NATIONAL ROAD TRANSPORT POLICY

Introduction

1.1 Road transport is vital to economic development, trade and social integration, which rely on the conveyance of both people and goods. Reduction in transport costs promote specialization, extend markets and thereby enable exploitation of the economies of scale. Global competition has made the existence of efficient transport and logistic systems in delivery chain an absolute imperative. Easy accessibility, flexibility of operations, door-to-door service and reliability have earned road transport an increasingly higher share of both passenger and freight traffic vis-à-vis other transport modes. Road transport has emerged as the dominant segment in India's transportation sector with a share of 4.5 per cent in India's GDP in 2005-06. Over the last six years (2000-01 to 2005-06), the annual average growth in road transport sector GDP at 9.5 per cent was much higher than the overall GDP growth of 6.5 per cent. Robust growth in road transport has been attained despite significant barriers to inter-State freight and passenger movement compared to inland waterways, railways and air which do not face rigorous *enroute* checks/barriers.

1.2 Transport demand in India has been growing rapidly. In recent years this demand has shifted among transport modes, mainly to the advantage of road transport, which carries about 87 percent and 61 per cent of passenger and freight transport demand arising for land based modes of transport (i.e. roadways and railways taken together) respectively. During 1992-93 to 2004-05 demand for road freight transport in India is estimated to have grown at an annual average rate of 6.7 percent, while GDP grew at an average of 6.2 percent. Road freight transport demand is expected to grow by around 10% per annum in the backdrop of a targeted annual GDP growth of 9% during the Eleventh Five Year Plan.

Motorization levels in India

2.1 Motor vehicle population has recorded significant growth over the years. India had 72.7 million registered motor vehicles at the end of fiscal year 2003-04. The growth of vehicular traffic on roads has been far greater than the growth of the highways; as a result the main arteries face capacity saturation. Between 1951 and 2004 the vehicle population grew at a compound annual growth rate (CAGR) of close to 11 per cent. Personalized mode (constituting mainly two wheelers and cars)

account for more than four-fifth of the motor vehicles in the country compared to their share of little over three-fifth in 1951. Further break up of motor vehicle population reflects preponderance of two-wheelers with a share of more than 71 per cent in total vehicle population, followed by cars with 13 per cent and other vehicles (a heterogeneous category which includes 3 wheelers, trailers, tractors etc.) with 9.4 per cent. In contrast to personalized mode, the share of buses in total registered vehicles has declined from 11.1% in 1951 to 1.1 as in 2004. Also, the share of goods vehicle which was about 27% in 1951 has declined to a little over 5% by end March 2004. The share of goods vehicle in vehicle population is modest in comparison to the size of the economy. The share of buses and trucks in the vehicle population at about 1 per cent and 5 per cent respectively is much lower compared to most of the other countries in Asia.

2.2 International experience suggests that with the rising income levels, car ownership rates are likely to grow much faster than GDP and start to displace 2-wheelers. The current vehicle density in developing countries is low; for example, the vehicle density in India is only 12 vehicles per 1000 persons, compared to 580 in Germany, 808 in the USA. Also the number of cars per 1000 people in Asia remains modest- at about 10 per 1000 people in PRC, 8 for India. However, the number of two-wheelers per 1000 population is much higher at around 45 in case of India. The low vehicle density is marked by its skewed distribution in favour of cities. In 2004-05, 22 cities accounted for 60 per cent of sales of passenger vehicles.

2.3 In the coming years the profile of motorization is expected to witness a number of changes in terms of segment shifts, driven by rising incomes, desire for safety and comfort and government regulations. Over the short term, the sensitivity of demand for vehicles to changes in GDP and in vehicle price is somewhat elastic as their purchase can often be delayed, but in the long term it has low elasticity, indicating that personal mobility is considered by many as essential to everyday living and that it has few substitutes. Thus, other measures are required as well to restrain growth in personal motor vehicle and associated negative externalities.

Need for Policy

3.1 Of all infrastructure sectors, the products and markets of the transport industry are most varied. Road Transport sector consists of two distinct segments; (a) Transport services that serve the public or commercial customers directly, and; (b) Transport infrastructure that is used by the transport service providers. Transport services are mainly privately owned and operated. In contrast, privately-owned transport infrastructure (particularly road networks) is not common.

3.2 Passenger and freight movement by road is expected to rapidly expand in the coming years in view of number of factors which amongst others include (a) substantial investment in improvement in national highway network which will facilitate speedy, reliable, door to door services (b) freight movement by road offers a holistic logistic solution that minimizes the costs of transport, logistics, and inventories (c) rising volumes of exports and imports which would entail higher demand for inland transport for moving cargo from production centres to the gateway ports – both air and sea and (d) accelerated urbanization creating additional demand for transportation.

3.3 Despite good performance of the road transport sector it is beset with slow technological development, low energy efficiency, pollution and slow movement of freight and passenger traffic. To sustain an annual overall growth in the GDP of **9%** during the Eleventh Plan would require growth in both passenger and freight road transport of higher order. Such an endeavor calls for a conducive road transport policy regime geared to meet requirements of faster mobility, safety, access to social and economic services and minimizing the impact of negative externalities (e.g., pollution, accidents etc.).

Objective

4.1 The endeavor of the National Road Transport Policy (NRTP) should be to promote modern, energy efficient and environment friendly road transport with following objectives:

i. Promote Road Infrastructure support for transportation of humans and goods to sustain high growth rate of GDP;

ii. Promote public transport and requisite quality of service;

iii. Promote quality and productivity of goods transportation and infrastructure;

iv. Ensure availability of adequate trained manpower;

v. Promote road safety, traffic management and post - accident trauma care;

vi. Promote sustainable road transport with special emphasis on energy efficiency, environmental conservation and social impact;

vii. Promote increasing use of modern technology and research in road transport development; and

viii. Strengthen database collection and management system to assist in continued policy and performance evaluation.

Promotion of Road Infrastructure Support

5.1 The aggregate length of roads, which was 0.4 million km in 1950-51 has increased 8 fold to 3.4 million km in 2002 but over the same period the number of passenger buses has shown 19 fold jump from 0.34 lakh to 6.35 lakh and goods vehicle fleet more than 36 fold increase from 0.82 lakhs to 29.74 lakh. The geographic coverage of India's highway network at 1.03 km of highway per square km of land is much dense compared to USA (0.77) and that of China (0.20). But, China's highway network consists of over 34,288 km of four or six lane access controlled expressway linking the major cities. In India, expressways do not yet link the major economic centres.

5.2 The country's road network can broadly be divided into three categories viz. (a) National Highways (NHs) (b) State Highways (SHs) (c) Major District Roads (MDRs) and (d) Rural Roads. The SHs and MDRs serve as secondary road network and provide connectivity between primary (NHs) road network and tertiary (rural roads).

5.3 National Highways: The National Highways running across the length and breadth of the country connect all state capitals, major ports, international boundaries, areas of economic and strategic importance, etc. The present total length of NHs is about 66,590 km. An overwhelming proportion of the total length of NHs is two or single laned (56% and 32 % of the total length of national highways are double/intermediate lane and single lane respectively) and only 12 per cent of the length of the NHs are four lane and more. The NHs constitutes less than 2 per cent of the road length of the country but carry about 40 % of the road based traffic. Highway

capacity shortages are aggravated by heterogeneity in traffic, encroachment, and frequent and long halts at state and municipal check posts. Further, over loading by rigid two-axle trucks has been a major source of damage to road structure and pavement.

5.4 In order to expand and improve road connectivity in the country, the Government has launched National Highways Development Project (NHDP). It is the largest highway project ever undertaken in the country. The NHDP is being implemented by National Highways Authority of India (NHAI). Government has envisaged investment of Rs.2,35,430 crore for upgradation of National Highways under various phases of NHDP over the medium term.

5.5 State Highways and Major District Roads: State Highways and Major District Roads constitute the secondary system of road transportation in the country. The State Highways provide linkages with the National Highways, district headquarters, important towns, tourist centres and minor ports. Their total length was about 1,37,711 km as at the end of March 2002. Major District Roads run within the district, connecting areas of production with markets, rural areas to the district headquarters and to State Highways/ National Highways. By acting as the link between the rural roads and National Highways, the State Highways and Major District Roads contribute significantly to the development of the rural economy.

5.6 Construction and maintenance of SHs, MDRs and Rural Roads is undertaken by various agencies in States and Union Territories. The size and spread of the road network comprising SHs and MDRs are reasonable but the standards and quality of these roads are not adequate to cope with the growing traffic. Their conditions and state vary widely from state to state due to a number of factors which include: inadequate finance and its thin spread over a number of projects; weak management by contractors and; delay in pre-construction activities. With a view to augment the resources, funds are being provided from the Central Road Fund (CRF) by the Union Government for the development of State Roads. The funds from the CRF are provided for improvement of State Roads other than rural roads. At present, the annual amount available from this source is about Rs. 1560 crore. The state-wise distribution of this amount is done on the basis of fuel consumption and geographical area of the state.

5.7 Inter State Connectivity: To promote inter-state facilities and also to assist the State Governments in their economic development through construction of roads and bridges of Inter-state and economic importance, Central Government provides 100% grant for inter-state connectivity projects and 50% grant for projects of economic importance. This fund is also made available from the CRF. An amount of about Rs. 170 crore per annum is available for development of the state roads under this scheme.

5.8 Rural roads: Rural roads connect villages giving access to rural population to the National Highways through Major District Roads and State Highways. Around 59 per cent of the total road length is accounted by rural roads largely built under Jawahar Rojgar Yojna. These roads are of limited value from the point of view of movement of heavy traffic.

5.9 Roads are also being developed in rural areas under the Pradahn Mantri Gram Sadak Yojana (PMGSY). The objective of PMGSY is to link all villages with a population of more than 500 people with all-weather roads by the year 2007. This is being implemented by Ministry of Rural Development.

5.10 To ensure smoother traffic flow, it is important that provision is made for wayside amenities, maintenance and repair facilities and parking spaces along highways. Also, a Corridor Management Plan should be drawn up for major state highways so that the problems of ribbon development, encroachments, uncontrolled access and poor safety can be tackled.

Maintenance

5.11 The condition of the roads affects the vehicle operating cost which is an important component of the road transport cost. The norms for maintenance of all categories of roads to keep them in a good level of service have been prepared by a Committee set up by the Ministry of Shipping, Road Transport & Highways. There is an urgent need for effective utilization of the available scarce resources. To this end, Pavement Management System (PMS) and Bridge Management System (BMS), mechanization in maintenance, maintenance by contract and corridor management approach needs to be introduced. Besides, there is need for institutional reforms like

establishment of road management unit, development of comprehensive database and taking legal steps for effective control of traffic and land of the right of way.

Central Road Fund

5.12 The Central Government has created a dedicated fund, called Central Road Fund through collection of cess from petrol and diesel. Presently, Rs. 2/- per litre is collected as cess on petrol and High Speed Diesel (HSD) Oil. The fund is distributed for development and maintenance of National Highways, State Roads, Rural Roads and for provision of road over brides/under bridges and other safety features at un-manned Railway Crossings as provided in Central Road Fund Act, 2000.

Public Private Partnership (PPP)

5.13 Traditionally, the road projects were financed only out of the budgetary grants and were controlled/supervised by the Government. The road sector has attracted little private sector participation in the past. The traditional system of financing road projects through budgetary allocation has proved to be inadequate to meet the growing requirements of this sector. To encourage private sector participation, several initiatives have been taken by the Union Government; which include: -

- Provision of capital subsidy up to 40% of the project cost to make projects commercially viable.
- 100% tax exemption in any consecutive 10 years out of the first 20 years of a project.
- Provision of encumbrance free site for work, i.e. the Government shall meet all expenses relating to land and other pre-construction activities.
- Foreign Direct Investment up to 100% in road sector.
- Higher concession period, (up to 30 years).
- Right to collect and retain toll.

The implementation of NHDP–III and NHDP–IV phases is to be mainly undertaken under PPP mode. The PPP projects are being implemented for the National Highways on Build Operate Transfer (BOT) (Toll) and BOT (Annuity) basis

5.14 PPP initiative by the States: Many State Governments have modified existing legal provisions to facilitate PPP in the road sector. Many States have amended the Tolls Act to allow the private sector to levy and collect tolls on State

roads and bridges. With a view to fully exploit the potential of PPP mode in the road sector following steps could be taken.

(i) Creation of PPP units at Centre and State level to perform the functions of information dissemination and guidance so as to provide advisory to PPP programme.
(ii) Proper estimation of road traffic and its projection.
(iii) Timely completion of pre-construction activities so that the work can be started by the concessionaire on the appointed date.

5.15 Road Development in the Hilly Region including North Eastern Region and other isolated areas: The development of roads in the hilly region poses special problems due to difficult terrain, heavy precipitation, rich biodiversity, fragile hills, high seismicity, etc. These external constraints are compounded by shortage of technical personnel, limited working season, non-availability of contractors, difficulty in procuring road construction equipment etc. These factors make road building activity difficult and expensive. Roads serve as the principle mode of transport for movement of goods and passengers with a share of over 90% in the total movement by surface transport in the region. The National Highways are the main arteries of this road network in this region. To address the special needs of the region, Government has approved a special project for development of roads in the North Eastern Region under Special Accelerated Road Development Programme - North Eastern Region (SARDPNE). This programme has been made for improving road connectivity to remote areas and places of strategic importance in the North Eastern Region. It envisages improvement of 3228 km of National Highways and 4388 km of state roads and roads of strategic importance. The total cost of the programme is estimated at Rs. 28,000 crore. This will also ensure connectivity of all District Headquarters which are still not connected to the National Highways in the eight North Eastern states. Besides, the improvement of rural roads in the hilly region has also been taken up under the programme of Bharat Nirman and Pradhan Mantri Gram Sadak Yojana. This will help achieve road connectivity to all villages having a population of 500 and above. Special construction technology to tackle the construction of roads in the hilly regions would be adopted to ensure quality roads within a specific time frame.

Public Passenger Transport by Road

6.1 The changing composition of vehicle population over time reflects an increasing importance of personalized mode (cars & two-wheelers) of transport vis-a-vis public bus road transport mode. The marginalisation of the bus mode of transport is reflected in the fact that while the vehicle population grew at a compound annual growth rate (CAGR) of close to 10% number of buses grew by less than 7 per cent during 1991 to 2004 with a meager growth of less than 1 per cent in the number of buses owned by the public sector entities. The slower growth in the number of buses has resulted in sharp erosion in the share of buses in total vehicle population from more than 11% in 1951 to a mere 1.1% in 2004. This marginalization of Public Bus Transport (PBT) also reflects major sociological and economic changes related to increase in disposable income of households, changes in lifestyles, urbanization etc. This has been accompanied by increasing motorization through rising number of cars and 2-wheelers resulting in congestion and therefore, slowing down the movement of public bus transport. With rising income and greater need for mobility, the personalized mode of transport is likely to grow in importance in the coming years. The proliferation in the personalized mode of transport imposes negative externalities on the society in the form of traffic congestion, carbon emissions/pollution, inefficient use of fuel, scarce road space, etc.

6.2 Public transport system comprises of a wide array of passenger services which includes mass transit/metros, contract carriages (taxis, autos), high capacity buses and stage carriages (buses, mini buses etc). Each of these modes has certain distinct features. Mass transit/metros has the capacity to move large volume of passenger quickly but entails huge fixed costs and are suitable for big metros; high capacity buses also enjoy the advantage of carrying large volume of passenger traffic at a lower cost vis-à-vis metro but requires dedicated lanes for faster movement which are hard to create where road space is scarce. Taxis and autos provide comfort and flexibility of personalized mode but do little to lessen the burden of congestion. Amongst the differing modes of public road transport bus is the optimum

from the point of view of cost effectiveness and benefits to the society as it entails less fuel cost and pollution per passenger km compared to other road based competing modes of public transport.

6.3 Objectives of Public Bus Transport (PBT) System

It is essential to promote public bus transport to:

a) Redress the imbalance between public transport and private personalized mode involving free use of the road network with attendant external costs, etc in favour of PBT mode;

b) Facilitate access to essential socio-economic services (shopping, education, health, etc.) and provide affordable mobility to those who do not have access to a personalized mode;

c) Reduce negative externalities (congestion, pollution etc) as PBT consumes/emits less fuel/pollution per passenger Km vis-à-vis personalized modes;

d) Reduce overall cost of transport for the society through higher modal share of PBT in passenger movement by road.

PBT has to strike the right balance between :(a) user satisfaction (b) commercial interests and; (c) social demands. A growing population means higher transport demand.

Financing of Public Transport Operations

6.4 By clearly separating the social objectives and appropriately compensating for social obligations, PBT can be operated on commercial lines. This would also encourage private investment. By applying economic principles for allocating scarce road space, it would also be feasible to have dedicated lanes for buses in select towns and metros resulting in improved and timely PBT services at much lower cost.

6.5 Financing of PBT operations can be achieved through a combination of (a) fare box collection which is a function of fare structure, passenger carried and efficiency of fare collection. (a) Other commercial revenue (advertising, property rentals etc.). Substantial non fare revenue can be collected through innovative use of

space on buses/bus stops for advertising purposes and development of real estate for commercial purposes and;(b) compensation for discharge of social /regional service obligations. The revenue foregone on account of confessional fares/passes is estimated at around Rs.1482 crore for the reporting SRTUs in 2004-05.

6.6 Public transport systems in most of the countries need financial support to fill the gap between income and cost of operations. Therefore it is imperative to explore alternate funding measures to over come this deficit. The alternatives to user charges adopted in some developed countries include following options:

6.7 Polluter Pays: vehicles which entail pollution compensate for the cost imposed on the community. The vehicles that cause congestion pay a fee to use the roads. The compensation paid may then be used to fund alternative, less polluting forms of transport – e.g. use of the proceeds of the Mineral Oil Tax (Mineraloelsteuer in case of Germany) to fund public transport; similarly environmental taxes and parking charges may be used to fund public transport.

6.8 Beneficiary Pays: those who benefit from a service meet its costs. Employers in particular gain from the provision of public transport services which give them access to wider labour-markets. The French Transport Tax (Versement Transport) requires employers with more than nine staff to contribute towards the cost of public transport investment and operation. Besides construction of new public transport infrastructure could be partly funded from the rents and sale values of property/premises of public transport operators/stations.

6.9 Public exchequer: through national and local taxation, this is borne by the taxpayers whether or not they are public transport users.

Financing of State Road Transport

6.10 For most of the State Road Transport Undertakings (SRTUs), financing of the operation cannot be fully covered by the revenues from fares/user charges. Also

SRTUs are confronted with a situation where staff costs and fuel costs account for more than three fifth of their expenditure with staff costs more or less in the nature of fixed costs due to the limited ability to adjust labour force in response to the changing market conditions. The fact that government financial support is required to fill the gap between revenue and costs of operation does not mean that SRTUs are unviable but also reflects that fares are not adjusted in line with rising fuel and other costs. Besides bus fares are also set with socio economic objectives in mind.

6.11 Presently acquisition cost of a bus is compounded by the existence of multiple commodity taxation, viz, central excise and State VAT/Sales Tax. In view of the advantages of public bus transport system it would be desirable to lessen the burden of commodity taxation. In addition, public buses (Contract/Stage carriage) are subject to Motor Vehicle Tax (MVT) and Passenger tax etc. which also need to be rationalized. There is heavy and varying incidence of MVT on public buses, in general, and SRTUs, in particular. SRTUs in Maharastra and Gujarat contribute 17% of their respective turnover towards MVT; in Rajasthan MVT is assessed at 2.1% of the current cost of bus chassis on a monthly basis; in Uttar Pradesh the average incidence tax on UPSRTC bus was Rs. 2.35 lakh *which is almost four times what a private bus operator paid (Rs. 0.85 lakh) in* 2004-05; in Punjab, for 2005-06, the average tax liability per SRTU Bus was 3.93 lakh compared to Rs.2.80 lakh paid by a private bus operator.

6.12 The main underlying principles of costing should emphasise: (a) Where costs are incurred for policy reasons, such as higher service levels or lower fares than would be justified on exclusively commercial grounds, those responsible for them must assume responsibility for their payment and; (b) Subsidies implicit/explicit should be considered and calculated as payments for services rendered.

Policy Framework to promote Public Bus Transport (PBT)

6.13 A clear and stable policy framework that defines the roles and responsibilities of all stake holders in PBT system would facilitate long term planning, sound day- to-day operation and a firm basis for launching public private partnership in the PBT system. To this end Government needs to explore untapped potential of Public Private Partnership (PPP) in PBT. PPP is a contractual agreement between a public

agency and a private sector entity. Through this agreement the skills and assets of each sector are shared in delivering a service or facility for the use of general public. In addition to the sharing of resources, each party shares the risks and rewards potential in the delivery of service/facility. It is imperative to put in place a policy framework that supports and sustains an efficient PBT system so as to contain runaway growth in personalized mode of transport. In particular, policy framework should emphasize following aspects:

I. Provide fiscal incentives to encourage Public Bus Transport.

II. Explore use of service contracts, which define clearly the responsibilities of each party/stakeholders. Allow for automatic adjustment in fare increase and specify that operators may be compensated for increase in operational costs on account of fuel and manpower costs. This will help to avoid less frequent steep fare increase or reductions in quality of service.

III. Service contracts should include financial incentives, in the form of a bonus/penalty system, in order to provide an inducement to increase the rider ship and the quality of service provided. Tenders should define not only the service required, but also quality.

IV. Explore new forms of supply/procurement for the PBT system, for example, procurement of rolling stock (through leasing) and outsourcing of maintenance operations.

V. Enhance productivity, comfort and security in PBT system to attract commuters.

VI. Adopt use of information technology (IT) to enhance efficiency and productivity. IT applications offer new opportunities for PBT which include: (a) e ticketing (b) communication with customers in general (c) (real time) time table information (iv) computer aided maintenance and control systems and; (d) GPS to track and monitor the operations of bus fleet

VII. In order to promote PBT system, there is a need to reduce the incidence of indirect taxes but also harmonise motor vehicle tax (MVT) regime across States which is diverse due to differing vehicle classification, basis (per seat/type of route/distance etc) and rates. MVT being a State subject can be suitably addressed through an Empowered Committee of State Ministers of Transport.

VIII. The declining role of public transport vis-à-vis personalized mode of transport is also in part a reflection of underinvestment in public transport. Underinvestment over a sustained period has resulted in low and

unsatisfactory level of public transport services leading to a greater dependence on personalized mode. **To promote much needed investment in the road public transport system there is urgent need to strengthen it with following** (a) ensure availability of adequate funds towards fleet modernization of SRTUs so as to create world class PBT system; (b) upgrade bus infrastructure – bus terminals, stops; (c) identify routes for plying of stage carriages based on comprehensive route surveys; (d)promote road safety and;(e) coordination with other modes

IX. **Provide assistance under centrally sponsored scheme "Strengthening Public Transport System in the Country" to all States/UTs subject to following conditions**: (a) preparation of detailed project report to access the facility, (b) adoption of competitive bidding for issue of permits for the passenger services, (c) identification and separation of profitable and non profitable routes; (d) issue of permits for the routes would be through competitive tendering: profitable routes would be awarded to highest bidder while non profitable would go to the lowest bidder in terms of subsidy/gap funding.

X. Offer product differentiation in bus passenger services (ordinary, semi-luxury, air conditioned etc) to serve different class of passengers. This will help in weaning away commuters from personalized mode and also help in raising fare collections.

XI. Review of Road Transportation Act, 1950. This is urgently required in view of the changed economic environment with greater role for market forces and need to build competitive cost structures in non tradable services like passenger road transport.

XII. SRTUs need to explore alternate institutional models which offer greater autonomy and flexibility from the point of view of commercial operations. This could be achieved if Road Transport Undertakings are incorporated under the Companies Act rather than Road Transportation Act, 1950.

XIII. Treat public transport at par with public utility services.

Promoting passenger road connectivity to semi-urban and rural areas

6.14 Promote participation of private operators on non viable semi urban/rural routes through favourable policy regime. This could be achieved through following options :(a) auctioning of combination of routes (which are a mix of profitable and non viable routes) to private operator(s) so as to enable them to compensate their losses on account of operation of non viable routes; (b) offering non viable routes to bidder

asking for lowest subsidy/financial support; (c) subjecting non viable routes to lower rates of taxation or permit fees and;(d) allowing alternate competing modes of passenger road transport. This could be achieved by granting mini bus permits on routes serving semi-urban and rural areas which are not adequately served by regular public transport. This policy has been successfully tried in Tamilnadu.

Road Transport Regulator

7.1 To ensure level playing field for road passenger transport services, operating in public and private sector, there is a need for Independent Regulator in Road Transport Sector. Such independent Regulator should be provided with statutory authority, fixed service tenure with provision for removal on grounds of inappropriate act or incompetence. Besides, financial autonomy need to be provided through levy of fee on service providers. The Independent Transport Regulator at State level should be entrusted with the following task:

i. fix price band for different kinds of services in an objective and transparent manner;

ii. Ensure service coverage across regions (including rural, remote and hilly areas) and provide mechanism for compensation for discharge of universal service obligations (provision of service on non-remunerative routes and remote rural sector);

iii. benchmark quality of road passenger service;

iv. impartially address various operational issues like access to terminals and other common infrastructure facilities to all operators and;

v. Promote competition to curb anti-competitive practices.

7.2 The Independent Transport Regulator could mandate ISO 9001-2000 Certification for the Transport Service Providers, consistent with reasonable tariff. The easy access of general public and NGOs to such a Regulator could ensure better compliance and better service to the users.

Promote Quality and Productivity of Goods Transport

Barrier free movement

8.1 Barrier free movement of passenger and freight by road across the country is vital for promoting efficient economic development and growth. In India, Road freight carriers are stopped at State borders, checked for payment of taxes/levies on the goods carried and for compliance of various provisions of Motor Vehicle Rules.

8.2 Multiple and sequential checks conducted by various agencies result in manifold detentions. Detention of vehicles causes lower speed, loss of time, high fuel consumption and idling of vehicles, leading to under-utilization of transport capacity and adversely affecting their operational viability. Besides, it imposes economy wide costs which are not easy to assess. Better roads and faster speeds may be offset by Inter State Check Posts (ISCPs). Essentially the checks made at border posts aim to ensure that (a) Taxes in the State of destination have been paid on the goods being carried; (b)Trucks are not overloaded; (c)Trucks are being operated safely and;(d)Trucks are carrying valid papers.

8.3 The enormous economic cost imposed by the check post system has been vividly brought out in Grand Trunk Road Improvement Project (GTRIP, 2006). It shows that the present check post system leads to delays in road freight movement. The economic cost of such delay is estimated at a minimum of Rs. 3,200 Crore and a maximum of Rs. 4,300 Crore for the year 2004.

8.4 The impact of various laws governing inter-state movement of passengers/ goods is accentuated by existing system marked by: Manual and segregated sales tax/VAT administration, vehicle registration records (license plate information), and segregated Driving License records system; non standardized vehicle registration plate location (on the vehicle) and; Regulatory and inspection functions still fully carried out by Government agencies.

8.5 Measures to ensure smooth passage of freight traffic

- Use of intelligent transport system (ITS). ITS may be used for automation of the commercial and regulatory documentation that has to accompany

commercial vehicles and goods thereby substantially reducing the detention at check post; it can be used for electronic payment of various charges without stopping the vehicle enroute. Similar solution for many other causes of detention may be found through ITS.

- Adopt concept of "Green Channel". Freight with single destination accounts for a large proportion of consignment and is likely to go up with containerization. Such cargo by road could be accorded "Green Channel" treatment provided papers are prepared in advance and sent to the check post. Initially high value freight and sensitive commodities could be covered under "Green Channel". Implementation of this proposal will also need some modifications to existing truck fleet, which can be locked/sealed and certified for the journey to their destination. Introduction of smart cards for vehicles registered, and driving license will be a pre requisite. Similarly development of national registers for vehicles and the traders, who are frequent users of check posts, will also be required.
- Adopt "single Window clearance System". It could be applicable for all authorized charges/clearances both at origin and at Check Posts. It may be achieved through the use of common software in a single Window Checking Facility, covering all major departments at Inter State Check Post on National Highways bordering adjoining States.
- Rationalize discretionary powers vested with officials of Police and other departments, consistent with requirements of national security, law and order and important legal requirements.
- National permit system: Facilitate payment of taxes of various states through e-payment scheme so as to eliminate much of the problems like leakage, delayed remittance and fraud/forgery, currently facing the national permit system.

Overloading

8.6 The available data shows that the Vehicle Damage Factor (VDF) on most of the National Highways is in the range of 10 to 12 for Northern India and 7 to 8 for the Southern part of the country. These values are more than the VDF of 4.5. Overloading adversely affects the pavement life, accelerates deterioration of pavement structure and also results in safety hazards. In order to contain the overloading prevailing VDF levels need to be brought down from 7 to 12 to 4.5 by the

end of 11th FY Plan. Existing enabling provisions in the MVA 1988 such as sections 113,114, 194, 199 and 200 are adequate but overloading persist due to inadequate enforcement. To eliminate the menace of overloading following steps needs to be undertaken.

- Install WIM (Weigh-in-Motion) to identify violators and install Vehicle Overloading Management System (VOMS) which identify violators and provide the complete axle load spectrum plying on the road on high density corridors. The latter system may be considered for installation along National Highway at select locations to identify overloaded vehicles.
- With a view to discourage overloading strict enforcement needs to be carried at the source of loading, viz. industries, mining areas, ports.
- Mandatory off-loading of excess load at identified sites with appropriate charges. States to make available land at such sites for storage of the offloaded luggage at transporter/consigner's risk.
- Concessionaires under BOT should be encouraged to place VOMS to check the menace of overloading.
- Discourage modifications (e.g. changing of tyre size, increasing number of leaf springs etc.) in goods transport vehicles by displaying/indicating such parameters in certificate of registration which would prevent overloading.
- Promote use of MAVs through liberal issue of Inter-State/National permits.
- Make carrying of freight in covered containers/carriages mandatory as per section 93(4) of Central Motor Vehicle Rule, 1989. Only specific commodities such as equipments, machineries including their parts etc. should be allowed to be loaded on open trucks.

Human Resource Requirements & Training

9.1 The total manpower requirement for the public passenger and freight road transport sector is estimated to grow from 17.9 million in 2007 to 24.7 million in 2012. It is noteworthy that more than three-fifth of the manpower requirement consists of drivers, of which almost four-fifth need to be absorbed in Goods Vehicles category. This clearly makes driver the most vital manpower resource in the road transport sector. The quality of drivers has a vital bearing on quality and productivity of

transport service specially, with respect to road safety, fuel economy, and efficiency of the sector. The existing provisions of Motor Vehicles Act, 1988 neither prescribe the requisite infrastructure, equipments etc. regarding driver training schools nor provide for inspection and supervision for quality control of these institutions. Therefore, expansion and improvement in driver training institutions is essential for promoting human resource development. This should encompass training of existing drivers as well as people aspiring to enter this profession. In this context, following initiatives need to be pursued

- Establishment of requisite driver training infrastructure across the country. A three tier structure for driver training schools/institutions is suggested: **Tier A**: Premier driving training institutions with campus of 15 acres having training and evaluation tracks simulators etc. It is proposed to have one such driving school in each State and two in bigger States, based on vehicular population, area, etc. **Tier B**: These would have essential evaluation tracks, be set up over 5 acres of land and assist local RTOs. **Tier C**: Motor Driver Training Schools which do not come under 'A' and 'B' category. Such schools would be given time to upgrade their facilities to conform to revised norms. While category/tier 'A' institutions would be approved by DORTH on the recommendations of the respective State Governments, 'B' and 'C' category schools may be approved by States/RTOs.

- Training School Standards

  Amendment of MV, Act, 1988 to provide for inspection of motor driving training schools and to ensure compliance with prescribed standards.

- Refresher Training Course

  Driving License in respect of drivers of transport vehicles has to be renewed after every 3 years. 'Refresher training course' should be made mandatory for the drivers from such certified/model schools before renewal of license. These training Schools should be permitted to issue the "certificate of competence" on the basis of which Learner License/Driving License can be issued.

- Driver Training Instructors

  Identification and financing of Industrial Training Institutions (ITIs) for imparting motor driving training as 'trade' so as to create a pool of competent driver training instructors.

- Automation in Licensing

  Evaluation and issuance of driving license could be gradually made IT based, with reduced scope for both human subjectivity, and extraneous considerations.

Road Safety and Traffic Management,

10.1 India is undergoing a major change in the causes of mortality accompanied by a rapid motorization and urbanization. A negative externality associated with expansion in road network, motorization and urbanization in the country is the increase in the road related accidents. Accompanying this change is a gradual decline in communicable and infectious diseases due to effective health policy interventions and programmes and emergence of road traffic injuries (RTIs) as a major public health concern. Today RTIs are one of the leading causes of deaths, disabilities and hospitalizations with severe socioeconomic costs. In India around 4.4 lakh road accidents (one road accident every minute) resulting in death of 94,968 persons (one road accident death every 6 minutes) took place in the year 2005.

10.2 Cost of Road Accidents: Accidents carry high economic and social costs, which are not easy to measure. The cost of road related injuries and accidents can be viewed in terms of (a) medical costs (b) other cost related to administrative legal and police expenditure (c) collateral damage in terms of damage to property and motor vehicle and (d) loss due to income foregone arising out of absence from work or impairment/disability. Besides accident survivors often live poor quality of life and have to live with pain and suffering which are difficult to estimate. In economic terms, the cost of road crash injuries is estimated at roughly 1 % of gross national product (GNP) in low-income countries, 1.5 % in middle-income countries and 2 % in high-income countries. For India the socio-economic cost of road accidents in 1999-2000 was estimated at 3% of GDP.

10.3 Profile of Road Accidents: The total number of accidents reported by all the States/ Union Territories (UTs) in the year 2005 were 4, 39, 255 of which 83,491 or 19% of total accidents were fatal; the number of persons killed in the accidents were 94,968 (i.e. an average of one fatality per 4.6 accidents) and; the number of persons injured at 4, 65,282 exceeded total number of accidents (4, 39,255) in 2005. The proportion of fatal accidents in the total accidents has increased since 2001. The

severity of road accidents measured in terms of persons killed per 100 accidents has also increased from less than 20 in 2001 to 21.6 in 2005.

10.3.1 Occurrence of accidents is an outcome of interplay of a number of factors which among others include type of road users, colliding vehicles, environmental/road related factors (road geometry, design, visibility etc), vehicle related, nature of traffic management, composition and flow of road traffic and adherence/enforcement of road safety regulations. Higher exposure to road accident risk may be mitigated by behavioural standards (adherence to road safety regulations) and policy intervention (enforcement). The main thrust of accident prevention and control across the world has been on **4 E's**, viz. Education, Enforcement, Engineering and Environment and Emergency care of accident victims.

10.3.2 About 80% of the road accidents are caused due to the Driver's negligence/fault. Improving Driver's skill and behavior is vital for reduction in road related accidents and fatalities.

10.3.3 The drivers of heavy vehicle operate under inhospitable conditions which induce high levels of stress level and the possibility of accidents. There are no organized wayside amenities, maintenance and repair facilities and parking spaces along highways. There is need to initiate steps to ameliorate the conditions under which drivers and crews operate on Indian roads.

10.3.4 To reduce the trauma and probability of death and disability associated with road accidents, curative measures in the nature of providing relief and evacuation to the accident victims are vital. Recognizing the vital importance of quick medical assistance and evacuation of road accident victims, **National Highway Accident Relief Service Scheme has been initiated.** The scheme provides for supply of cranes and ambulances to States/UTs/NGOs for relief, rescue and evacuation of accident victims to nearest medical aid centre and for clearing the accident site.

10.3.5 The Committee on Road Safety and Traffic Management has submitted its report to the Department of Road Transport and Highways. The Committee has recommended setting up of an apex multi member body called National Road Safety and Traffic Management Board (NRS&TMB) with regulatory, advisory, capacity building and research functions under an Act of the Parliament. Besides it has

envisaged setting up of State Road Safety and Traffic Management Board at the State level on the lines similar to NRS&TMB. The safety related activity would be financed by creating a National Road Safety Fund to which 1 per cent of the total cess on diesel and petrol would be made available. 50% of the fund would be used by NRS&TMB and remaining by States as per agreement with them.

10.4 Traffic Management: Congestion in large cities is unavoidable. The problem of congestion has to be addressed through a range of measures including improved system management, pricing and capacity expansion, applied in a tandem. Specific measures applied in isolation are likely to be less effective compared to a package of policies to address both supply and demand pressures. Road pricing enables traffic demand to be managed both spatially and temporally based on pay-as-you-use principle to control the movement of vehicles and ensure that congestion does not worsen. New electronic tolling systems make more complex time-sensitive applications easier. This can take the form of road tolls, congestion pricing, cordon fees, high-occupancy vehicle lanes, vehicle use fees and road-space rationing. Since charges are based on usage, those who contribute more to the congestion pay more and those who use the roads less frequently or who travel during non peak hours will pay less or need not pay at all. The National Urban Transport Policy outlines the directions in this regard for urban spaces.

10.4.1 Indiscriminate parking of trucks on highways and on carriageways of towns and cities encroaches upon space reserved for pedestrians, as well as for moving vehicles. Truck terminals/Transport Nagars need to be constructed outside the cities to ensure availability sufficient parking space to trucks. This would free the highway and carriageway space that is as of now encroached upon by parked trucks and promote free flow of vehicles on highways.

Sustainable Road Transport Development

11.1 Social Sustainability: In rural areas, the poor are mainly dependent for their livelihood on their ability to produce and market agricultural products. Poor accessibility necessitates head loading of the goods to be moved. Also poor incur high costs in terms of time and money to gain access to employment, health services, education and other amenities. Increasing access to traded inputs (for example, fertilizers, seeds and equipment) and making it possible to transport

agricultural products to distant markets is the means whereby productivity and income of those dependent on agriculture can be enhanced. This transformation will also facilitate the development of non-agricultural activities in rural areas. In urban areas, the principal resource of the poor is their labor. Adequate and affordable transport to work is therefore critical.

11.2 One of the best ways to help the low income groups is to facilitate and improve non-motorized transport. The security and convenience of pedestrian should be protected and enhanced. Cycling can also act as an efficient complement as a local distributor, allowing wider stop spacing and higher corridor speeds and flows. Despite its potential, users of non-motorized transport (NMT) have been disadvantaged in various ways. Users of NMT are physically very vulnerable. This is particularly a consequence of the failure to separate motorized and non-motorized traffic, for example, by providing sidewalks for pedestrians and bike paths for cyclists. The growing emphasis on the complementary role of NMT and motorized transport in some of the developed countries to deal with environmental and efficiency problems is instructive for India as well.

11.3 Increased auto dependence tends to displace non-motorized transport and reduce the variety of public transport means available to the poor. The balance between modes of transport depends very heavily on income. In low income regions, both rural and urban transport is largely non-motorized. In medium-size towns in India, a significant proportion of trips are by non-motorized modes. The dominant mode of transport in small towns of low income States is the cycle or cycle rickshaws. Facilitating non-motorized transport not only fulfills the socially desirable objective of serving the cause of economically weaker segment of the society but is also environmentally friendly.

11.4 Environmental Sustainability: Climate change is principally the result of Green House Gas Emissions (GhG) emanating from carbon based energy consumption, or the burning of fossil fuels. Motorised transport is emerging as a significant contributor of carbon emissions. Vehicle fleets are doubling every 6-7 years. These prospects reinforce the urgency of producing cost effective GhG reduction solutions for transport.

11.4.1 For improvement in ambient air quality, there are three aspects namely fuel specifications, engine technology and better maintenance and fitness of *in-use*

motor vehicles. Quality/standards of fuel and engine technology greatly determine emission levels. This entails vehicle technological requirements in line with the global specifications, with implementation time frames that depend on fuel availability, among other considerations. Introducing tighter energy efficiency and emissions standards requires sufficient unleaded and low-sulfur fuel. If *in-use* vehicles do not receive maintenance that is adequate in quality and frequency, their emissions, will suffer. The emissions from on-road vehicles are being checked in a stand alone manner.

11.4.2 The norms for new vehicles are being constantly upgraded and with Bharat Stage (BS) II norms applicable for the entire country and BS-III norms already in force in the 11 mega cities. Keeping in view the proposed introduction of BS-IV emission norms there is need for clear and long term road map for facilitating smooth transition to lower emission norms. This calls for a well defined road map of transition to alternative fuels to facilitate technology up gradation and appropriate phasing of transition path/stages of emission norms.

11.5 Inspection and Certification: Ideally Inspection and Certification (I&C) regime should cover both safety and emission norms and combine both visual and automated tests. As I&C is a revenue generating and self sustaining activity, it would be appropriate that I&C is run by the private sector with Government acting as a regulator. Central Government could frame a regulatory structure specifying lists of tests to be conducted, items to be inspected, frequency of specified tests, vehicle inspection fees and defining criterion for selecting of private vehicle inspection centres. Provision for regular performance audit for these I&C Centres should also be made. To enhance the effectiveness of I&C process, registration/ insurance of vehicles should be linked to I&C. Selection of cities for I&C should be in conformity with Auto Fuel Policy. To begin with I&C may be introduced in 11 cities with focus on commercial vehicles (Delhi/NCR, Kolkotta, Bangalore, Ahmedabad, Pune, Kanpur, Mumbai, Chennai, Hyderabad, Surat and Agra). Vehicle repair workshops should also be subjected to certification.

11.5.1 The following steps can go a long way in effectively tackling of the environment and social impacts resulting from up gradation of road projects.

(i) Promote the use of bio-fuels.
(ii) Facilitate Non-motorised transport.

(iii) Set up a coordination body for I&C at the national level.

(iv) Introduce 'Green cess' on older vehicle to discourage pollution and create a resource pool to enforce environmental discipline.

Technological up-gradation & Research & Development

12.1 There is an urgent need for the introduction of the new technology in the designs, engineering and construction methods as also carrying out surveys through remote sensing techniques particularly in the up gradation of the roads which are covered by the High Density Corridor. Use of machines to improve both the quality and speed of construction need to be pursued more vigorously. The possibility of creating equipment leasing companies need to be encouraged. Several new materials of road construction are also emerging such as polymer modified bitumen, geosynthetics etc. that would need to be encouraged depending upon the cost effectiveness.

12.2 There has been substantial induction of new technology in the personalized motor vehicles. However, in respect of trucks and buses, such technology up gradations have been somewhat slow. Moreover, the fabrication of bus body and the truck body has hitherto been virtually unregulated. The bus body code has been evolved and work on the same in respect of trucks is in progress. In order to implement these norms, a system of accreditation of body builders needs to be evolved.

12.3 It has been assessed that multi-axle vehicles save fuel up to the tune of 50% per tone km. Multi-axle vehicles are also more road-friendly as these put less stress on the road infrastructure. It can cover longer distance per day and has lower emissions per tone of load carried as compared to rigid vehicles. It is, therefore, necessary to apply differential taxation to encourage the use of multi-axle vehicles. There is need to promote use of low tare weight and heavy haul multi axle trucks, which are more fuel-efficient.

12.4 Intelligent Transport System (ITS) can increase the efficiency of existing transportation infrastructure. This is especially important where physical constraints preclude expansion of road network. ITS holds the promise of substantially increasing the capacity of existing infrastructure, thus avoiding the cost of new

construction and freeing funds for use for other pressing developmental needs. ITS is based on information technology. The main information resources of the ITS include real time traffic flow management, parking availability, vehicular traffic, and a basic geographic information system. ITS could be harnessed to monitor, respond and to evaluate continually the effectiveness of the transportation management system to provide optimal traffic flows at all times.

12.4.1 Cargo that uses more than one mode, sea-to-road or rail-to-road for example spends a lot of time stationary in depots or warehouses or at border checkpoints. Using vehicle ITS technologies in transport systems combined with electronic tagging and documentation, can greatly reduce waiting/transit times. Studies have shown that congestion on roads lead to increased emissions and fuel consumption. According to studies, ITS can reduce journey time and thereby facilitate savings. Applications like electronic toll collection that facilitate Automatic, contactless collection of tolls using surveillance methods and vehicle guidance and automated operations can contribute significantly to reducing delays.

12.4.2 In the cities available technology can improve traffic management. Traffic signaling coordination can increase effective road capacity and increase speeds to levels at which emissions per vehicle mile are much lower. Traffic management can also protect environmentally sensitive areas or road user categories from vehicular traffic. Developments in electronics have reduced both initial equipment cost and maintenance needs.

12.5 R&D in Road Transport: There is a need for promoting R&D effort in this sector. Such R&D efforts may focus on various aspects pertinent to this sector like Futuristic Bus Body Design with emphasis on energy conservation and eco friendly material; Propulsion technology for use of hybrid cells, bio fuels, alternate energy; Development of appropriate transmission systems suitable for urban driving condition etc.

Data Issues related to Road Transport Sector

13.1 The Constitution of India has put Road Transport under List-II of Seventh Schedule thereby placing road transport primarily in the domain of State administration. Therefore availability of relevant data related to road transport sector depends on the efforts of the State Governments.

Motor Vehicle Data

13.2 The data available in India is for the number of registered vehicles which gives cumulative data of vehicles registered at the end of a period without accounting for decommissioned/scrapped vehicles. Worldwide it is the data on *'vehicles in use'* that is used for the purpose of analysis, comparisons and policy prescriptions. *'Vehicles in use'* is a better indicator of the number of vehicles plying on road and hence provides a better idea of traffic density as compared to that based on total registered vehicles.

13.2.1 The system of vehicle registration in the country needs to be modernized. Motor Vehicle Act provides for maintenance of State registers of motor vehicles. The system is decentralized in nature. Currently, significant time lag exists between consolidation and release of all India vehicle registration data. Keeping in view the time lag in reporting and existing gaps following is suggested

a) IT-based Centralized registry/depository of all information on motorized vehicles with each vehicle carrying a unique national identity number similar to PAN indicating year of production, class of vehicle, capacity, details of permit in case of goods vehicle. This would enable quick and easy access to data. Alternatively, make vehicle registration in major States/cities IT-based and ensure connectivity to concerned official agencies across the country.

b) State Transport Authorities should collect information on motor vehicles in terms of tax paying and non tax paying vehicles as well so as to capture the number of motorized vehicles in use.

Freight and Passenger movement by road

13.3 As of now there is no mechanism in place which would provide regular data on freight and haulage (Ton Kilometre-TKM) and; passengers and distance carried (Passenger Kilometre-PKM) by the private sector operators in road transport sector. No comprehensive data on freight movement is available to indicate origin, destination, type and size of freight carried on roads by motorized transport. It is therefore, recommended that:

i. There is a need for creating a mechanism for collection of information regarding freight movement by road covering lead, load and other relevant characteristics. The load factor needs to be further disaggregated in terms of broad commodity categories. The information so generated could be integrated through the use of IT to provide data for policy and analysis. In the interim, till the IT based system becomes operational, surveys could be undertaken by agencies such as NSSO.

ii. There is complete lack of regular information on many parameters related to trucking industry like operational cost, cost of financing, vehicle technology, vintage, time and resources cost of detention of vehicles, turnaround time, distance traveled etc. This makes task of evaluation of trucking operations and related policy formulation difficult. Regular surveys at five yearly intervals on these parameters need to be undertaken.

iii. Passenger movement by road transport is available for SRTUs but not for private buses. Passenger movement and related parameters by private bus operators need to be captured.

iv. Commuter Surveys**:** Commuter surveys covering time and money spent on travel by road particularly in major metros which is vital for urban planning.

v. Time Motion Surveys**:** These could be undertaken to assess time spent on various activities related to document compliance/clearances at barriers to ascertain transaction costs faced by road freight/passenger industry

Road Sector Data

13.4 Comprehensive, accurate and up to date database is vital for planning, design, construction, implementation, maintenance and monitoring of road works. At present, database maintained for both central and state sectors roads suffers from inadequate coverage and time lag. Road sector data needs to be collected on a regular basis. There is a need to strengthen the database system for all roads including State Highways and Major District Roads. An institutional system for maintaining the database of road length, inventory of roads and bridges, traffic data, condition of roads and bridges, cost data, source of material, availability of manpower and details of contractors and consultants need to be developed.

Policy Statement

1. In the sphere of **road infrastructure** Government will endeavor to augment road capacity by promoting:

I. Corridor Management Plan for major highways to address the concerns of ribbon development, encroachments, uncontrolled access and safety.

II. Way-side amenities, parking space etc, along highways under public private partnership (PPP) scheme.

III. PPP units at national and state level to disseminate information on PPP and render advisory services.

2. Government will strive to strengthen **road maintenance activities**:

I. Through Pavement Management System and Bridge Management System for proper up keep of road network.

II. By ensuring adequate availability of funds for maintenance of the nationally financed road infrastructure like highways and locally owned assets as well. To this end, a fixed share of Central Road Fund (say 10%) will be earmarked for maintenance of road network. Similarly, dedicated Fund for maintenance of roads at State level to be put in place. States may consider allocating 10 per cent of Motor Vehicle Tax and VAT collected on sale of vehicles to this dedicated Fund.

3. The Government will take steps to strengthen <u>public road transport</u> to facilitate access to essential socio economic services and provide affordable mobility through a package of measures which amongst others would include:

I. Provide fiscal incentives to Public Transport and facilitate harmonization of Motor Vehicle Tax among State / UTs.
II. Liberalize issue of stage carriage permits.
III. Use of information technology to enhance efficiency and productivity of public bus transport in particular.
IV. Provision of assistance/funds to strengthen public transport system in States/UTs through centrally sponsored scheme.

V. Product differentiation in bus passenger services to serve different class of passengers to wean away commuters from personalized mode and raise fare box collection.

VI. Review of Road Transportation Act, 1950 in view of the changed economic environment with greater role for market forces. Government will encourage SRTUs to explore alternate institutional models which offer greater autonomy and flexibility from the point of view of commercial operation.

4. Passenger road connectivity to semi urban and rural areas: Providing affordable mobility to people who do not have access to personalized mode and reside in rural and remote areas is an important objective of the Government. To this end, government will endeavor to encourage participation of private operators on nonviable rural/remote routes through:

I. Auctioning of combination of routes(which are a mix of profitable and non viable routes) to private operator(s) so as to enable them to compensate their losses on account of operation of non viable routes;

II. Offering non viable routes to bidder asking for lowest subsidy/financial support;

III. Subjecting non viable routes to lower rates of taxation or permit fees and allowing alternate competing modes of passenger road transport.

5. Independent Road Transport Regulator

Government will facilitate setting up Independent Road Transport Regulator at State level with following functions in view of the liberalisation and deregulation across various sectors of Indian economy.

I. Fix price band for different kinds of services in an objective and transparent manner.

II. Ensure service coverage across all regions and provide mechanism for compensation for non remunerative routes.

III. Benchmark quality/service standards for road passenger services.

IV. Promote competition to curb anti competitive practices.

V. Address/adjudicate operational issues like access to terminals/common infrastructure.

6. Government will facilitate **smooth and seamless flow of freight movement by road across States/UTs** so as to foster single barrier free domestic market through:

I. Use of intelligent transport system (ITS) for automation of the commercial and regulatory documentation that has to accompany commercial vehicles and goods and; electronic payment of various charges without stopping the vehicle enroute etc.

II. Devising "Green Channel" facility to high value/export cargo with single destination. Implementation of this proposal will need some modifications to existing truck fleet, which can be locked/sealed and certified for the journey to their destination.

III. Adoption of "single Window clearance System" for all authorized charges/clearances both at origin and at Check Posts.

IV. Rationalization of discretionary powers vested with officials of various departments, consistent with requirements of national security, law and order and important legal requirements.

V. Creation of a web-based database of the vehicles having National Permits and adopting e-payment scheme for payment of taxes of various states so as to reduce the scope of revenue leakage, delayed remittance and malpractices plaguing the national permit system.

7. Government will make concerted efforts to curb the menace of **Vehicle Overloading** through:

I. Strict monitoring and enforcement of provisions relating to permissible weight. Vehicles carrying weight in excess of permissible limits to be off-loaded at load checking sites. States should make land available at such locations for storage of off-loaded goods at transporter/consigner's risk.

8. To reduce the scope of human error in road accidents and to meet the **human resource requirement and development of road transport sector** the Government will**:**

I. Establish model driver training institutions across the country with requisite infrastructure support.

II. Put in place mechanism for inspection of motor driving training schools to ensure compliance with prescribed standards.

III. Make ‘refresher training course’ from certified/model schools mandatory before renewal of license for drivers of transport vehicles.

IV. Identify and finance Industrial Training Institutions for imparting motor driving training as 'trade' so as to create a pool of competent driver training instructors.

V. Make evaluation and issuance of driving license IT based so as to reduce scope for subjectivity and extraneous considerations

9. The Government will spell out the institutional responsibilities of stake holders and measures to promote road **Safety, traffic management and post-accident care** through

I. Setting up of the National Road Safety and Traffic Management Board (NRS&TMB) with regulatory, advisory, capacity building and research functions under an Act of the Parliament along with State Road Safety and Traffic Management Board in the States on the lines similar to NRS&TMB to provide an institutional framework for a coordinated approach in the area of road accidents.

II. PPP in rescue, evacuation and trauma care of accident victims for effective delivery of emergency relief services.

III. Facilitate setting up Truck terminals outside the cities. This will result in quicker turnaround time of goods carriers and speedy loading/unloading of freight resulting in substantial efficiency gains in trucking operations and also help reduce traffic congestion.

10. Government will create a policy framework to foster **sustainable road transport** which is efficient in terms of resource use (fuel, road space etc), puts less strain on environment and affordable by encouraging:

I. Use of bio-fuels

II. Non-motorized transport (NMT) by making provision for NMT infrastructure on all roads, segregating motorized and non-motorized transport etc.

III. Inspection & Certification (I&C) regime under PPP with Government acting as a regulator which covers both safety & emission norms. To enhance the effectiveness of I&C process, registration/insurance of vehicles should be linked to I&C

IV. Create dedicated resource pool through levy of ‘green cess’ by States on the older vehicles which could be used to ensure compliance to environmental regulations.

11. Government will **promote of R&D in transport Sector** through**:**

I. Use of Intelligent Transport System for addressing the problems of transport sector.

II. Use of modern technology in construction and maintenance of road infrastructure as well as for rolling stock.

III. Closer collaboration with academia and industry to promote research and development in the sector and strengthening of the existing institutions involved in road transport research.

12. Government will help and assist States/UTs to enhance **data collection**, accessibility to facilitate planning, policy formulation and monitoring by:

I. Making vehicle registration IT based and creating a centralized registry/depository of all information on motorized vehicles. All the Regional Transport Authorities will to be computerized and networked.

II. Putting in place mechanism to generate economic data on road transport sector on a regular basis through electronic format.