

**Government of the People's Republic of Bangladesh
Ministry of Communications
Planning Commission**



**Integrated Multi-Modal Transport Policy
Final Draft**

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1. A NEW POLICY FOR TRANSPORT

1.1. Introduction

Adequate transport infrastructure and services are prerequisite for sustainable economic and social development. Globalization now calls for more efficient transportation systems to reduce travel times and costs. Countries having efficient transport and communication systems are well placed to attract investment compared to those with weak infrastructure and services. But transport is already damaging towns and cities and harming the countryside. Future planning of the transport sector must, therefore, ensure that the system is sustainable in the long run.

The transport sector in Bangladesh suffered heavily during liberation war in 1971. Most of the infrastructures, bridges, ports and airports were destroyed. Many of the facilities then had to be built from scratch. The reconstruction of infrastructure was undertaken in line with a multi-sector investment plan and this trend continued up to the end of 1980s. However, from the beginning of 1990, development started taking place in a sectorally biased manner, with an over-emphasis on road sub-sector at the cost of other competing modes. The development of rail and IWT sub-sectors gradually became marginalized.

This policy has been developed following extensive consultation across Government, and with all stakeholders in order to re-dress this imbalance. As demand for transport grows, the climate of our planet is being altered. There is a need for policy to address all modes of transport in an integrated way, so that future investment can take account of the best mode in each case to meet overall Government objectives.

Road transport has, in particular, revolutionised lives, bringing great flexibility and widening horizons. Government does not want to restrict road transport - the vision for a prosperous Bangladesh is one where prosperity is shared by all. But an over-concentration on road transport has a price - for health, for the economy and for the environment.

Short-term thinking on transport has reduced choice, for all the traveling public and for goods carriers. The business sector is concerned about the costs of transport. People want the existing transport system to work better. They want more choice and a new emphasis on protecting the environment and their health. An integrated transport policy is needed to address the massive demands of the future, and to combat congestion and pollution.

The integrated transport policy is intended to extend choice in transport and secure mobility in a way that supports sustainable development. Achievement of the Millennium Development Goals is, in part, reliant on a cheap and efficient transport system. The transport system in Bangladesh is intended to be safe, efficient, clean and fair.

1.2. Environmental Issues

Across the world, emissions of CO₂ from road transport are the fastest growing contributor to climate change - the greatest global environmental threat facing the international community. Climate change brings unpredictable extremes of weather with more frequent and intense storms, floods, droughts and rising sea levels. Whilst Bangladesh does not contribute much in terms of CO₂, it suffers heavily from the effects of climate change.

Bangladesh's urban particulate matter concentration is twice the world average and a major cause for concern. Road transport contributes a lot towards this problem, which hastens the death of thousands each year. Contrary to popular opinion, drivers and their passengers are not protected from the pollution they create - the air inside a truck or bus can be more polluted than for nearby pedestrians. Inland water transport and railways are less polluting than road transport.

1.3. Safety

Increases in road traffic, and speeds, have made roads more threatening for pedestrians and rickshaws. The economic benefits of roads are being undermined by the economic and social

costs of road accidents, injuries and fatalities. In Bangladesh, road transport related fatality rates are much higher than those of inland water transport and railways. That is the dilemma with road transport - on the one hand it brings advantages but, on the other, it takes up valuable land and causes high accident rates. Hence, in this policy change is proposed - a new approach to transport policy that is not led by road building.

1.4. Improving Logistics

The 21st century has seen a renewed focus on intermodal freight transport driven by the changing requirements of global supply chains. With the rapid development of containerization worldwide, the orientation towards deregulation, and a new focus on logistics and global supply chain requirements, the stage is set for continued intermodal transport growth.

The world-wide growth of intermodal freight transport is characterized by several key factors:

- the need to reliably and flexibly respond to changing customer requirements with seamless and integrated coordination of freight and equipment flows through various modes at minimum costs and time;
- increasing freight movement requiring freight integrators—container depots, freight stations, and logistics parks;
- meeting the growing needs for inter-country freight transportation; and
- constraints on and coordination of infrastructure capacity, including policy and regulatory issues, as well as better management of existing infrastructure and broader considerations on future investment in new infrastructure.

In order to address these issues, governments world-wide are transforming their roles to respond to the changing needs of time. In particular they changing from providers to facilitators of services — leaving shipping, air and road transportation mostly in the domain of private sector; introducing competitive impulses in railways; encouraging public-private partnerships in infrastructure financing. In order to maintain and improve competitiveness in trade and industry, Bangladesh needs to move in these directions too.

Along with physical integration of transport modes, information integration is also a major challenge that can be addressed through application of information technology in order to ensure timely delivery of goods in a coordinated and cost-effective way. Following the global trend, Bangladesh needs to develop a transport system to reduce the real cost of transport and integrate itself with the regional transport network to derive the benefits of growing regional trade.

1.5. A New Approach

The country faces an enormous challenge to deliver the vision of a transport system that supports sustainable development. A new approach is needed, bringing together the public and private sectors in a partnership which benefits everyone. The policy provides a new emphasis on rail and inland water transport, in which transport companies can provide new services and raise standards, and Government needs to ensure that its money is spent wisely to make public transport available for all and that services are properly regulated in the public interest.

1.6. Constraints

Moving towards a sustainable transport system means overcoming a number of constraints. In the inland water sector, rivers are characterized by a lack of dredging and few night navigation aids. Most vessels are relatively slow with no container handling facilities as yet. Inland water transport does not offer the door-to-door service that road transport does, and so policy initiatives need to be taken to overcome this. Bangladesh's rail infrastructure is characterised by lack of maintenance with many speed restrictions and safety concerns. Locomotives and rolling stock are relatively aged, and do not offer modern levels of service to passengers. The railway operates on two gauges, which obviously hampers seamless travel. In order to ensure that rail plays its full role in a multi-modal system in the future, these special issues need to be addressed by policy.

2. INTEGRATED MULTI MODAL TRANSPORT POLICY (IMTP)

2.1. The Paradigm Shift

All of the above has led to this policy shift away from continued investment in the road sector towards the concept of sustainable mobility. Sustainable transport is designed to meet the mobility needs of the present without compromising the ability of future generations to meet their needs. Hence the focus of policy is on the development of the railway network and improving its level of service, and to reviving the inland water transport sector. At the same time, high priority is given to maintaining and managing the nation's transport infrastructure that is already built. Taken together, future public and private investment should represent an increase in resources for transport. More investment in railways and inland water transport, and more people and goods using them will work together to generate more revenues, which in turn can lead to further investment and even better services.

The Government will take steps to increase investment in railways and inland water transport, and develop strategies for improving integration between these two modes.

The way forward is through an integrated transport policy. This means:

- integration **within and between different types of transport** - so that each contributes its full potential and people can move easily between them;
- integration **with the environment** - so that transport choices support a better environment;
- integration **with land use planning** - at national, regional and local level, so that transport and physical planning work together to support more sustainable travel choices and reduce the need to travel;
- integration with **policies for education, health, economic growth, gender and social equity and poverty reduction** - so that transport helps to make a fairer, more inclusive society.

The Government wants a transport system that meets the needs of people and business at an affordable cost and creates a better environment in which to live and work. It wants to cut congestion, improve towns and cities and encourage vitality, helping to reduce the need to travel and avoid urban sprawl, and excessive road building that has consumed precious agricultural land. Planning and coordination will be reformed to bring together thinking about better transport and a better environment at the planning stage. Multi-modal transport operations that bring efficiency will be fostered.

2.2. Objectives of the IMTP

The primary objective of the IMTP is to emphasise the roles that rail and inland water transport must play in the development of the overall transport network. Within this overall policy, the objectives of the Integrated Multi-modal Transport Policy (IMTP) are to :

- Reduce cost of transporting goods, so as to make goods and services within Bangladesh less costly;
- Aid export competitiveness, through lower transport costs;
- Improve safety;
- Take advantage of Bangladesh's geographical position to trade in transport services;

- Reduce the worst environmental effects of transport;
- Ensure that transport meets social needs – in terms of its cost and accessibility to all sectors of society;
- Improve integration of the overall transport network and foster measures to make interchange between modes easier;
- Reduce the need for travel by better land use planning;
- Use transport as means to assist poverty reduction; and
- Reduce aid dependency; and
- Improve fuel and energy security.

2.3. IMTP Emphasis

The integrated multi modal transport policy emphasizes the following:

- Maintenance of existing assets and infrastructure
- Encouraging more investment in rail and inland water transport;
- Adopting integrated transport strategies;
- Improved integration and interchange between modes of transport;
- Improving regional connectivity;
- Fostering the role of Multi-modal transport operators (MTO's);
- Setting specific targets for improving air quality, road safety, public transport provision and efficiency, and road traffic growth reduction;
- A firm commitment from the government to provide adequate levels of funding;
- Greater private sector participation in the sector;
- Greater use of traffic management;
- Innovative funding mechanisms, including road user charging and levies to fund road maintenance, and new funding proposals for inland water transport;
- Ensuring physical and operational integration between different modes of transport;
- Establishing a more rational regulatory framework;
- New co-ordinating mechanisms to advise on integration at the national level and act as a force for change;
- Meeting the transport needs of women and girl-children; and
- Improved research, education, training and technology to support integrated transport objectives.

3. SUB-SECTORAL IMTP POLICIES

Within the framework of the IMTP, policies are set out for each sub sector. The main sub-sectoral policies by mode are set out below.

3.1. Railways

Bangladesh's rail infrastructure is characterised by lack of maintenance with many speed restrictions and safety concerns. Locomotives and rolling stock are relatively aged, and do not offer modern levels of service to passengers. The railway operates on two gauges, which obviously hampers seamless travel. In order to ensure that rail plays its full role in a multi-modal system in the future, these special issues need to be addressed by policy.

The Government intends to establish a vision for Bangladesh Railway, which will be a new corporate entity in the future, with a dedicated mission and the tools to be able to deliver it. The Government will ensure that it meets the needs of passengers and the freight customers it serves. Passengers rightly demand better services and more accountability. The railway can make a big contribution to avoiding future construction of roads by attracting current and future roads users to rail through the following measures:

- Improved inter-city service quality, timetabling and capacity.
- Increasing container movement efficiency and capacity;
- Establishing more inland container depots;
- Taking a lead in providing multi-modal door-to-door services in close co-operation with operators of other modes;
- Developing multimodal corridors between major economic centers which give priority to freight and a high-speed network for passengers. The immediate priority will be the Dhaka Chittagong Economic Corridor;
- Establishing technical harmonization and interoperability between various logistics and systems, including regional traffic, particularly for rail-based container movement;
- Reorganising the organisation into lines –of-business with a focus on operations in the multimodal environment;
- Ensuring better integration and interchange ;
- Establishing regional links, including those of Trans-Asian Railway, to facilitate trade in goods and services;
- Corporatising BR in order to bring in efficiency and modern business practices;
- Encouraging BR to divest itself of non-operational land holdings;
- Improving value for money for passengers from the Government subsidy; and
- Brining forward investment plans and projects to meet these objectives.

The policy performance targets for rail are:

- **Inter-city railway passengers to grow by 30% over next 5 years**
- **Share of container traffic to double over the next 8 years**

3.2. Inland Water Transport

For centuries people have used an inland water transport as a cheap and efficient means of travel, and for moving massive quantities of freight. But, in the inland water transport sector, rivers are characterized by a lack of dredging and few night navigation aids. Most vessels are relatively slow with no container handling facilities as yet. Inland water transport does not offer the door-to-door service that road transport does, and so policy initiatives need to be taken to overcome this.

Therefore, within the framework of the integrated multi modal transport policy the priorities in the IWT sector are :

- Investment and greater Government allocation for dredging;
- Improved technology and management in dredging;
- Greater private sector participation in dredging;
- Investment in existing river ports to improve cargo and passenger handling;
- Investment in existing river ports to improve interchange between water transport and other modes;
- Investment in new ports to better serve increasing passenger and bulk cargo needs;
- Provide door-to-door services in co-operation with operators of other transport modes;
- Development of inland container depots served by inland water transport to link both sea ports with major inland destinations;
- Improve efficiency and safety in the country boat sector;
- Improve navigational aids and vessel tracking;
- Rationalisation of the regulatory agencies and regulations in the sector;
- Research into more fuel-efficient vessels;
- Ensure clearances on inland waterways are maintained; and
- Improve the *Protocol on Inland Transit and Trade*¹ to increase commerce and assist the revival of IWT.

The policy performance targets for inland water transport are:

- **Restore full navigability of class I and II channels over the next 5 years**
- **Increase modal share of IWT for freight to 20% over the next 5 years**

3.3. Road Transport

The paved road network in the country has expanded dramatically since Independence, from 3,000 km in 1971 to over 55,000km today. All Divisional Headquarters and seaports are linked to the Capital by paved roads, and there is a high level of road connectivity in rural areas. In fact, the road density in Bangladesh is one of the highest in Asia. However, the network is

¹ Under Article 8 of the Transit Agreement, signed between the Governments of Bangladesh and India on 21st March 2006.

characterised by inefficient and under-funded maintenance regimes, with the result that many parts of it now require urgent rehabilitation. Traffic management is poor, and the full capacity of the network is not being fully realized. Low cost traffic management measures can aid safety, and avoid costly investment in new roads.

The IMTP emphasizes:

- improved road maintenance, making it the first priority. Skimping on maintenance wastes money. If maintenance is delayed too long structural damage is done and much more expensive and highly disruptive repairs are required;
- road users paying more for the service that they get, especially when road maintenance is improved;
- making the best use of existing roads by investing in traffic management measures and in minor improvements. This will include giving priority in specific locations to certain types of traffic, including buses and coaches and heavy goods vehicles;
- promote carefully targeted capacity improvements to address existing congestion on the network, where they support the integrated transport policy;
- full social and environmental appraisals of road projects with sustainable action plans to mitigate adverse effects of road building;
- reform of road ownership and responsibilities for roads through new legislation, and to confer on road agencies powers to prevent encroachment onto roads;
- ear-marking road projects for private sector participation; and
- strict enforcement of axle-load restrictions.

Since new roads can lead to more traffic, adding to the problem not reducing it, all plausible options need to be considered before completely new roads are built. Traffic calming and measures to reduce traffic will also be considered in conjunction with the construction of bypasses for towns.

The policy performance targets for roads are:

- **increase the proportion of National Highways in “good-to-fair” condition to 90% over the next 3 years**
- **remove all the maintenance backlog in next 5 years**
- **earmark 10% investment projects for private sector participation over the next 5 years**
- **use of Social and Environmental guidelines be made mandatory for all road and bridge projects in next 2 years**

3.4. Ports and Shipping

Ports and shipping are vital to the multi-modal logistic chain. The capacity and operational ability of ports needs to be improved to maintain competitiveness. This integrated shipping policy has the following aims:

- To identify the key infrastructure improvements that need to be made for the next 5, 10 and 20 years;
- To ensure that multi-modal plans are overseen by one body – to cover ports, barging, off-dock facilities, customs, procedures and associated banking issues, so that these all work together;

- Move towards modern working methods and the use of new technologies that will increase employment prospects, and improve skill and wage levels;
- Move towards building confidence with trade unions;
- Increase Chittagong Port capacity, including consideration of a deep-sea port, and ensure that new berths are fully connected by rail and inland water transport;
- Foster the growth of ports as gateways for the smooth movement of goods to and from neighbouring countries in the region;
- streamlining customs procedures and regulations in line with the requirements for the introduction of Multimodal Transport.
- Introduce new legislation covering the documentary requirements and obligations for multi-modal transport operation, including insurance provisions needed to cover all risks.
- to improve the regulatory control of shipping using Bangladesh ports and waters;
- to expand the capacity of Chittagong port and improve its operational efficiency through greater private sector participation;
- foster the shrimp and fish export industry through improvements to port operations at Mongla;
- to better utilise the potential of Mongla port through inland water transport and rail connections for general cargo and containers;
- enforce IMO protocols on marine pollution; and
- utilise local and foreign expertise and investment to increase port capacity and efficiency.

Ports are a vital link in the supply chain to and from trading partners and must be integrated with wider transport networks. The aims of the policy will be to:

- promote Bangladesh competitiveness by encouraging reliable and efficient distribution and access to markets;
- enhance environmental and operational performance by encouraging the provision of multi-modal access to markets;
- make the best use of private sector for investment and operations;
- promote best environmental standards in the design and operation of ports, including where new development is justified.

The policy performance targets for ports are:

- **Decrease the container dwell time at Chittagong Port to 10 days**
- **Maintain the ship turn round time at Chittagong at an average of 2.5 days**

3.5. Air Transport

The increasing demand for rapid distribution of goods will continue to put pressures on air freight services and in turn on airports and associated infrastructure, adding to the pressures from growth in passenger traffic. The rapid growth of air cargo services and their wider economic, environmental and social significance requires further examination. The Government will commission new research to formulate future policies on the air freight industry. The research will:

- assess the current development of the sector, including its economic importance and wider impacts;
- provide a better basis for forecasts of its future growth and the implications for demand for services and market change;
- support the development of the new national airports policy, which will set the framework within which the industry can plan for the future with greater certainty.

In the meantime the policies for air transport are:

- Improvement of cargo handling at Zia and Shah Amanat International Airports through the creation of Cargo villages with streamlined procedures to assist export competitiveness particularly aimed at perishable goods;
- Improve access to airports by all modes of transport;
- Immigration services at international airports will be improved through the recruitment and training of staff dedicated to the task, and the introduction of improved IT systems;
- Fostering the operation of more international flights at Chittagong and Sylhet, subject to relevant agreements on commerce and trade between Bangladesh and respective countries;
- Greater private sector participation in the operation of air flights on both international and domestic routes; and
- Greater private sector participation in the activities of the CAAB. Government will divest service and maintenance works to the private sector.

The policy performance targets for air transport are:

- **develop a national airports policy by 2009**
- **Separate regulatory and operational functions of CAAB by 2010**

3.6. Human Resource and Professional Development

Implementation of the above policies will require an injection of improved human resources across all transport sub-sectors. In addition to specific initiatives identified in the policy, the Government will:

- Commission research into the human resource requirements in the public and private sectors
- Identify training needs for Government and agency staff
- Encourage training and professional development improvements in the private sector
- Promote the establishment transport planning and management institute.

4. CROSS CUTTING ISSUES

4.1. Investment Criteria

Decisions on when and where to invest in network improvements, including measures to manage traffic, will be taken in the light of the new approach to appraisal based on the criteria:

- integration - ensuring that all decisions are taken in the context of the integrated transport network development and the IMTP;
- safety - to improve safety for all transport users;
- economy - supporting sustainable economic activity in appropriate locations and getting good value for money;
- environmental impact - protecting the built and natural environment;
- accessibility - improving access to everyday facilities for the poor and those without a car and reducing community severance;
- poverty reduction – emphasizing projects that have beneficial effects on the poor on in areas of high poverty concentrations;
- social inclusion – meeting the needs of women, the elderly and the disabled; and
- providing accessibility to basic health and education facilities.

4.2. Multimodal Transport Operation

Multimodal transport (MMT) operations have emerged in international trade to facilitate the smooth movement of international trade under the cover of one document and under one authority, and to provide door to door services. The IMTP will encourage MMT Operators in Bangladesh through:

- Alignment of domestic legislation, rules and regulations in line with international norms, advocated by the Multimodal Transport Convention of UNCTAD;
- Foster the training of Multimodal Transport Operators (MTO's) to undertake the task of multimodal transport operation, and to provide on time, door to door services.;
- Support to the private sector transport operators, freight forwarders as well as to other government and semi-government entities to establish themselves as MTO's; and
- Support a self-registration system among MTO's to regulate their operations in line with international norms, to ensure that Bangladesh is competitive in this area.

4.3. Transport Safety

4.3.1. Road safety

The numbers killed on roads are equivalent to 10 Boeing 747 aircraft, fully loaded, crashing in Bangladesh every year. But because road casualties occur only a few at a time they are not always noticed as much as aircraft or launch disasters where, overall, the number of people killed is very much lower.

The policies that address the causes of accidents are to :

- Review the driving test and driver training, to develop a more effective test and better training techniques;

- Improve vehicle fitness through better testing and enforcement;
- Improve the quality of road design, and introduce formal safety audits on road projects;
- Increase awareness of the necessity of safer driving using sociological techniques where appropriate;
- Improve road safety education in schools and by parents, by assessing the effectiveness of existing training aids and developing new ones;
- Assess local measures to achieve safer routes to school, and producing a best practice guide;
- Survey potential measures to ensure better compliance with speed limits on roads ;
- Adopt proven measures to improve vehicle safety and to ensure that they give maximum protection to occupants and minimize injury to pedestrians and non-motorized transport;
- Outlaw use of mobile phones when driving;
- Fully enforce traffic rules and regulations;
- Campaign in the media improve awareness of the potential dangers of road traffic and high speeds;
- Regulate the transport of hazardous goods by road;
- Use data on accident black spots to design safety measures;
- Improve accountability of those responsible for road transport operations; and
- Consolidating the legal reform implications of the above in a new Motor Vehicle Act.

In order achieve the implementation of these policies the Government believes that a modern and focused driver and vehicle licensing agency is needed. To this end it will reform the existing Bangladesh Road Transport Authority (BRTA) to focus on these core activities and equip it accordingly.

The policy performance targets for road safety are:

- **Reduce the number of fatalities from road accidents by 50% over the next 15 years**
- **Reduce the number of fatalities from road accidents by 10% over the next 2 years**
- **Reduce overloading by 50% on all national highways over the next 2 years**
- **Reform BRTA over the next 3 years**

4.3.2. Bus and coach safety

Investment in improving the quality of vehicles and infrastructure which will be encouraged by policies for the bus industry should bring safety benefits in addition to encouraging public transport use.

The siting of bus stops and location of crossings should take account of the need to minimise the risk of accidents, whilst encouraging a safer, more pleasant walking environment.

4.3.3. Railway safety

Already rail is one of the safest forms of travel and the long term improvement in rail safety is continuing. However, safety is compromised by poor maintenance and the increasing chance of de-railment. The focus of the IMTP is on accidents that occur at level crossings, and in order to reduce train/road transport conflict the policies are to:

- Strengthen the Government Inspector for Bangladesh Railway;
- Ensure that all level crossings on National and Regional Highways are fitted with some form of physical protection;
- Road over-bridges are constructed at level crossings on National and Regional Highways in accordance with the Road Master Plan; and
- Awareness is created, especially in rural areas of the potential dangers at level crossings.

4.3.4. Inland Water Transport safety

Whilst inland water transport is a *relatively* safe mode, the scale of casualties and deaths in accidents is always a cause for national concern. Policies within the IMTP to improve safety are::

- Increased and improved training for engine and deck hands;
- Enforcement of vessels' design standards;
- Reform of vessel registration system;
- Improved regulations and enforcement to prevent overloading of vessels; and
- Enforcement of vessels' fitness to sail.

4.4. Women, the Elderly and Physically Challenged and Transport

To assist greater participation of women, the elderly and disabled in economic, social and cultural affairs, the key policies are:

Mobility

- greater emphasis on integrated transport, including more accessible buses, and better information;
- improving the quality of the pedestrian environment, eg making it easier for women with children, the elderly and the disabled to move;
- the full range of community transport needs to be assessed in government investment projects;
- use of ramps at stations and bus stops to aid access;
- easy-to-use buses - to help access for disabled and elderly people and parents with young children; and
- half-price or lower concessionary fares for children and elderly people;

Security

- better facilities for women on buses;
- safer public transport, including the security measures at stations;

4.5. Private Sector Participation

Historically investment in creation of transport infrastructure has largely been made by the Government for public use. In assessing the role of private sector, a distinction must be made between infrastructure and services. Most of the transport services and mobile assets with the exception of Bangladesh Railway are owned by the private sector.

The basic infrastructure with a few exceptions is under the public sector ownership. Efforts will be made to involve the private sector in provision of these basic infrastructure facilities as well. Road construction will remain in public domain to a large extent. However, there is a major opportunity for private sector participation in development of roads where the traffic densities are extremely high.

The Government, in line with its own Guidelines for Private Sector Investment, will encourage greater private sector participation in the following areas:

- Private sector participation in acquiring railway rolling stock, particularly high speed wagons and new generation locos. This can be achieved through innovative leasing schemes. The long term goal should be to provide an open access to the fixed infrastructure;
- Individual passenger train routes, particularly for air-conditioned and first class rolling stock, will be franchised to the private sector;
- A private company will be floated to operate container trains;
- Private sector will be invited to operate inland water ICD's, and invest in equipment;
- Vessels carrying containers between Chittagong and Pangoan;
- Long-term contracts for river maintenance dredging;
- In the port sector, initiatives have already been taken to involve the private sector and these should be continued and expanded;
- In case of airports, it is policy to involve the private sector more through splitting the CAAB into two agencies. One, under state control would continue to be responsible for the regulation and safety of civil aviation, with a second company to operate airports under private sector ownership and
- The target for private sector investment in roads should be of the order of 10% of total investment over the next 20 years limited. There is also scope for private investment in bridges, inter-urban expressways and bypasses. In order to involve private sector in development of highways, the public sector funds should be used in the form of equity and/or grant so that projects become more attractive for the private sector.

Where there are foreign proposals for investment in transport, the Government will consider an appropriate domestic equity share.

Many infrastructure facilities and services have natural monopoly characteristics. There is a need for regulation in order to ensure that the operator does not exploit its market power to serve its own ends. In order to achieve this objective the regulator must be equipped to fix optimum tariff and perform quality monitoring role.

The policies are:

- Regulatory practices will be improved so that the transport modes are truly competitive and responsive to users demand;
- Regulatory practices will address consumer grievances such as quality of services, safety etc.
- The regulator will also be required to act as an arbitrator in disputes between service providers or between concessionaire and the concessioning authority.
- To ensure that the regulatory authorities are functionally free from bureaucratic control.

4.6. Social Equity and Poverty Reduction

Within an integrated multi-modal framework transport should develop in Bangladesh with the specific objective of assisting the economic, social and human development of the nation. Transport should not be an obstacle to growth, and furthermore it must be fostered in a way which enhances personal mobility and accessibility of the poor as part of an overall poverty reduction strategy. Hence :

- Labour-intensive methods in construction and maintenance of transport projects will be encouraged where appropriate;
- Transport facilities and services will be designed in future to take into account the special needs of women and girl-children;
- Programmes will be developed to ensure that professionals, administrators and decision-makers in all transport sectors, deliver services that are attractive and usable by women and girl-children;
- Environmental, social and resettlement impact analyses will be mandatory for all significant transport projects. Mitigation measures will be identified and implementation monitored ;and
- Transport projects and services will be designed to maximize benefits to the poor.

4.7. Regional Cooperation

The Government's objective is to take advantage of Bangladesh's geographical position to develop international transport links that generate revenue for the nation, as well as safeguarding the national sovereignty and security. The key policies are:

- The Government will seek to co-operate with neighbouring countries in the region in matters of water management and regional transport that can improve the efficiency of multi-modal transport in Bangladesh;
- Bangladesh will continue to be an active member of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and will promote cooperation in trade, transport, communications, and people-to-people contact;
- The Government recognizes that future cooperation under BIMSTEC requires the development of key infrastructure, in particular transportation and communication linkages, to facilitate tourism, trade and investment and accordingly agreed to strengthen and accelerate cooperation for developing concrete project proposals;

- Government is also committed to consider the recommendations of the SAARC Regional Multi-modal Transport Study (SRMTS) concerning transport connections by road, rail, and IWT, and will implement those which are in the national interest as well as serving the interests of other countries in the region;
- The Government will continue to promote the development of the Asian Highway and Trans-Asian Railway in Bangladesh through co-operation with neighbouring countries and UNESCAP;
- The Government will take steps to improve regional cooperation on water management not just for flood control, but to ensure a regular and steady flow in the major rivers which can assist navigation;
- Standardise road signs in line with the Vienna Convention² to facilitate safe movement of regional traffic;
- Government will investigate ways of minimizing trans-shipment of cross border goods, in order to reduce transport costs; and
- The Government will ask Bangladesh Railway to bring forward proposals to provide improved physical links with neighbouring countries

4.8. Efficient Transport and the Environment

Better preservation of the environment is a must. Hence the policy favours greener, cleaner vehicles that have less impact on the environment, along with better public transport and measures that assist non-motorised transport and walking. But these alone will not be sufficient to tackle the congestion and pollution that is caused by road traffic – and so there will need to be measures that reduce the rate of road traffic growth. The target should be an absolute reduction in traffic in towns and cities where its environmental damage is worst.

The price of goods, especially essential food, is affected by the cost and efficiency of transport. Goods need to be delivered cheaply, but with least harm to the environment. To achieve this policy aim, Government will work with industry to promote sustainable distribution, so that the efficiency of the distribution market is improved in a way that meets environmental objectives.

On major corridors for freight movement the Government will take a lead in analysing the constraints on complete door-to-door movements, in order to bring forward measures to reduce transport costs.

The Government will foster innovations in :

- Bus services so that they are cleaner, more comfortable, more reliable, and a real and attractive alternative to using cars;
- Bus routes so that they are franchised to private sector operators in a transparent way that meet environmental objectives;
- Encouraging CNG vehicles;
- Solar powered refrigeration units for trucks carrying perishable items;
- Inland ports to accommodate waste matter from vessels to prevent it being dumped in waterways.

Environmental standards for road transport will be established, including rigorous emission standards, in a new Motor Vehicle Ordinance.

² 1968 Vienna Convention on Road Signs and Signals

4.9. Transport and Land Use

Transport and land use is a closely inter-related issue. Since land use generates transport movements, it is crucial that transport system is planned well to handle the needs that various land uses generate. Research will be undertaken to undertake the special impacts of transport on land use in Bangladesh so that :

- Land use policies can be adopted that encourage local services, reducing the need to travel;
- Transport planning can be integrated with land use planning, especially in urban areas, including Upazila towns. The Government will ask responsible local government agencies to draw up town and city transport plans accordingly; and
- Transport policy can integrate with the government's Land Use Policy (2005).

In addition :

- In urban areas, no major land use change should be allowed unless a Traffic Impact Assessment (TIA) is undertaken in advance and measures suggested for addressing the adverse impacts of increased transport demand;
- Under the trend in urbanization, high density developments should be focused around metro- stations and other major public transport hubs;
- In rural areas, adequate care will be taken to segregate the effects of local land uses from through traffic on main roads by creating barriers and service lanes.

5. SPECIFIC POLICY INITIATIVES WITHIN THE IMTP FRAMEWORK

The following specific policy initiatives are designed to support the overall objectives of the IMTP.

5.1. Pedestrians

- reallocate road space to pedestrians, for example through wider footways and pedestrianisation;
- improving footway design, continuity, maintenance and cleanliness;
- provision of ramps to facilitate access for the physically challenged;
- providing more protected pedestrian crossings, where pedestrians want to cross;
- reducing waiting times for pedestrians at traffic signals and giving them priority in the allocation of time at junctions where this supports more walking;
- The Government will launch a 'Pedestrian First' programme designed to ensure that all concerned agencies provide sufficient footways, along with safe pedestrian crossings, and are able to remove unauthorised encroachment from footways.
- promotion of road safety; and
- Introducing traffic calming measures in residential areas.

5.2. Non-Motorised Transport

- Segregation of non-motorised traffic from motorized on National Highways;
- Ensure the use of lights and reflectors on rickshaws;
- Selective bans on the use of rickshaws on roads more suited to bus operations;
- Fostering rickshaws as a feeder transport mode

5.3. Urban Transport

The current structure of governance for the transport sector in cities is not equipped to deal with the problems of urban transport, with insufficient planning and no co-ordination between the many agencies involved. As a result traffic congestion is increasing, especially in the Dhaka City.

- The Government will strengthen concerned institutions for transport (City Corporations as well as DTCB), to facilitate more co-ordinated planning and implementation of cities' transport programmes and projects, and the integrated management of urban transport systems;
- Strategic Transport Plans will be drawn up for all major cities, in which the role of public transport will be emphasized. Such plans will also make recommendations for institutional reforms to enable successful implementation of the plans.
- Strengthened institutions will ensure that adequate coordination is effected between rail, water and road based modes of city transit systems. They will be required to engage in frequent and effective public consultation;

- Urban transport plans should prioritise traffic management – making the best use of existing infrastructure to manage demand for traffic, rather than attempting to cater for unlimited demands. Traffic management methods should, in the long-term, make use of intelligent transport systems;
- The Government will grant powers to appropriate institutions to franchise routes for bus operations and to secure adequate facilities for bus operations (stopping, terminating etc.);
- The Government will establish an independent supervisory board to ensure that bus franchising is implemented in the public interest;
- Urban transport policies will be encouraged that remove inefficient competition between modes of transport, with a view to selecting the most appropriate for each situation, and encouraging integration between modes;
- Strengthened institutions in cities will be granted powers to set appropriate fare levels locally for various modes of public transport;
- Such institutions will co-ordinate common ticketing systems for public transport in their areas;
- The Government will provide guidance to concerned agencies on the proper planning of public transport facilities and services in urban areas;
- The Government will provide financial assistance for the construction of Mass Rapid Transit (MRT) systems in cities that are properly designed to meet mass travel needs;
- Measures to control motorised traffic entering congested urban areas (e.g. through pricing), may be considered by concerned agencies, but will only be implemented following permission from Government;
- City corporations will be required to draw up parking policies. These will contain plans for the provision and pricing of long and short-term parking, both on-street and off-street. Concerned agencies will be given powers to control on-street parking; and
- While approving plans for buildings for commercial, residential or educational purposes, the approving authority will require that sufficient car parking and pickup and drop areas are provided within the boundary of the property.

5.4. Integrated public transport

For public transport to provide an attractive alternative to road transport, it must operate as a network. The policy emphasises

- more through-ticketing;
- better facilities at stations and other places for interchange;
- better connections between and co-ordination of services;
- wider availability and provision of information on timetables, route planning and fares;
- a national public transport information system

Many journeys include an interchange, from the relatively straightforward change of buses at a bus stop to major rail stations. Quick and easy interchange is essential for public transport to compete road transport, and new projects should assess the adequacy of existing facilities against the key attributes of good interchange:

- reliable/punctual and frequent services to produce minimal waiting times;
- short walking distances and clear directional signs;
- good timetable displays;
- staff availability;
- well maintained infrastructure, including public conveniences
- good personal security;
- Accessibility.
- better protection from the weather;
- instantly readable and relevant information on routes and frequencies;
- better directional signs between, for example, bus stops and between rail and bus stations;
- regular cleaning and maintenance;

5.5. Rural Transport

In rural transport the Government seeks to foster a range of motorised and non-motorised modes of transport to improve access to employment, markets, along with education, health and the full range of social facilities. Connectivity of rural areas is a priority, both in terms of infrastructure and transport services. The policies are:

- To provide paved connections between all the economic growth centres and the country's road network. The Government's target is to complete this programme in the next five years. Important destinations in rural areas such as Union Parishad offices, markets, railway and water landing stations, schools, health centres, and social facilities will be connected in phases with the existing road network. Of the above Parishad offices will be the priority.
- The programme of bridge and culvert construction on the rural road network will be extended to improve accessibility of rural people and for generating employment. Adequate gaps and drainage structures should be provided to avoid flooding.
- To foster a higher level of rural mobility and access to basic transport facilities as well as services. In the medium-term many of these may continue to be non-motorised (on roads), and using rural water transport, e.g. country boats.
- Non-motorised transport is especially important in rural areas and special considerations will apply in rural road design, including vehicle segregation and low gradient bridges, wherever feasible.
- A high diversity of vehicles and technologies will be encouraged through removing inappropriate regulations. Transport and rural development policies will be more closely linked so as to improve economic conditions through improved local markets, labour based contracting on roads, transport hire facilities, and access to credit.
- Improved human skills will be encouraged in machine maintenance, driving, business enterprise, and looking after animals used for transport. Government will work with NGO's to achieve this. This will be assisted by the implementation of participatory planning and awareness at the most local levels.
- Rural road maintenance management systems will be strengthened to ensure the sustainability of the rural road network.

6. POLICIES FOR IMPLEMENTING THE IMTP

6.1. Institutional

The Government wishes to have a strong, professional and focused capability to direct the implementation of the integrated multi-modal transport policy, and to co-ordinate the delivery of improved transport services throughout the country. The key institutional policies are:

- The Government will constitute a Cabinet Committee with Ministers of the concerned Ministries to oversee the implementation of the multi-modal transport policy for Bangladesh. The Council monitor the extent to which policy performance targets are being met, and will establish new targets from time to time.
- The Transport Sector Coordination (TSC Wing) established in the Planning Commission will perform the role of coordination in ensuring implementation of the policy. This Wing will act as a secretariat to the Cabinet Committee.
- A 'National Multimodal Transport Coordination Committee' will be constituted to prepare proposals for implementation and monitoring of the IMTP, and will report to the Cabinet Committee. The Cabinet Committee will appoint members of the Multimodal Transport Coordination Committee, including representatives of the private sector.
- The TSC Wing will provide secretarial assistance to the 'National Multimodal Transport Coordination Committee', and be responsible for the coordination and sharing of data within the transport sector;
- The terms of reference of the National Co-ordination Committee on Multi-Modal Transport will be to co-ordinate all agencies involved in multi-modal transport in order to improve efficiency. This will involve the ministries responsible for shipping, ports, local government, communications, civil aviation, commerce, planning and finance, and concerned private sector representatives.
- The Ministries of Shipping, Communications, Civil Aviation, Local Government and Commerce will designate their own focal points to deal with matters related to Multimodal Transport.
- A single independent body will be established to regulate fare structures in the public interest, separated from any other interests (economic regulation), with economic regulation being removed from individual agencies in the transport sector.
- BRTA will be reformed to focus on improved driver and vehicle adherence to modern vehicle and driving standards, to collect revenue efficiently, and to lead the road safety policy initiatives. BRTA's other functions will be taken up by other concerned agencies.

6.2. Planned Policy Implementation

Policy implementation will be assisted by improved problem identification, planning and appraisal, with the following actions to be taken:

- Problems of transport infrastructure and operations across all modes, including access to ports and airports will be identified in detail and integrated transport strategies for the country based on the multi-modal approach will be developed and implemented.
- Multi-modal transport studies will be undertaken addressing the objectives and issues of sustainable development, taking account of forecast demands, leading to the adoption of investment plans.

- The Government has prepared a Road Masterplan, and in future will ensure the development of the following sub-sectoral masterplans :
 - Railway Development Plan
 - Transport Safety Strategy
 - Inland Water Transport Masterplan
 - Air passenger and freight targets
 - Urban Transport Plans

- Within the multi-modal transport framework, and bearing in mind the recommendations of the above plans, an integrated and well-coordinated multi-modal transport (MMT) investment plan will be drawn up taking into account the
 - Relative economic costs of various modes;
 - Integration options for the transport network; and
 - Options for the provision of door-to-door services.

- Action plans to implement the MMT investment plan will be drawn up to include the legal, regulatory and institutional measures to achieve the policy objectives of sustainable multi-modal transport. Contradictions within existing policies will be rationalised, and enforced through legislative means.

- Government will continue to support the establishment of Transport Sector Coordination capacity in the Planning Commission (and concerned Ministries) with capabilities in:
 - Multi-modal transport planning and forecasting
 - Policy analysis and review
 - Project appraisal
 - Monitoring implementation of the IMPT and sub-sectoral policies
 - Advanced Geographical Information System data collection, analyses and support services.

- Strict implementation of improved project appraisal techniques will be adopted to ensure that primary poverty and social objectives are being met by transport programmes, as well as economic and environmental concerns. All proposed major transport projects will be required to include a feasibility study to justify investment.

- The Government will promote the implementation of recently adopted policy guidelines for further private sector participation subject to any capital subsidy ceiling in projects.

- The scope of project monitoring and evaluation will be widened to test whether investments are meeting economic and social objectives.

- The advantages of Multimodal Transport will be publicised to concerned organizations.