

Chapter 9

ACTION PLAN



9.1 Priorities

9.1.1 Road Freight Transport

While licensing procedures have scope for further streamlining, the deregulation that

has taken place in the road freight industry has had positive results. Productivity is low by Western standards, partly because of the continuing transition being made by SOEs, but it has improved significantly as a result of both market pressures and fleet and management improvements. Continuing competitive pressures and more demanding customer requirements will undoubtedly raise efficiency and performance standards further and help weed out inefficient operators. Competition among smaller private operators is intense, however; safety standards are being compromised and truck overloading is common, partly because of high expressway tolls.

At the same time, there has been a revolution in the distribution supply chain and among logistics service providers that brought about an expansion of higher-quality services catering for more demanding export, manufacturing, and consumer markets. MOC's policy of moving SOEs toward consolidated joint-stock companies at arm's length from government and promoting market leaders is supporting this trend and helping encourage the development of integrated, nationwide networks. But in the long run, market pressures will probably be more effective in achieving this; MOC should be careful not to discriminate against those companies that compete with its chosen firms.

In short, markets appear to be working. With regulations left largely unchanged and safety enforcement strengthened, quality, efficiency, and safety improvements at the "top" end will percolate down and there will be a weeding out and consolidation among the lower-quality, smaller-scale operators. The latter would be hastened if regulatory authorities were to focus more on removing remaining market restrictions imposed by provincial and lower-level agencies, enforcing safety and loading standards more strictly, linking operator permit renewal to safety performance and regulatory compliance, and restructuring user taxes and charges to encourage the use of modern multi-axle vehicles and discourage the types of trucks that do most pavement damage. The last of these should also involve a review of highway toll policies. In addition, there is a need for a comprehensive review of on-the-road vehicle safety standards and VWD and loading limits: the aim should be to downplay regulations controlling vehicle maintenance and focus on enforceable technical standards that any vehicle using public roads should meet. This would be the basis for the improved system of on-road enforcement and safety performance rating.

9.1.2 Road Passenger Transport

Licensing regulations for operators, buses, routes, services, and terminals are needlessly restrictive. Operators have little opportunity to innovate, tailor services to passenger requirements, or use buses more efficiently. Quality standards are high, but productivity levels low. Further restrictions on operations are imposed through terminals. With fares controlled, input costs rising, and limited opportunities to reduce costs by raising productivity, many operators are facing growing financial difficulties.

The main priority should be to remove route capacity restrictions, to allow buses to be operated on any route rather than being restricted to particular routes. The resulting improvement in productivity would significantly reduce unit costs per passenger carried. Once this has been achieved, regulation of bus fares could be abolished; they would no longer be necessary. Existing operators would compete on price and quality and improve bus utilization by interworking them within their networks. Later, when things have settled down, they should be allowed to compete on other routes. To minimize instability and prevent the influx of inexperienced and incompetent operators, existing market-entry requirements should be retained for a period; some consolidation will occur; later, they can be eased. Even if they met higher competency standards, new small operators would find it difficult to compete with established operators and would tend to focus on routes where they are more appropriate.

Bus operators should be allowed to operate terminals, and should not be required by law to share them, though they should be allowed to do so if they wish. Bus operators should decide their own departure times, subject to minor adjustment by terminal operators if there are too many simultaneous departures. Terminal operators should not be required to

enforce safety or loading regulations ; that is the role of the enforcement authorities. They should be allowed to decide on terminal fees , subject to review by a Provincial Pricing Bureau charged with investigating overcharging complaints.

9.2 Action Plan for Road Freight Transport

9.2.1 Road Cost Recovery

Until now , there has been no integrated policy toward road user fees , taxes , and tolls. A restructuring is needed. Without this , heavy commercial vehicles will continue to be subsidized relative to other road users , inefficient vehicles (e.g. , those that do more pavement damage per ton of payload) will not be discouraged , users will not face the true costs of their road use , and demand will be artificially inflated. Ideally , each vehicle should face taxes and charges at least equivalent to the marginal social costs (the costs to society) associated with its use of the road system. This can be achieved through a combination of vehicle-based fees , road usage-based fees and tolls. The balance between these should be established based on an analysis of the fixed and variable costs of road use (including the externalities of safety risk , congestion , and pollution) , an attribution of these costs among types of vehicle , and an analysis of the optimum mix of cost-recovery options to achieve , as near as possible , full marginal-cost recovery for each vehicle type.

Such a study would likely result in proposals to establish an annual or periodic vehicle charge (a road maintenance fee or vehicle registration fee) and a fuel surcharge to supplement the system of highway and bridge tolls. Unlike the present structure of road maintenance fees based on GVW , the annual vehicle charge would be structured according to the number of ESALs-measuring potential road-damaging power-

of each vehicle when fully laden. The fuel surcharge and tolls would be the main sources of revenue for recovering the variable costs of road use , i.e. , those that vary with the level (volume and weight) of traffic.

MOC should carry out an updated analysis of road cost recovery to determine the optimum mix of user taxes and charges to recover the marginal costs of road use. Outline terms of reference have been provided under the Project. The study should be advised by a consultative committee comprising representatives of MOC , NDRC , the Ministries of Finance and Commerce , provincial governments , and the road freight and passenger transport industries , and should involve extensive consultations with road users and other stakeholders.

9.2.2 On-road Vehicle Safety Standards and Permissible VWD Limits

It is recommended that improvements in vehicle safety standards be achieved by replacing the present controls over maintenance procedures with a set of enforceable minimum safety , size , weight , and loading standards required to be achieved by all vehicles using public roads. In addition to minimum safety-related features such as lights , brakes , steering , engine power , load security and stability , etc. , these should include an updated set of permissible limits on VWD and loading. The standards should be capable of being verified by inspection on the road. Failure to meet the minimum standards would result in fines , loss of points on the operator's performance rating , and , for persistent violations , confiscation of operator permit.

It is beyond the scope of the present project to draft these standards and to suggest revised VWD limits : the latter would require a detailed analysis of the impacts of alternative truck and axle-load configurations on geometric and structural standards for roads and bridges , road pavement and bridge per-

formance under load , truck stability and handling , accident risk and the economic trade-off between the lower freight costs associated with larger vehicles , and the additional costs of providing and maintaining higher-standard road pavements and bridges. It is recommended that this be done as part of a VWD and Safety Standards Study carried out by MOC ; draft terms of reference have been developed under the project. It would require inputs from experts in vehicle technical regulation , vehicle , driver and road safety , highway/bridge engineering , enforcement , contracts management , and transport economics. Advised by a consultative committee comprising representatives from MOC , MPS , NRDC , provincial governments , and the vehicle manufacturing and road transport industries should advise the project.

9.2.3 Vehicle Safety and Loading Compliance

Enforcement

The present arrangements for enforcing vehicle safety and loading standards are ineffective and need to be changed : under present arrangements , there is little economic incentive for truck operators to comply with the regulations and for enforcement agencies to carry out their task effectively. Nor is it practical to achieve vehicle safety goals by specifying how they should be maintained.

The Government should aim for the following :

- a revised set of minimum on-the-road vehicle standards (see above) capable of being checked at the roadside or in permanent inspection stations ;
- the facilities and equipment , including automatic axle-weighing scales and other testing equipment , printers and communications facilities , needed to verify compliance with vehicle standards regulations and to provide an automatic , accurate , and tamper-proof record of whether each vehicle inspected meets

the minimum prescribed conditions ;

- trained , committed , and honest inspection staff , with incentives to achieve effective enforcement ;
- a tamper-proof procedure for marking or identifying vehicles that have recently passed an inspection and been found to comply with minimum vehicle standards ;
- a system of independent monitoring , including where appropriate weigh-in-motion equipment or other remote sensing equipment , to ensure that the enforcement system is working effectively ;
- a structure of fines designed to deter noncompliance ;
- a system for identifying and recording the holder of the vehicle and operator permits , and procedures for rating the compliance performance of each operator , linked to the renewal of permits ; and
- close cooperation between the relevant highway authorities (PCD or CB) and security authorities (PSD or PSB) in preparing , establishing , and operating such a system.

Systems and procedures for meeting these conditions are recommended to be developed under a proposed Vehicle Safety Compliance Project , outlined below , and that they be trialed and evaluated for their effectiveness in a pilot demonstration project in a selected province. Ideally , the trial should include two options for implementation : one in which inspection and enforcement continue to be done by PSD staff , the other where the operation of one or more inspection stations is outsourced to a carefully vetted private operator , chosen after competitive tender , with a performance-based contract subject to independent audit.

Performance Rating

A key feature of the recommended safety-related

initiatives is a performance rating system, similar to the approaches used in North America and Australia, based on each operator's compliance with safety, vehicle size/weight, and loading standards. Renewal of an operator's permit would be conditional on his/her maintaining a threshold rating score; renewal of a vehicle permit would depend on its having complied with on-road vehicle safety standards. Noncompliance, determined by roadside inspection, would result in graduated fines and a lowering of the operator's rating, and, if persistent, suspension or confiscation of the operator and/or vehicle permit, depending on the nature of the noncompliance.

Implementation of such a system would require careful preparation, done in conjunction with the planning for revised VWD and safety standards and enforcement procedures. It is recommended, therefore, that the Vehicle Safety Compliance Project also be tasked with designing the vehicle/operator identification system, compliance rating system, procedures used at inspection stations, penalties for noncompliance, computerized record-keeping that would support the rating system, and the procedures for linking the rating system to the renewal of operator and vehicle permits, as well as the associated institutional arrangements, and drafting the necessary changes to licensing, safety standards, and safety enforcement regulations. Draft terms of reference have been provided to MOC. They would require careful coordination both at the national level with the MPS and between the PCD and PSD at the provincial level. Coordination at the national level would aim to establish an overall framework and set of standards, protocols, and procedures within which compliance-rating systems at the provincial level can be developed and integrated.

[1] The Action Plan timetable allows for a period during which the pilot province is selected. It should be noted, however, that Guangdong has already made progress in establishing an integrated database system for sharing information between the PCD, PSD, and provincial insurance regulation authority. It will be necessary, however, to establish national guidelines governing the development of such systems if a proliferation of incompatible systems is to be avoided.

Demonstration Project

To develop, refine, test, and evaluate the proposed approach to safety/loading inspection and compliance, a demonstration project is recommended in a province willing to introduce the changes.^[1] This would involve:

- specifying, developing, and installing the integrated database system and associated data capture, storage, access and communications systems to maintain records on the results of on-the-road vehicle inspections and the performance of individual transport operators in complying with safety, VWD, and loading regulations;
- specifying, procuring, and installing the necessary equipment at selected inspection sites (including automatic axle-weighing scales and other measuring and testing equipment, computers, printers, and communications facilities) and in the offices of the PCD and PSD;
- developing, testing, and refining procedures for carrying out inspections by enforcement staff, initially with PCD staff in attendance, and preparing standard operating procedures and manuals;
- testing and evaluating the use of independent contractors to operate inspection stations, and drafting appropriate performance-based contracts and operating and monitoring procedures—though this could, if necessary, be done at a later stage in implementing the proposed compliance system;

- implementing and testing procedures for independent monitoring of the effectiveness of the enforcement task ;
- testing the operation of the performance-rating and license-renewal systems , initially “ off-line ” in parallel with (i.e. , without initially replacing) , existing procedures for imposing sanctions on offenders ; and
- evaluating the benefits of the trial and making any adjustments that may be necessary.

Although the systems and procedures for improved compliance would be tested in a single province , the aim would be to extend the performance-rating system throughout the country ; otherwise , there would be no way of linking offenses occurring in distant provinces with the license-renewal procedure in the operator’s home province. Regulations for doing so would need to be issued jointly by the Ministers of Communications and Public Security.

9.3 Action Plan for Road Passenger Transport

9.3.1 Reform of Bus Regulations

In the case of road passenger transport , the proposed process of change from the existing situation must be carefully managed to minimize the problems experienced in other countries that have deregulated their bus services. The social implications of the proposed changes , particularly the effect of reduction in employment through improved efficiency should also be considered.

To eliminate the risk of inexperienced new operators entering the market and destabilizing the industry , existing operators should be given time to adapt to a more competitive regime by initially competing among themselves ; this can be done by retaining the existing entry requirements for a period after deregulation of routes : Increased competition between exist-

ing operators will be a sufficient spur to improved efficiency without the added complication of a large number of new operators. This would enable large operators with the necessary critical mass to establish coordinated networks of services where required , and to develop related services such as terminal or workshop facilities as appropriate. Later , when entry to the market is made easier , new small operators would find it difficult to compete with established operators on those routes where large operators are more effective , and would therefore tend to commence operations on those routes where small operators are more appropriate.

The criteria for operator categorization should , however , be relaxed for existing operators , to enable them to expand , contract , or restructure if they so wish , without this affecting the services which they may operate. For example , a large group may decide to divest itself of its terminal and maintenance subsidiaries , which technically would render it ineligible to operate the longest-distance services under existing regulations.

The first stage in the deregulation process should therefore be to remove restrictions on the capacity of each route and the permit condition restricting buses to particular routes. This would enable operators to experiment with different service levels , make more effective use of buses by using them on different routes within their existing networks , and compete more effectively , albeit with existing operators. At the same time , the categorization criteria should be abolished in respect of existing operators.

The immediate impacts of relaxing these route controls would be lower operating costs (through better driver and vehicle productivity) and a wider range of available services and schedules. If controls over fares are also removed , fares should fall in line with the reduction in costs.

Later , when all operators have become accustomed to operating in a more competitive situation ,

and fares and service levels have become established on each route , operators should be permitted to commence operation on other routes (including routes not currently operated if they so wish) , and to compete with existing operators on those routes ; they are also likely to experience competition from additional operators on their own existing routes. This will likely result in some operators expanding their networks of routes , while others may be forced to reduce their operations. Some operators may take over or merge with others to form larger enterprises. Fares and service levels may change further as a result of the increased competition.

The final stage of the process should be to ease restrictions on entry to the market , but this should be done with care to prevent instability caused by incompetent operators. It is recommended that potential new operators should be offered training courses on the legal requirements and practical issues involved in bus operation , with a certificate of professional competence issued upon successful completion of the course. In addition to the legal content of the course , potential operators need to be given guidance on commercial aspects to minimize the degree of disruption to existing operators , and the number of failures of new operators , through ignorance of basic transport operating principles.

Illegal and informal operators must also be catered for. All existing operators in this category are proposed to be given a temporary permit to operate on their existing routes , valid for 1 year ; no new operators would be eligible for permits after a specified date , after which any vehicle operated without a permit would be impounded and disposed of. Operators with temporary permits would be required to comply with all relevant regulations within one year ; those failing to do so by the end of this period would have their permits revoked and their vehicles impounded if they continued to operate these. Those remaining in business would have to compete with the formal operators. They should be encouraged to form into larger

units where appropriate , through merging or the formation of operators' associations ; such associations should be eligible to hold operators' and route permits on behalf of their members , and perform the role of bus operators in their own right. Alternatively , the small operators might sell out to larger operators if any is willing to buy.

Bus station operators currently play a major role in regulating bus services , through their responsibilities for allocating bus departure times , and for ensuring compliance with vehicle safety regulations. Under the proposed reforms , these responsibilities will be transferred to the bus operators and to the government authorities responsible for enforcing vehicle safety regulations. Nevertheless , the efficient management of bus stations is essential to the efficient operation of bus services , and the terminal operators will therefore be key stakeholders in the Action Plan.

9.3.2 Training Requirements

Bus operators in the PRC will have to adjust to a more competitive environment. In the medium to long term , increased competition will force operators to improve their efficiency ; those that do not will eventually go out of business. If newcomers are allowed to enter the market , such as foreign operators in JVs , they are likely to introduce international best practices that will put them at an advantage over existing operators.

If this happens , existing operators may be destabilized with consequent problems and waste of resources. In the Chinese context , it would be preferable to introduce best practices to the Chinese operators first. Chinese operators already employ some best practices such as smart cards on city bus services and automated ticket-checking at bus terminals , but these are mainly technology-based ; operators are lagging behind other countries in terms of management " software , " i.e. , practices and procedures.

The strategy should therefore be to rationalize the regulatory system, eliminate restrictions on existing operators and give them more freedom to innovate and develop new services, without opening the floodgates to large numbers of new operators, many of whom would be incompetent and therefore likely to destabilize the industry. Existing operators should then be assisted in introducing best practices, primarily through training and study tours, in which they should have the opportunity to observe both good and bad practices. Officers in the regulatory authorities should also participate in appropriate training programs. Informal operators should also be given the opportunity for training if they so wish. It will then be appropriate to allow freer entry to the market, although it will still be necessary to guard against incompetent new operators by imposing strict quality and safety requirements. At this stage, new operators should also be eligible for training in best practices.

9.3.3 Demonstration Project

To demonstrate the potential improvements, a demonstration project is suggested to be set up based on a large town or small city, with about 1 million population.^[2]

The bus operators would be exempted from certain controls as described above, and would also be given advice on best operational practices to maximize their efficiency. They would also be given guidance, where necessary, in the use of operational data for planning purposes. Bus station operators would cease to be responsible for allocating departure times to bus operators, although they would have to liaise with bus operators, and agree on some adjustments, if the operators scheduled too many departures at the

same time. Like the bus operators, the station operators would be given advice in best practices in this and other areas of their responsibility.

All bus routes (other than local urban bus services that are not under the jurisdiction of the MOC) in the city concerned would be included in the project. Therefore, bus stations and bus operators based in other cities would also become involved to some extent, as would the transport authorities in those cities. Bus station operators in cities at the destinations of the routes from the pilot project city would be required to relinquish responsibility for allocating departure times on the routes concerned. Bus operators based in other cities, but operating on routes into the pilot project city, would enjoy exactly the same relaxation of regulations, on those routes, as the operators based in the pilot project city; they would, however, continue to be subject to existing regulations on all their other routes.

9.4 Implementation of the Action Plan

9.4.1 Road Freight Transport Action Plan

The suggested timetable for the road freight transport action plan is set out in Table 29. It comprises three main groups of activities:

- a Road Cost Recovery Study, carried out by MOC, to develop proposals for a revised system of taxes, charges and tolls that would recover from road users the marginal costs of their use of the roads and make a fair and reasonable contribution to those components of cost that do not vary with road use;
- a VWD and Safety Standards Study, also car-

[2] A demonstration project based on a single city is preferable to one involving several. If several cities are proposed, the demonstration projects should be staggered, so that lessons learned in one can be passed on to the others.

ried out by MOC , to establish an updated set of on-the-road vehicle safety , VWD , and loading standards that are capable of being enforced effectively and would help maximize the economic benefits achievable by modern truck technologies in the context of an economically optimal strategy for road and bridge development , strengthening/upgrading , and maintenance ;

- a Vehicle Safety Compliance Project , carried out by MOC with the cooperation of MPS , to improve operator compliance with updated on-the-road vehicle safety , VWD ,and loading standards , and to strengthen enforcement of those standards. A key feature would be a system for recording the performance of operators in complying with safety and loading standards at roadside inspection stations , linked to procedures for renewing operator and vehicle permits. This project would include a demonstration project to install the necessary equipment and develop , test , and refine the procedures in a pilot province before they are extended throughout the country.

The suggested timetable for the key tasks and milestones is set out in Table 29.

9.4.2 Road Passenger Transport Action Plan

The suggested timetable for the road passenger transport action plan is set out in Table 30. It focuses mainly on preparations and implementation of the proposed bus service licensing reforms in a pilot project , but additional tasks are also specified in the schedule.

The initial pilot project is recommended to be implemented in one city only. This would minimize the number of consultants required at any one time. It would also provide an opportunity for the changes to

be evaluated and modified if necessary before being extended elsewhere :one objective of the pilot project is to ensure that any problems can be identified and resolved before general implementation. If the Government wishes to carry out more than one pilot project , the starting dates should be staggered by at least 6 monthly intervals. This would enable lessons learned in one city to be passed on to the next. It would also enable the team of external consultants to assist in more than one location , thus providing consistency. The involvement of international consultants can be progressively reduced as their Chinese counterparts become familiar with the various tasks.

The project would be coordinated by the PCDD but supervised on a day-to-day basis on its behalf by the Transport Administration in the project city. Assistance from external consultants would be essential , and in practice the consultants would play the major role in managing the implementation of the project , in close liaison with the authorities and other stakeholders.

This cooperation and involvement of all key stakeholders is crucial throughout the period of implementation. The stakeholders would include the provincial and municipal regulatory authorities , all bus station operators , and the principal bus operators in the cities concerned. When all stakeholders have been identified , there must be a period of intensive consultation to ensure that all concerned are fully aware of the purpose of the project , the implementation program and their respective roles. A pilot project implementation committee should be established , comprising representatives of all major authorities involved , and other stakeholders as appropriate. This committee would meet on a regular basis to review with the consultants the progress of the project and to agree on any changes found to be necessary.

The consultants employed must be fully conversant with the issues concerned. Some tasks , such as

instruction in international best practices , would require consultants with substantial experience of bus operation outside the PRC ; in effect , this will eliminate the majority of Chinese consultants. Other tasks , such as the development of new regulations and licensing procedures , should ideally also involve consultants with international experience. However , it is equally important that the international consultants work very closely with Chinese counterparts , who eventually would be able to take on all aspects of similar projects , and assist in implementing reforms throughout the PRC.

On completion of the pilot project(s) , the consultants involved should produce a detailed report describing the changes made and the effects of these changes ; the report should also describe any problems encountered in implementing the changes , and how these problems were overcome. Lastly , it should provide a practical timetable for introducing the reforms nationally.

It will be important to ensure that the relaxation of regulations does not result in instability in the industry or lack of continuity of service. In the long term , the

regulations will cater to this , by requiring bus operators to give notice of any intended changes to the licensing authority. For the purpose of the pilot project , such notice should be given to the PCD , who should notify the consultants who in turn would assess whether the proposed changes are likely to cause disruption. If in the opinion of the consultants any proposed change would have undesirable results , this would be discussed by the PCD (who may in practice wish to delegate this task to local authorities in the city concerned) with the operator , who may be requested to amend his plans. However , such intervention must be regarded as a last resort and should be used only if the proposed change will be potentially damaging to the public interest or to the bus industry as a whole. Majority of bus operators in the PRC have a strong sense of public responsibility , and are unlikely to knowingly take action which is against the public interest. Once bus operators have become familiar with the new regime and understand the effect of any actions they might take , and market forces are functioning as they should , such cases should be rare.

Table 29 Road Freight Transport Action Plan Timetable

No.	Action	By Whom	Comment	Duration (months)	Related Actions
Road Cost Recovery Study :					
1	Establish steering committee and allocate responsibilities and resources	MOC	Members to include MOC , NDRC , MOF , MIC and representatives of the transport industry	1.0	
2	Assemble data on revenues from road users from all sources	MOC	Including all taxes , fees and tolls , by level of administration and type of vehicle	3.0	
3	Assemble information on the existing and projected costs of road/bridge development , upgrading , operation , and maintenance ; determine those that vary with traffic and those that are fixed	MOC	Requires assistance of consultants	4.9	

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(Table 29 continued)

No.	Action	By Whom	Comment	Duration (months)	Related Actions
4	Allocate fixed and variable costs among classes of vehicle based on the degree to which they are responsible for them ; estimate the level of cost recovery under existing policies	MOC	Cost allocation requires use of HDM model or similar ; requires assistance of consultants	2.0	2 , 3
5	Estimate the additional costs of externalities (congestion , accident risk , pollution)	MOC	Requires assistance of consultants	3.0	
6	Identify alternative sources and mechanisms for cost recovery ; assess the practical implications of each as an instrument of cost recovery	MOC	Consideration should be given to the different agencies responsible for collecting revenues and incurring expenditures	4.0	2 , 4 , 5
7	Evaluate alternative combinations and identify those that fairly recover marginal costs from different users	MOC	Aim should be to establish similar level of cost recovery among vehicle classes , and to create as close a link as possible between user charges and the benefits of improved roads	2.0	6
8	Test each option for its impacts on road transport costs , road funding , and restructuring of the vehicle fleet	MOC	Requires use of HDM model or similar , with assistance of consultants	3.0	7
9	Recommend the preferred combination of vehicle-based , road usage-based charges and tolls	MOC		2.0	8
10	Prepare a staged implementation plan	MOC		1.0	9
11	Consult with government and industry stakeholders and provincial governments , and modify proposals as necessary	MOC		2.0	10
VWD and Safety Standards Study :					
12	Establish steering committee and allocate responsibilities and resources	MOC	Members to include MOC , MPS , NDRC and representatives of the transport industry	1.0	
13	Review available studies ; determine relationships between vehicle/loading characteristics and road user and agency costs	MOC	Requires assistance of consultants	6.0	
14	Review vehicle technology trends and prepare scenarios for fleet development	MOC		4.0	
15	Evaluate the trade-off between road user costs and road agency costs for alternative vehicle size , weight and loading limits , and safety features	MOC	Requires use of HDM model or similar , with assistance of consultants	6.0	13 , 14
16	For the economically optimal combination , develop detailed vehicle safety , VWD and loading standards , and associated road/bridge engineering standards	MOC		4.0	15

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(Table 29 continued)

No.	Action	By Whom	Comment	Duration (months)	Related Actions
17	Check that the vehicle safety and loading standards can be verified by roadside inspection	MOC , MPS	In close cooperation with MPS	3.0	16
18	Draft necessary changes to regulations governing on-the-road vehicle safety , VWD , and loading standards	MOC	In close cooperation with MPS	3.0	17
19	Consult with government and industry stakeholders and provincial governments , and modify proposals as necessary	MOC	2.0	18	
	Vehicle Safety Compliance Project :				
20	Establish national steering committee and allocate responsibilities and resources	MOC , MPS	Members to include MOC , MPS , NDRC and representatives of provincial governments and the transport industry	2.0	
21	Specify facilities , equipment and procedures for carrying out roadside inspections to verify compliance with on-the-road vehicle safety , VWD , and loading regulations	MOC , MPS	Aim should be to specify automatic , tamper-proof equipment and procedures minimizing opportunities for avoidance and corruption	6.0	18
22	Specify facilities , procedures , and contract arrangements for independent monitoring of the effectiveness of enforcement	MOC , MPS	Monitoring agency must be truly independent of the enforcement process	3.0	21
23	Specify procedures and contract arrangements for outsourcing the vehicle inspection task	MOC , MPS	Optional task ; this could be done much later in the implementation program , depending on the results of the monitoring task	5.0	21
24	Design a performance rating system for monitoring the compliance of operators with safety , VWD , and loading regulations	MOC , MPS	Based partly on a review of performance-based systems used in North America and Australia ; requires assistance of consultants. Could include a study tour to evaluate alternative approaches (not included in time estimate)	5.0	
25	Design a system for linking the performance rating system with fines and other sanctions , including procedures for renewal of freight operator licenses	MOC , MPS	Based on a points system ; if an operator falls below a specified threshold rating , he could be fined , his vehicle permits could be reduced and/or his operating permit could be revoked	3.0	24
26	Draft any changes in laws and regulations needed to implement the proposed procedures	MOC , MPS		4.0	21 , 25
27	Prepare a detailed plan for testing implementation in demonstration project in a pilot province	MOC , MPS	Requires consultations with shortlisted provinces willing to establish cooperative arrangements between their PCDs and PSDs	3.0	26

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(Table 29 continued)

No.	Action	By Whom	Comment	Duration (months)	Related Actions
28	Consult with government and industry stakeholders and provincial governments , and modify proposals as necessary	MOC , MPS		2.0	27
	Pilot Demonstration Project :				
29	Select the pilot province and brief all stakeholders	MOC , MPS	Briefing all affected stakeholders is especially important	3.0	27
30	Specify , develop , install , and test the shared information system and associated equipment and communications facilities	PCD , PSD	System design will depend partly on the existing information systems in the PCD and PSD	8.0	24
31	Procure , install , and test inspection/testing equipment at chosen roadside inspection locations	PCD , PSD	Including tamper-proof , automatic axle weighing scales , printers , and communications facilities	10.0	21
32	Implement , test , evaluate , and refine the recommended procedures for carrying out roadside inspections by PSD staff , attended by PCD staff	PCD , PSD		4.0	21
33	Appoint independent agents and test , evaluate and refine procedures for outsourcing inspection tasks	PCD , PSD	Optional ; could be omitted until later in the implementation plan	6.0	23
34	Implement , test , evaluate and refine procedures for establishing independent monitoring of the effectiveness of roadside inspections	PCD , PSD	Requires transparent process of prequalification and selection , with model contract documents and procedures developed under Task 24	6.0	24
35	In parallel with existing procedures , implement and evaluate procedures for operating the performance-rating system and linking it to procedures for permit renewal	PCD , PSD	The procedures being tested should run " off-line " initially , without replacing existing procedures for applying sanctions for violations of the regulations	10.0	24 , 25
36	Prepare proposals for extending the trial to other provinces and specifications for linking the provincial systems into a national performance rating system accessible by all enforcement and licensing agencies	PCD , PSD	Aim should be to have compatible systems in every province , so that enforcement and licensing agencies can share a common pool of information on operators' performance in complying with the regulations governing vehicle safety , VWD , and loading limits	6.0	35
37	Consult with government and industry stakeholders and provincial governments , and modify proposals as necessary	PCD , PSD		4.0	36

MOC =Ministry of Communications ; MOF =Ministry of Finance ; MPS =Ministry of Public Security ;
 NDRC =National Development and Reform Commission ; PCDs =Provincial Communications Departments ;
 PSDs =Public Security Departments ; VWD =vehicle weight and dimensions

Source : Authors

Table 30 Road Passenger Transport Action Plan Timetable

No.	Action	By Whom	Comment	Duration (months)	Related Actions
Pilot Project-Preparation :					
1	Select city for pilot project	MOC	Approx. 1 million population , and as self-contained as possible	1.0	
2	Form Pilot Project Implementation Committee (PPIC)	MOC/PCD/PSD	Steering Committee with representatives of all major authorities involved , chaired by MOC	1.0	
3	Identify bus routes affected	PCD	All routes operating into the city	1.0	
4	Identify all participating operators and terminals	PCD	Operators serving the city , whether based there or not	1.0	3
5	Identify other cities/provinces affected	PCD	Destinations of routes from project city , and terminals used by these routes	0.5	3
6	Liaise with authorities in other cities/provinces	PPIC	Other authorities will have to make licensing concessions on affected routes	1.0	5
7	Rationalize vehicle inspection requirements and enforcement procedures	PCD/PSD		6.0	
8	Publicize pilot project	PPIC	Media announcements , presentations , workshops , etc.	3.0	
Pilot Project-Implementation and Evaluation					
9	Design procedures and criteria for operator licences , route licences , vehicle licences , licences for informal/illegal operators	MOC	Assisted by consultants	3.0	
10	Introduce new operator permits	PCD		3.0	9
11	Introduce new route permits	PCD		3.0	9
12	Introduce new bus licences	PCD		6.0	9
13	Issue temporary licences for informal/illegal operators and embargo on new ones	PCD	Licences valid for 1 year (for practical reasons it may be necessary to extend this)	3.0	9
14	Strengthen enforcement of licence validity	PCD	Checks to ensure no operators running without valid licences	Continuous	
15	Issue licences to those who can comply with the new entry requirements and impound remaining illegal vehicles	PCD	1 year after issue of first licences	3.0	
16	Encourage formation of area-based operators associations for small operators	MOC/PCD	Media announcements , presentations , workshops , etc.	6.0	

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(Table 30 continued)

No.	Action	By Whom	Comment	Duration (months)	Related Actions
17	Abolish bus fare regulation but introduce measures to prevent predatory undercutting	MOC/PCD		2.0	9
18	Relax categorization for existing operators	PCD		–	9
19	Remove route capacity restrictions	PCD		–	9
20	Remove restriction of buses to particular routes	PCD		–	9
21	Permit operators to determine own schedules	PCD		–	9
22	Workshops for bus and terminal operators on best practices	MOC	Assisted by consultants. Intermittent over 1 year	12.0	
23	Allow operators to run on any route	PCD	After operators have become accustomed to increased competition resulting from initial licence relaxation—say ,1 year—Operators must obtain licences for new routes but this will be a formality	–	17-21
24	Introduce CPC-design exam , set up procedures	MOC/PCD	Assisted by consultants	12.0	
25	Ease market entry conditions	PCD	1 year after permitting operators to run on any route ; categorization to be replaced by CPC and related requirements	–	24
26	Rural bus services-design subsidized contract procedure	MOC	Assisted by consultants	4.0	
27	Set up contract procedures	MOC/PCD		4.0	26
28	Select routes for initial contracts	PPIC	Probably in one sparsely populated area : criteria to be determined	1.0	26
29	Award and monitor contracts	PCD	Contracts should be for 3 years	39.0	27-28
	Additional Actions				
30	Develop industry-wide trade association	MOC	Assisted by consultants	24.0	
31	Develop training courses in best practices for existing operators	MOC	Assisted by consultants. Should be organized through industry associations	12.0	30
32	Develop training courses for potential new operators	MOC	Assisted by consultants. Should be organized through industry associations	12.0	In parallel with 31
33	Study tours for operators/operators' association , regulators	MOC	Together with industry association		30

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(Table 30 continued)

No.	Action	By Whom	Comment	Duration (months)	Related Actions
34	One ministry for all quality control on buses and freight transport	SC			
35	Bus terminals : code of practice : define responsibilities , procedures for planning-review current guidelines	MOC	Assisted by consultants	4.0	
36	Freight terminals : ditto	MOC	Assisted by consultants	4.0	
37	Decide on social issues—natural wastage for people and buses	SC			
38	Pensioners issue	SC			
39	Study of driving standards—improve test requirements	MOC	Assisted by consultants	6.0	
40	Review Construction and Use Regulations-quality regulation	MOC	Assisted by consultants	4.0	
41	Review traffic regulations	MOC/PSD	Assisted by consultants	6.0	
42	Mechanism for reviewing terminal charges	MOC/Price Bureau	To set up a procedure to prevent terminal operators from abusing their positions of local monopoly	2.0	
43	Review administrative/institutional arrangements in light of regulatory changes	MOC/SC	Assisted by consultants	6.0	
44	Urban bus services-separate study required on mechanism for bringing into line with MOC-controlled bus services	MOC/MCon	Assisted by consultants ; probably not practical to include urban services in pilot project	6.0	

CPC = Certificate of Professional Competence ; MCon = Ministry of Construction ; MOC = Ministry of Communications ;

PCD = Provincial Communications Department ; PPIC = Pilot Project Implementation Committee ;

PSD = Public Security Department ; and SC = State Council

Source : Authors