

IRTENZ  
FIFTH INTERNATIONAL HEAVY VEHICLE CONFERENCE

**AUSTRALIA'S ROAD TRANSPORT REFORM  
PROCESS AND PROGRESS**

*by Bob Pearson  
Director Technical Standards  
National Road Transport Commission  
Melbourne, Australia*

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## **1.1 NEW APPROACH TO ROAD TRANSPORT IN AUSTRALIA**

### **1.1 Background**

Australia is a federation. The six States and, to a lesser extent, the two Territories have established rights. The joining of Australian States in 1901 gave the Commonwealth specific powers under the Constitution, with States retaining the remainder.

In 1901, it took many days to reach a State border, and land transport must not have seemed a high priority for a fledgling Australian nation. Regulation of rail and road transport remained a State responsibility, a legacy from our forefathers with significant implications in the 1990s.

As far back as 1929 efforts were made to bring some consistency into road transport. The 1929 Annual Report of the Commissioner of Main Roads in Queensland noted:

"The Federal Transport Board (consisting of State Ministers in charge of transport under the Chairmanship of the Federal Minister for Transport), after discussing the matter of "uniform weight and speed regulation", has now requested the Federal Aid Roads Board to submit recommendations there-on".

Changes to meetings of national Ministers resulted in the establishment of the Australian Transport Advisory Council (ATAC) in 1946. This body of road and transport Ministers was formed to pursue co-operation and consistent regulation of Australian transport. While significant advances resulted from the deliberations of ATAC, many differences in approach remained, as decisions were not legally binding.

Australian States have long guarded their rights and espoused various degrees of mistrust of Commonwealth legislation. The Special Premiers' Conference burst of co-operation between 1989 and 1991 pursued co-operative approaches to many difficulties resulting from the legal entity of Australian federation. Among the initiatives at that time was the agreement to establish the National Road Transport Commission (NRTC).

### **1.2 National Road Transport Commission**

At the July 1991 Special Premiers' Conference, Heads of Governments from six States and the Australian Capital Territory signed the "Heavy Vehicles Agreement". The thrust of the agreement was recognition that:

"there should be improvements to both road safety and transport efficiency and reductions in the costs of administration of road transport".

The Agreement further indicates that these principles "necessitate uniform or consistent road transport legislation throughout Australia..."

The Agreement outlined the roles of two new road transport bodies:

- the Ministerial Council for Road Transport, consisting of one representative of the States, Territories and the Commonwealth, to consider policy questions and recommendations from the National Road Transport Commission, and
- the National Road Transport Commission, consisting of three part-time Commissioners and a small full time staff to develop policy and legislation and oversight administration.

The Agreement provided for the passage of Federal legislation to formally establish the Commission and the powers of Ministerial Council.

The Commission was to be responsible for policy and development of legislation for:

- heavy vehicle charging;
- design, construction and use standards for new and in-service heavy vehicles;
- matters relating to drivers of heavy vehicles; and
- registration of heavy vehicles.

A "heavy vehicle" has a manufacturers' gross mass of more than 4.5 tonnes.

The Northern Territory was not a party to the initial signing of the Heavy Vehicles Agreement, but signed the Agreement some months later.

Four months after the formal proclamation of the National Road Transport Commission Act 1991, Heads of Government signed the "Light Vehicles Agreement" extending the Commission's responsibilities to include:

- design, construction and use standards for vehicles less than 4.5 tonnes;
- driver licensing and vehicle registration issues for these vehicles;
- traffic regulations; and
- dangerous goods.

Charging for light vehicles is not an issue to be addressed by NRTC.

### **1.3 Establishment of Legislation**

One of the remarkable parts of the agreements under which the NRTC operates is the means of establishment of uniform or consistent legislation.

The process is as follows:

- the Commission submits legislation to its Ministerial Council for a two month consideration period;
- if Council does not disprove the legislation in that two months, the Commonwealth enacts the legislation to apply to the Australian Capital Territory (ACT);
- the six States and the Northern Territory pass complementary legislation adopting the laws of the ACT.

The effect of this process is that once enacting legislation is passed by the States, the changes resulting from legislation passed by Ministerial Council comes into effect across Australia at the same time.

Provision has been made for legitimate State or regional variations, or for variations arising from an emergency.

## **2. HEAVY VEHICLE CHARGING**

Debate in Australia has raged for more than 5 years about appropriate heavy vehicle charges and charging principles. Without doubt, this emotive issue had a major influence on the establishment of the Commission.

The former Inter-State Commission (ISC) attempted to resolve the wide disparity of registration charges, but failed. State officials massaged the ISC figures, but eventually the Commission was asked to provide the answers.

The Heavy Vehicles Agreement specified two zones for charging purposes, envisaging that the charges for Zone B (WA, SA and NT) would be lower than Zone A. The Agreement also defines charging principles which require the Commission to recommend charges that:

- achieve full cost recovery;
- achieve a reasonable balance between administrative simplicity, efficiency and equity;
- improve the link between pricing and investment decisions; and
- minimise the incentive to "shop around" for lower charges.

Five types of charges can be used to recover costs:

- an access charge;
- a road use charge (diesel fuel excise);
- a mass - distance charge;

- permit fees for oversize and overmass vehicles in higher mass or distance categories; and
- a charge for moving between zones.

Achievement of full cost recovery runs the gauntlet of the full range of contentious issues, including cost allocation to heavy vehicles and between classes of heavy vehicle. The results are heavily dependent on what costs and revenues are included.

The Commission was required to use the PAYGO (Pay As You GO) expenditure to determine the total road use cost to be allocated. A template of expenditure attribution separated expenditure into 8 categories:

- servicing and operating expenses;
- road maintenance;
- bridge maintenance, rehabilitation and strengthening;
- pure road asset rehabilitation;
- minor asset extensions/improvements;
- major road extensions;
- miscellaneous (including corporate services).

Most categories also had sub-categories.

The cost attribution identified the separable and non-separable costs of each category using allocation parameters to attribute costs to vehicle classes.

The expenditures allocated to heavy vehicles depend on two main factors; the separable cost share and the allocation parameter. The parameters include average operating mass for pavement construction costs and vehicle kilometres of travel for non-separable costs.

After considerable debate and consultation, the Commission decided on the annual charging schedule shown in Tables 1 and 2. Additionally, a "Road Use Charge" of 18 cents per litre for diesel fuel was designated; this charge is to be part of the present fuel charges.

<b>TABLE 1: PROPOSED CHARGING SCHEDULE FOR FREIGHT AND PASSENGER CARRYING VEHICLES (\$ 1992/93 pa)</b>					
<b>Vehicle Type</b>	<b>1-axle</b>	<b>2-axle</b>	<b>3-axle</b>	<b>4-axle</b>	<b>5-axle</b>
<b>Rigid Truck</b>					
Light <sup>(1)</sup>	--	300	600	900	--
Heavy	--	500	800	2,000	--
SCV	--	600	2,100	--	--
MCV	--	--	4,000	4,250	--
LCV	--	--	5,250 <sup>(2)</sup>	--	--
<b>Prime mover</b>					
SCV	--	800	3,250	4,250	--
MCV (B-Double)	--	3,250	4,250	4,500	--
LCV (Double Road Train)	--	--	4,750	--	--
LCV (Triple Road Train)	--	--	5,250	5,500	--
<b>Trailer</b>					
Semi	250	500	750	--	--
Pig	250	500	750	--	--
Dog	--	500	750	1,000	1,250
Dolly	250	500	--	--	--
<b>Buses</b>					
Light <sup>(3)</sup>	--	300	--	--	--
Heavy	--	500	1,250	--	--
Articulated	--	--	500	--	--

-- not applicable

SCV Short Combination Vehicle

MCV Medium Combination Vehicle

LCV Long Combination Vehicle

**Notes:** (1) 2-axle less than 12 tonne, 3-axle less than 16.5 tonne, 4-axle less than 20 tonnes.

(2) Same charge would apply to rigid trucks with more than 3 axles and used in LCV.

(3) 2-axle less than 12 tonne.

<b>TABLE 2: PROPOSED CHARGING SCHEDULE FOR SPECIAL PURPOSE VEHICLES AND LOW LOADERS (\$1992/93 pa)</b>	
<b>Category</b>	<b>Proposed Charge</b>
(i) Plant which does not exceed present statutory axle loads	No charge
(ii) Plant which exceeds present statutory axle loads	\$250 plus \$250 per axle in excess of 2
(iii) Vehicles designed to carry indivisible loads (low loader)	Prime mover as per short combination vehicles Trailer charge \$250 per axle

The most significant features of the schedules are:

- vastly simplified structure;
- the schedule is based on the use of a motor vehicle, and \$250 per trailer axle; and
- charges are uniform throughout Australia.

The charges are due to come into effect on 1 July 1995. Some significant work remains, however, as New South Wales believes the charges are too low, and Western Australia believes they are too high.

### **3. HEAVY VEHICLE DESIGN, CONSTRUCTION AND USE STANDARDS**

One of the most fruitful areas for reform is to provide uniformity or consistency in vehicle design and use. Efforts have been made over many years to achieve this position with some measure of success, but some major and many niggling differences remained.

The Road Transport Reform (Vehicles and Traffic) Act has been passed by Ministers. This Act is known as the "Peg" Act because it is effectively an Act to which the vehicles Regulations are "pegged". A modular approach is being taken to introduction of the Regulations, rather than attempting to complete the total regulatory package at one time. The Modules for heavy vehicles and their purposes are shown in Table 3.

This part of the paper will deal briefly with each set of Regulations.

#### **3.1 Heavy Vehicle Standards**

##### **New Vehicle Standards**

Under the National Road Transport Commission Act, NRTC is responsible for design and construction standards for new vehicles. Under the Federal Motor Vehicle Standards (MVS) Act, the Federal Minister for Transport is responsible for national standards for vehicles first used in transport.

This dilemma was solved by the signing of a Memorandum of Understanding (MOU) between NRTC and the Federal Office of Road Safety, who are responsible for advising the Federal Minister and administering the MVS Act. The MOU indicates agreement that both organisations would co-operate and use the Australian Design Rules (ADRs) as standards for new vehicles. A new advisory and consultative structure was established. The principal advisory body in this new structure is the Technical Liaison Group (TLG), comprising representatives of States, Territories and the main industry groups. New Zealand is represented on TLG. Under the MOU, the Federal Office continues to administer the ADRs.



**TABLE 3 - TAXONOMY FOR HEAVY VEHICLE DESIGN AND OPERATING RULES**

Vehicle Category	Requirements for the construction of a vehicle and its roadworthiness (note 1)	Limitations on the vehicle when it is loaded	Specification of routes the vehicle may take (note 2)	Specification of driver obligations
Rigid vehicles Combination vehicles which do not exceed either 19 metres or 42.5 tonnes	Australian Design Rules and Heavy Vehicle Standards Regulations	Mass & Loading Regulations	Medium, Long & Combination Vehicles Regulations (note 3)	Traffic Regulations and Driving Hours Regulations
Combination vehicles which exceed either 19 metres or 42.5 tonnes	Australian Design Rules and Heavy Vehicle Standards Regulations	Mass & Loading Regulations and Medium, Long & Combination Vehicles Regulations	Medium, Long & Combination Vehicles Regulations	Traffic Regulations and Driving Hours Regulations
Special Purpose Vehicles Low Loaders and extendable trailers	Australian Design Rules and Heavy Vehicle Standards Regulations (exemptions as appropriate)	Oversize & Overmass Vehicles Regulations	Oversize & Overmass Vehicles Regulations	Traffic Regulations and Driving Hours Regulations

**Notes:**

1. Australian Design Rules (ADRs) apply only to vehicles built after the introduction of the ADR.
2. Excludes local signs such as load limit signs and bridge height restriction signs which are dealt with in Traffic Regulations
3. Vehicles affected by these Regulations are rigid vehicles exceeding 12.5 metres length and vehicles exceeding 4.3 height.

## **In-service Standards**

In-service vehicle standards have always been the responsibility of State and Territory administrations, and a wide range of differences resulted. The NRTC recently completed, and Ministers have agreed to, the Road Transport Reform (Heavy Vehicle Standards) Regulations. These Regulations provide the basis for national uniformity in standards for vehicles in excess of 4.5 tonnes gross mass.

The main features of the Regulations are:

- a complete review of all existing requirements to ensure that standards were appropriate;
- a requirement that a vehicle must continue to comply to ADRs;
- requirements drawn from ADRs, but simplified, to apply to other vehicles;
- a grandfather clause for existing vehicles which would be expensive to modify to the new standards.

In each case, requirements for all vehicle types from road trains to small rigid trucks are specified.

### **3.2 Heavy Vehicle Roadworthiness**

The usual meaning of roadworthiness is "fit for the road". In this respect, it is a combination of:

- compliance with the minimum standards specified in the Heavy Vehicle Standards Regulations; and
- the "fitness" of other components which are not specified as being necessary for safe operation but which, if fitted, must work properly.

An example is a chassis, provision of which is not a regulatory requirement but if the manufacturer designs a vehicle with a chassis it must be structurally sound.

Roadworthiness is being tackled by adding a requirement to the Heavy Vehicle Standards Regulations that the major safety components (steering, brakes etc) must be free of defects which might impair or be likely to impair the safe operation of the vehicle. A set of guidelines has been developed which lists these defects, while business rules are being developed as a guide to treatment of defects, depending on severity.

### **3.3 Mass And Loading**

The module on Mass and Loading Regulations has been completed. These regulations deal with security of loading, allowable load projections and mass limits.

The 10 year-old Truck Loading Code has been substantially revised and rewritten, and will be released shortly as the Load Restraint Guide. The Regulations call up the performance standards of the Guide with respect to strength of lashings.

At this time, existing mass limits are specified, but a major study is underway with the objective to:

*examine and report on the feasibility and net benefits of increasing allowable mass limits for vehicles fitted with road-friendly suspension systems.*

This major study commenced in June 1993 and is scheduled to report late in 1994. The study is divided into five main areas:

- definitional and compliance aspects
- road and bridge impacts
- road safety and environmental impacts
- operational impacts, and
- impacts on charging.

This study is closely aligned with the IR6 DIVINE project, and is undertaking bridge research which will be of significant value to IR6.

### **3.4 Oversize - Overmass**

Special Purpose Vehicles (SPVs) such as cranes, and vehicles such as low loaders carrying indivisible loads, are the subject of the proposed Oversize and Overmass Regulations.

Significant effort over recent years has resulted in a major degree of uniformity in allowable limits for oversize and overmass vehicles. In most cases, permits are issued to allow operation under specified conditions.

The thrust of these regulations is to reduce administration by eliminating permits for the more common vehicles. The regulations will specify mass and dimension limits and associated conditions of operation, and will allow jurisdictions to gazette areas of operation.

Larger vehicles will still be eligible for permits, and guidelines are being prepared by NRTC for the issue of these permits.

The mass limits in these Regulations will be reviewed over the next 12 months.

### **3.5 Driver Working Hours**

Driving hours has been one of the most difficult and controversial subjects facing the Commission. Present State and Territory requirements range from no limits (in Western Australia and the Northern Territory) down to a maximum of 12 hours working per day. However, research has revealed significant abuse of present limits.

The Regulations now being formulated by the Commission have the following significant features:

- allowing flexibility within a maximum of 72 hours driving per week, recognising that "working" is not capable of enforcement;
- uniform bus driving hours of 12 hours maximum per day throughout Australia;
- truck driving hours of 14 hours maximum;
- no limits to truck driving hours specified in Western Australia or the Northern Territory;
- reduced hours for two-up driving operations;
- provision for jurisdictions to allow alternative hours to suit local, specific or seasonal transport tasks; and
- recognition of various means of maintaining records of driving such as vehicle monitoring devices and schedules in lieu of traditional log books.

Work is continuing on specifications for a driver specific vehicle monitoring devices.

### **3.6 Medium, Long and Combination Vehicles**

Road trains, B-Doubles and other larger vehicles operate under State permits, although means to obtain these permits and conditions of the permit vary widely.

These Regulations will eliminate the need for permits and jurisdictions will be provided power to control routes or areas of operation.

### **3.7 Light Vehicle Standards And Roadworthiness**

The Light Vehicles Agreement gave the Commission responsibility for light vehicle construction and use standards. ADRs presently cover light vehicles and no additional work is required by the Commission to introduce standards for new vehicles.

The Commission is presently preparing amendments to the Heavy Vehicle Standards Regulations and Heavy Vehicle Roadworthiness Guidelines to include specific requirements for in-service light vehicles (less than 4.5 tonnes). The final Regulations will thus be Vehicle Standards Regulations and specify standards for vehicles from road trains to motor bikes.

A workshop in Melbourne on May 11 and 12 will be the start of the consultation in the light vehicles area.

### **3.8 Traffic Regulations**

Rules of the road are contentious, not because they are necessarily significantly different but because of the multitude of minor variations which occur throughout Australia. Plain English drafting is an added complication.

New Traffic Regulations have been prepared by Austroads and are nearly ready for public comment and are expected to create wide interest.

## **4. DRIVER LICENSING AND VEHICLE REGISTRATION ISSUES**

### **Driver licensing**

In 1987, a new system of driver licensing was approved by ATAC Ministers to replace the differing systems in States and Territories. It was not implemented, although some jurisdictions changed to be closer to the suggested system. An Austroads project team has been examining licence classifications over the last few years and hopefully we are now closer to achieving a uniform system.

### **Vehicle registration**

Nine different registration systems operate in Australia; one for each of the six States and two Territories, and the Federal Interstate Registration Scheme. Changing these systems to be more consistent is a mammoth task.

Existing schemes need modification to enable introduction of the new heavy vehicle charging schedule in July 1995. Records must be updated over the 12 months before introduction of the new schedule, and that means starting no later than 1 July 1994. Many details are still to be sorted out.

## 5. CONCLUDING COMMENTS

The two key features that have characterised the road transport reform process in Australia over the last few years have been:

- willingness by all parties to pursue uniformity or consistency;
- strong support from both industry and jurisdictions to negotiate change.

However, the task given to the Commission was greater than the originators of the system had envisaged. The potential gains are large, the impediments to change significant. The work required from all parties is enormous in a time of reducing resources. Legal difficulties are surfacing with the modular approach.

Only two of the original Heads of Government signatories to the Heavy Vehicles Agreement remain in office. The Ministerial Council for Road Transport has had twenty occupiers of its nine seats in two and a half years. Notwithstanding these changes, a bi-partisan approach has been evident to NRTC activities.

Industry is starting to become impatient with their perception of slow progress.

With this background, the impetus of the Commission must be maintained and if possible increased if it is to achieve its allotted task.

The Commission must report in 1997 to its Council of Ministers on whether the Commission should continue. That report should make interesting reading.