

**IMPROVING SAFETY MANAGEMENT IN
AUSTRALIA'S BUS INDUSTRY**

DISCUSSION DOCUMENT

June 2008



National Transport Commission

**Prepared by
National Transport Commission**

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Improving Safety Management in Australia's Bus Industry

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Comments by:	4 July 2008
Comments to be addressed to:	

Donna Soo
National Transport Commission
L15/628 Bourke Street
MELBOURNE VIC 3000

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FOREWORD

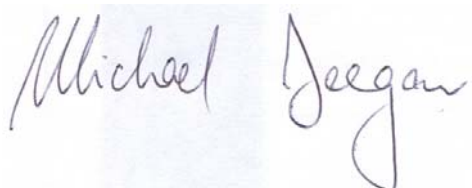
The National Transport Commission (NTC) is a body established under a Commonwealth Act and an inter-governmental agreement with a charter to develop, monitor and maintain uniform or nationally consistent regulatory and operational reforms relating to road transport, rail transport, and inter-modal transport. This body is funded jointly by the Australian Government, states and territories.

The Bus Industry Confederation identifies national accreditation issues as a key strategic priority and has asked the NTC and the Australian Passenger Transport Group to undertake work in this area. The NTC has undertaken to develop options for introducing a risk management approach to safety and make a recommendation to the Australian Transport Council (ATC).

This report is timely, as bus accreditation arrangements have been in place in most jurisdictions for some time, but largely have not been recently reviewed. With changes in safety regulation in other transport sectors it is a good opportunity to examine bus safety in comparison with other modes and international best practice.

The NTC is now seeking feedback from interested parties about the conclusions that it has drawn through reviewing current arrangements, and about the options it proposes. These include leaving arrangements as they are currently, or moving towards introducing a risk-based approach to managing bus safety (on either an individual or a national basis). Based on feedback from stakeholders, NTC will put forward a proposal to ATC. Please provide comments by **4 July 2008**.

NTC would like to thank state and territory road transport agencies and the Bus Industry Confederation for providing information for this report, and to acknowledge the efforts of Donna Soo in preparing this report.



Michael Deegan
Chair

Mail Comments to: Donna Soo
Senior Policy Analyst
National Transport Commission
L15/628 Bourke Street
MELBOURNE VIC 3000

Telephone: (03) 9236 5000
Facsimile: (03) 9642 8922

Email: dsoo@ntc.gov.au
Website: www.ntc.gov.au

SUMMARY

This paper sets out the background to current bus operator accreditation and licensing arrangements around the country, and examines the effectiveness of safety features in these accreditation or licensing arrangements. The primary purpose is to establish whether current arrangements could be improved to provide better safety outcomes, particularly when compared with recent safety regulatory developments in other transport areas.

The paper examines the possibility of low probability/high consequence crashes (which is particularly applicable to the bus sector) and current bus crash statistics. It also looks at problems currently faced by bus regulators in jurisdictions, and reviews recent developments in safety regulation in the road freight transport and rail sectors. This includes examining the concept of Chain of Responsibility, where all parties can be responsible for their actions as they relate to other parts of the supply chain.

The paper considers whether bus safety currently meets a satisfactory level and if this level can be improved. The discussion leads to the National Transport Commission (NTC) providing some options for managing bus safety supported by an assessment of the key issues relating to each option. There are five options discussed, including the status quo. The alternative options examine the merits of introducing new regulatory requirements for accreditation based on a risk-analysis approach to safety. In particular, these options draw on successful approaches to improving safety in other transport modes and other industries. The 'general duty to manage safety' is a key feature of these proposals. More specifically, the options are:

- prescribing a general duty that overarches accreditation requirements;
- developing a bus-specific accreditation module relating to safety;
- an option that combines these two measures; and
- an option considering a co-regulatory approach where the bus industry would essentially develop its own compliance mechanism to meet its safety obligations.

The NTC seeks feedback from key stakeholders about the proposed options.

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1. INTRODUCTION

Safety management in the Australian bus industry is linked into accreditation and licensing regimes administered by States and Territories. These regimes differ in each state and territory, tend to be prescriptive and have evolved over time. When compared with significant regulatory developments in other areas of transport¹ in recent years, it is timely to review safety arrangements for the bus industry as to the effectiveness of these arrangements and to identify opportunities to improve safety outcomes.

The National Transport Commission (NTC) has a statutory mandate to lead regulatory reform in the areas of safety, environment and productivity for road, rail and inter-modal transport. NTC is a member of the Australian Passenger Transport Group (APTG), which is tasked with providing the Standing Committee on Transport (SCOT) with advice, leadership and support on passenger transport policy and strategic issues. NTC is also advised by the Bus Industry Confederation (BIC), a key stakeholder for the bus industry, and the Bus Industry Advisory Group (BIAG) about regulatory reform in the bus industry.

The Bus Industry Confederation has identified the lack of a system of national minimum accreditation standards for the bus and coach industry as the primary strategic issue currently facing the bus industry. To address this issue, it has requested that NTC undertake an examination of bus operator accreditation and has also posed a similar request to the Australian Passenger Transport Group. NTC submitted a paper to the Australian Passenger Transport Group meeting in May 2007 seeking support to develop a discussion paper about how safety risk is managed in the bus industry, with a view to proposing some options that may potentially increase safety outcomes. NTC will report to ATC by mid-2008 with the results of public consultation and propose a recommended option for ATC to consider. The Australian Passenger Transport Group has agreed to this approach, and also agreed to act as an expert reference group for NTC.

This paper proposes a number of options for the managing bus safety in the future. These include maintaining current accreditation regimes and introducing a risk analysis approach. It also includes a proposal for co-regulation, whereby government would set safety duties and industry would devise its own methods for achieving compliance with these duties.

1.1 Purpose

This paper seeks to examine the case for introducing a risk management approach to safety through bus operator accreditation and licensing. The paper:

- discusses the current management of safety through operator accreditation or licensing in the bus industry;
- outlines changes and trends in safety management in other transport modes and compares the effectiveness of the alternatives to the current arrangements for bus operator accreditation and licensing; and
- presents options for introducing a safety risk management approach to bus operator accreditation (including consideration of whether a nationally harmonised approach to safety management could contribute to better safety outcomes).

¹ Accreditation and safety management for the heavy vehicle freight industry and the rail industry.

1.2 Scope

This paper concentrates on reviewing current bus accreditation arrangements only as they relate to safety, and will not address efficiency or productivity benefits specifically (although it may be that improvements to safety arrangements result in efficiency and productivity gains). In addition to this, the options in the paper will only consider a 'national approach' in the context of how this could improve safety outcomes.

Some objectives for a recommended option include:

<i>Not diminish current levels of safety in any jurisdiction.</i>	A proposed option should allow a jurisdiction to maintain or improve its current level of safety.
<i>Minimise administrative compliance costs for operators.</i>	A proposed option should not significantly increase compliance costs for operators, and ideally should reduce current levels.
<i>Minimise enforcement costs for regulators.</i>	A proposed option should not require significant additional resources and should, preferably, allow regulators to better use current resources.
<i>Allow for better reporting/data capture to generate meaningful statistics.</i>	At present it is difficult to monitor safety outcomes because different data are captured and recorded in each jurisdiction. Consistent recording of incidents, crashes, and detections of non-compliance would generate more meaningful data and provide a better picture of safety levels and areas for improvement.
<i>Be subject to review to ensure achieving desired outcomes.</i>	Regulatory requirements should be periodically reviewed to ensure that they are continually effective.
<i>Be able to be tailored to the risk profile of an individual operation.</i>	Accreditation requirements should be flexible and not 'one size fits all', to allow operators with a good performance to minimise their costs and also to allow each company to target its own unique risks.
<i>Be consistent with regulatory best practice/changes in other industry areas/other modes.</i>	Accreditation should incorporate relevant best practice elements from other industry areas or modes of transport.
<i>Consider a national approach.</i>	There may be some clear advantages in a 'national approach' to accreditation, although a national approach to bus safety risk management in accreditation need not mean a mandatory system. Rather, it could mean supporting jurisdictions to implement changes in a nationally consistent manner.

There should also be clear evidence that it is necessary for NTC to lead a reform on this matter because other organisations are not able to, and that there is appropriate support from jurisdictions to assist NTC in doing so.

2. NATURE OF PROBLEM (ACCREDITATION SYSTEMS FOR BUSES)

2.1 The importance of bus safety

Bus companies provide important passenger (and sometimes freight) transport services across Australia, from urban commuter services to rural and long distance inter-state services. Most buses carry members of the public including commuters, school children, holiday makers and tourists, and people in sporting or social groups. Therefore it is important that anyone who operates, and is involved in the provision of, a bus service is able to do so to the highest standard to engender public confidence in this important public transport option.

The person responsible for the bus operation needs to be able to demonstrate that they can run a bus service that will meet any minimum legal requirements, including safety requirements, in order to be able to provide a good service to the public. To do this they need to be able to demonstrate management skills to ensure that they will have correct procedures in place, that their staff (particularly drivers) are appropriately trained and that their vehicle fleet meets design standards and is well maintained.

Anyone who drives a bus must not only be able to drive safely, but must be able to supervise people safely boarding and alighting from the bus (including disabled passengers), and also supervise passengers in the event of any emergency situations. A driver will also (depending on company procedures) need to conduct pre-trip inspections of the bus.

Buses must meet any applicable vehicle design standards in order to operate. In addition to this, routine inspections and maintenance checks must be undertaken to ensure that buses are always in good working order, and servicing and repairs must occur in a timely fashion.

As a result of the community desire for safe bus transport, governments have introduced various measures to address safety. These include accreditation of bus operators², certifying drivers and introducing minimum bus design standards (cabin strength, seatbelt and seat anchorages, etc). These are discussed at length in Section 3.

2.2 High consequence/low probability events

Risk management across the transport sector must take into account potential events that have a low probability of occurring, but with high consequences if they do. For example, in the area of dangerous goods transport, a petrol tanker crashing in a built up area is an uncommon event, however if it occurs, there is potential for not only human casualties, but significant damage to property or infrastructure and very serious environmental consequences.

² An overview of accreditation requirements is available in *Guideline for Bus Operator Accreditation Requirements*, NTC, 2004.

Rail transport is an area with a similar risk profile to the bus industry. Rail travel is a very safe form of passenger transport particularly when compared with road³. But it was the shocking loss of 22 lives in rail incidents at Salisbury, Waterfall, and Kerang over the last five years that led a government focus on rail safety and industry reforms.

Similarly, while serious bus crashes are rare events, a severe crash involving an at capacity bus could result in multiple deaths. A crash involving a full school bus would invoke a considerable public reaction. Even if a crash involves no injuries, as public transport carriers, bus crashes are far more likely to capture the attention of the media, and be under public scrutiny, than the more common car crashes⁴.

2.2.1 Serious bus crashes

Featuring highly in the minds of the Australian community are two tragic bus crashes that occurred in New South Wales (NSW) in 1989. These are arguably Australia's most catastrophic examples of high consequence/low probability incidents in the bus industry, and they occurred within two months and 200km of each other. In October 1989, at Cowper near Grafton in NSW, a coach collided with a semi-trailer, killing 21 people and seriously injuring a further 22. Eight weeks later, just outside Kempsey, two tourist coaches collided head-on, resulting in the deaths of a further 35 people. These tragedies highlight the need to focus on bus safety measures. Even though serious bus crashes like these are rare events in Australia, the impact that they can have can be minimised through good risk management procedures.

2.3 Crash Data

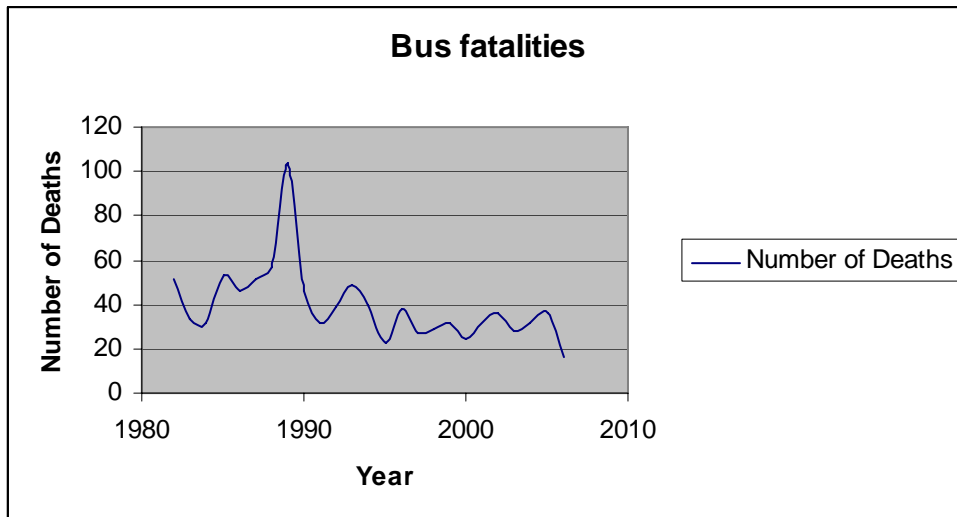
2.3.1 Bus involvement in crashes

An Australian Transport Safety Bureau (ATSB) study in 2001 found that bus occupants accounted for only a very small proportion of all road fatalities (0.6%) for the period of the report (1990-1998), and that bus travel is clearly the safest road transport mode per 100 million passenger kilometres. Most bus crashes occurred on urban buses travelling short distances and in speed zones of 60km per hour or less.

Statistics show that, whilst the number of deaths from crashes involving buses and fatal bus crashes fluctuates each year, since 1982 there has been a general decline.

³ In 2006 there were 40 deaths (0.19 per 100,000 kms) recorded from accidents in the rail sector compared with 1598 (7.72 per 100,000 kms) in road transport.

⁴ This issue is highlighted in the report *Review of the Accident Experience of Small Passenger Vehicles and Buses*, by Burns, McLean and Kloeden, October 1997. The report demonstrates that in the sample surveyed, 45% of casualties arose from just 2% of bus accidents, concluding that one crash can result in a large number of casualties (pg 31).



Source: ATSB

2.3.2 Contributing factors to bus crashes

There are no national statistics collated on the causes of bus crashes. However Victoria was able to identify that, during the seven years since the implementation of its bus operator accreditation, there have been 32 fatalities in accidents involving buses. Of these, only two of these were on-board passengers. The other 30 have either involved a car colliding with a bus, a pedestrian knockdown or a passenger boarding or alighting from a bus being struck by a passing vehicle⁵.

In a South Australian study it was concluded that bus drivers were responsible for 42.3 per cent of casualty accidents in which buses (in the survey sample) were involved⁶.

The difficulty in specifying the causes of crashes is evident in a report by Ken Smith⁷, which analyses long distance coach crashes between 1988 and 1994. In some cases the cause of the crash can be pinpointed (for instance, the driver collapsed which cause the coach to run off the road), whereas in other cases the author can only speculate whether factors like speed, fatigue, weather conditions, or the nature of the road contributed to the coach crashing. While the report may comment on the individual circumstances of a particular crash (and the cause) it does not attempt to analyse the crash causes to any extent.

2.4 Road agency perspective of safety in the bus sector

A workshop was held in July 2007 with road transport agency representatives nominated by the Australian Passenger Transport Group to provide data and information to NTC about their current regimes, and also to explore key issues being faced by the road agencies in terms of safety related aspects of bus accreditation. Through these avenues NTC has been able to gain an indication of some of the bus safety issues that exist today. Following is a summary of some of the common issues raised by individual jurisdictions.

⁵ Source Public Transport Safety Victoria, 2007.

⁶ Burns, Mclean and Koeden, *Review of the Accident Experience of Small Passenger Vehicles and Buses*, October 1997, pg. 26.

⁷ Smith, Ken *Bus Crashes and Occupant Protection, A Brief Summary and Analysis of Crashes Involving Long Distance Coaches, Australia 1988 to 1994*. Canberra, July 1988.

2.4.1 Small bus safety

Several road agencies noted concerns about the safety records of operators of small buses. It is common among jurisdictions for the small bus industry to be less regulated than the large commercial bus industry. Most existing accreditation schemes apply to buses of 12 seats and over (the exact number differs slightly from state to state), leaving buses with less seats —small buses— outside of accreditation. Tourism and courtesy bus industries are rapidly expanding in some areas, and concerningly, a crash study in Victoria in the early 1990s found that the small bus industry has a higher crash rate than the large bus industry. There is also a common perception that the 'bad safety record' of smaller operators affects the reputation of the rest of the industry.

Accordingly, NTC will consider small bus safety in the context of any of the options described in this paper.

2.4.2 Incident and crash data gaps across the jurisdictions

Data recording, collation and reporting requirements contained in bus operator accreditation and licensing schemes vary between the states and territories. Some collect data on bus accidents and incidents as part of accreditation requirements, although these are not necessarily collated and analysed in a particularly meaningful way. Others rely on available crash data through police crash reporting systems only.

The development of a national risk management approach to bus safety through accreditation would provide an opportunity to introduce some commonality to data gathering and collation, and analysis and interpretation. This would help to create a consistent and meaningful picture of safety levels, to assist with monitoring the effectiveness of accreditation implementation and also identify areas for further improvement.

2.4.3 Age of buses and vehicle design

It is unclear whether the age of vehicles contribute to their likelihood of being involved in an accident (and a study of South Australian police data speculates that older buses are likely over-represented in existing crash data due to the fact that there are more buses over 10 years old than buses under 10 years old)⁸. However, it has led South Australia to develop a bus age limit policy that essentially prohibits large buses over 25 years old from operating in passenger transport services, apart from exceptional circumstances (like operating classic or vintage buses).

There is some concern that if older buses are involved in a crash, the consequences may be greater because the bus will have less safety features than a newer vehicle. There is also a trend for large commercial operators to on-sell aging buses to small school bus operators, community groups or schools, and so school children are often being carried in older buses without the safety features available in new buses.

2.4.4 Rock throwing

People throwing rocks at buses (and other sorts of attacks) while on route services was raised as quite significant problem. This has been a danger to both bus drivers and passengers, as well as causing damage to the buses. In areas where this was noted to be a

⁸ Burns, McLean and Kloeden pg. 27.

problem road transport agencies were working with the police and the community on preventative measures. Some agencies also noted introducing practical measures, like fitting shatter-proof glass windows near the driver's position.

2.4.5 Mandatory seatbelts

New coaches are required, by Australian Design Rules, to have seatbelts fitted. In addition to this, guidance materials have been developed to assist bus operators that want to fit seatbelts to existing buses to a high safety level.

The issue of seatbelts in buses has been widely canvassed and subject to enormous scrutiny. To date, there is little evidence to show that bus seatbelts would contribute to making any significant gains in bus safety. In considering the merits of making bus seatbelts mandatory, other issues need to be considered like how seatbelt wearing would be enforced in urban transit buses, particularly where many patrons are standing, and so on. Making seatbelts mandatory for school buses has also been debated at length.

It is NTC's view that seatbelts should be viewed in the context of how they can demonstrably improve a specific safety outcome. The preferred approach would be to describe safety outcomes, but not prescribe specific measures to meet those outcomes.

2.4.6 Support for a safety focus for bus accreditation

Generally, there was agreement national alignment of standards for safety elements of accreditation could reduce unnecessary duplication, and assist in enforcement of operators working across jurisdictional borders. However, it was also felt that this alignment could be achieved effectively at state level, without the need for a national initiative.

Also, while all road transport agencies agreed a focus on safety would be a positive step for the industry, some expressed concern that introducing mandatory schemes (like the new New South Wales Safety Management System approach) might be onerous for small operators. It was agreed that a national approach to this accreditation issue was appropriate suggested that, as a minimum, any changes should result in:

- a net reduction in the regulatory burden for operators;
- a net reduction in regulations;
- no additional costs to operators;
- no lessening of safety outcomes; and
- greater clarity of responsibilities for operators and regulators.

The Bus Industry Confederation is supportive of a national strategy to upgrade the entire Australian bus fleet to a modern standard⁹, which could be achieved through setting standards for average or maximum fleet ages as part of safety-focussed accreditation.

2.5 Sanctions imposed through regular inspections/audits

NTC had hoped to further build a picture about safety through analysing records of non-conformance identified through the regular audit processes (e.g. whether there are regular

⁹ Bus Industry Confederation information brief on bus vehicle safety.

non-conformances for particular issues). However, most road transport agencies do not collate information when a non-conformance is identified, rather dealing with issues on a case by case basis. Anecdotally it was thought that many infringements were dealt with promptly (so not causing widespread on-going problems), which is also supported by a report from the Australian Capital Territory (ACT) regulator¹⁰.

3. HOW SAFETY IS CURRENTLY ADDRESSED

Most of the existing accreditation or licensing systems for bus operators have come into existence since the early 1990s, which is thought to be a response to the significant bus crashes of that era (particularly the Kempsey and Grafton incidents). Around this time the Commonwealth transport department developed a package on bus safety initiatives to minimise occupant harm in the event of a crash, which was endorsed by Ministers. This package included recommendations for minimum standards for cabin strength (which provides added protection in rollover crashes), standards for seat anchorages, seatbelts, and padding for seats, seatbacks and stanchions.

Over the past decade new Australian Design Rules have been introduced (and revised) to incorporate these minimum standards, as well as guidance material produced (including a Code of Practice dealing with retro or refitting existing buses). However, Australian Design Rules only apply to new buses, and given that buses can remain in use in excess of 30 years in some areas, the passage of these new safety features into the fleet is taking a long time.

These regulatory developments have focused very much on improving the safety technology for the bus fleet, which has been an important phase. It is unlikely that there will be significant safety gains in future to accrue from further advances in technology and it is time to look at other ways of increasing bus safety outcomes.

An accreditation framework allows regulators to prescribe the capabilities of the person or persons responsible for a bus company. These include that the operator:

- has the financial capacity to run a business;
- is able to provide a competitive customer service; and
- is able to adhere to relevant legislative requirements – for instance legal requirements to ensure safe operation for staff and passengers.

In obtaining accreditation an applicant may be required to undergo a range of assessments such as credit checks, police checks, and medical checks on personnel and, in some cases, may be required to undertake training or hold qualifications. They may also need to provide other information on operating procedures demonstrating that their operation will be efficient and safe.

¹⁰ The ACT regulator reported that 2004/05, 15 bus companies were audited and one company was issued with an improvement notice for not keeping appropriate documentation. In 2005, 385 buses were inspected and five buses were found to be not accredited, or not displaying their accreditation number. One was issued with an infringement notice and all buses were subsequently cleared for safety.

Accreditation of bus operators in Australia is done through government regulators in state and territory transport departments. All jurisdictions have an accreditation system in some form, and most are prescriptive, or have a prescriptive aspect to them. The systems have common features, however because of the jurisdiction-based approach there are differences in the detail. Features common to more than one jurisdiction include:

- assessment of the capabilities of the operator, such as financial viability assessments, criminal record checks and training requirements;
- driver qualifications, for example, driver training, medical examinations, criminal record checks, and that the driver is licensed for the correct class of vehicle;
- procedures relating to the maintenance of vehicles and equipment;
- procedures for maintaining a customer service that is appropriate, safe, and secure, for example, emergency procedures, and a customer complaints process; and
- audit requirements – both external by the regulator or third party auditors, and internal or self assessments.

Regulators meet regularly through an informal group known as the Bus Regulators Panel to discuss ideas and share information.

The following section describes how accreditation is specified through the legislation in each state and territory.

3.1 Queensland

Legislation: *Transport Operations (Passenger Transport) Act 1994* and *Transport Operations (Passenger Transport) Regulations 1994*

Regulator: Queensland Transport

The *Transport Operations (Passenger Transport) Act 1994* states the purpose of operator accreditation is to encourage high quality public passenger services by raising operating standards (including safety, service delivery and business acumen) and ensuring that operators are held accountable for compliance with appropriate standards. It also states that accreditation is essentially an authorisation to operate a public passenger service. The Act allows for Standards to be created on various accreditation matters (quality service, vehicle maintenance and design, management skills and driver requirements).

Section 15 of the Act imposes a duty on the operator, which is in order to provide a public passenger service they must be accredited and use appropriately authorised drivers. It also defines the person responsible for the system of operator accreditation, what constitutes 'evidence' that a person is an operator and defines necessary driver credentials.

The Regulations set out in more detail particular circumstances relating to issuing operator accreditation and driver authorisation.

Queensland Transport produces an operator accreditation workbook that all prospective operators must work through over a period of time (and also integrate into their accreditation system). Once this is approved by Queensland Transport, the operator is given full accreditation. Completion of this workbook is evidence that the operator is meeting their legal obligations. The Chief Executive of Queensland Transport can cancel,

amend or suspend an operator accreditation if the operator breaches accreditation requirements.

Safety

Safety is an objective of operator accreditation. Although safety is inherent in the accreditation requirements, the primary legislation and the regulations very much focus on the need to be accredited and penalties associated with breaching accreditation, rather than specifically targeting safety as an outcome of accreditation.

3.2 New South Wales

Legislation: *Passenger Transport Act 1990*, and *Passenger Transport Regulation 2007*

Regulator: Ministry of Transport

3.2.1 Safety management approach introduced in New South Wales

The NSW government ratified the risk management approach for rail recommended in the McInerney report, and at the same time introduced legislative requirements for a safety management approach to safety in the bus industry. Implemented in 2005, the approach requires all bus operators, once accreditation is granted, to undertake a risk analysis of their operation and prepare a document of policies and procedures (a safety management system) to deal with identified risks.

The *Passenger Transport Act 1990* requires a person who provides a public passenger service to be an accredited service operator. The Act also says the purpose of accreditation is to ensure that the accredited person (or corporation, etc) is responsible (fit and proper/of good repute) and has the demonstrated capacity to provide a service that meets the government standards, including that they are:

- financially viable;
- can ensure safety of passengers and the public; and
- can undertake appropriate vehicle maintenance.

The maximum penalty for operating without accreditation is up to \$110,000.

The Act also allows for standards pertaining to (the points listed above) to be made and deals with particulars about the nature of the accreditation application process, issue and renewal of accreditation and accreditation conditions. Additional to this are separate sections relating to accreditation conditions about drug and alcohol programs and testing; and safety management system for bus services. This specifies that all accredited services must have a safety management system that complies with the requirements, including:

- identifying any significant risks; and
- specifying controls to manage the risks and monitor safety outcomes.

The maximum penalty for failure to have a safety management system is \$110,000. The *Passenger Transport Regulation 2007* sets out in greater detail the provisions in the Act.

The Ministry of Transport issues a Safety Management System Handbook and a Bus Operator Accreditation System manual that set out for operators how to meet the requirements of the safety management system (and their legal obligations). This includes forms, check lists etc, and explanations of how they meet the different legislative provisions.

Safety

The NSW approach includes specifying in primary legislation that all operators must have a risk management system targeting safety, with a severe penalty for failure to comply. The supporting documentation¹¹ sets out in greater details what this risk management system consists of.

3.3 Australian Capital Territory

Legislation: *Road Transport (Public Passenger Services) Act 2001* and *Road Transport (Public Passenger Services) Regulations 2002*

Regulator: Public Transport Regulator Division

The *Road Transport (Public Passenger Services) Act 2001- Sect 15* sets out the purpose of accreditation, which is to ensure that:

- the accredited person is financially capable;
- that people involved in the bus operation are 'suitable'; and
- that the accredited person can comply with relevant regulations like providing for the safety of passengers and the public and maintain vehicles.

The *Road Transport (Public Passenger Service) Regulation 2002* deals with the various conditions of accreditation and also allows the road transport authority to approve minimum standards for operation, which may include anything relating to the safe, reliable and efficient provision of the regulated service. It also covers specific aspects of the bus operation, some of which relate directly to the safety of service (maintenance of buses, records of inspections, etc) but others do not (like advertising allowed on buses, bus company livery and air conditioning).

Minimum service standards and an application guideline are issued by the division which act as a guide for operators to follow for accreditation and, in doing so, operators will comply with their legal requirements.

Safety

The regulations are prescriptive and there is no particular duty to manage safety (and safety risks) within the operation through the accreditation framework, although safety is implicit in meeting the individual requirements that may have a safety focus. Penalties can be awarded for breaching conditions of accreditation (including suspending or cancelling a licence, and also fines for the organisation and an individual) however there is no specific penalty available for not adequately managing safety.

3.4 Victoria

Legislation: *Public Transport Competition Act 1995* and *Public Transport Competition Regulations 1999*

Regulator: Department of Transport – Public Transport Safety Victoria

The *Public Transport Competition Act 1995* specifies that anyone operating a road transport passenger service must be accredited and maintain the conditions of

¹¹ The New South Wales Safety Management System Guidelines can be found at <http://www.transport.nsw.gov.au/bus/sms-handbook.pdf>

accreditation. The purpose of accreditation is to ensure that the operator is suitable and able to capable of running an effective and efficient public transport service. In particular, the person must be able to meet any prescribed standards relating to delivery of the service, public safety and maintain vehicles appropriately.

The *Public Transport Competition Regulations 1999* clarify further who accreditation applies to and how to apply for (and maintain) accreditation. This includes obligations to retain records, maintain vehicles, establish various procedures and management information systems, etc.

The Public Transport Safety Victoria issues guidelines and forms, which include a sample system, that bus operator can essentially use as a template (and by doing so comply with their legal obligations).

3.4.1 Victorian public transport legislation review

The Department of Transport in Victoria has announced a review of public transport legislation. A discussion paper, "*Towards an integrated and sustainable transport future: a new legislative future for Victoria*" was released in October 2007, followed by *Improving Bus Safety in Victoria Summary* in May 2008. The discussion paper proposes establishing a dedicated bus safety Act, primarily aimed at bringing bus safety in line with regulatory safety in other modes and acknowledging the increasing importance of bus as a public transport option in the future.

3.5 South Australia

Legislation: *Passenger Transport Act 1994* and *Passenger Transport (General) Regulations 1994*

Regulator: Department of Transport, Energy and Infrastructure

The *Passenger Transport Act 1994* requires operators of public transport services to be accredited. Accreditation is essentially an authorisation to operate and ensures that the operator is:

- of good repute and fit and proper; and
- has the capacity to meet the standards (including ensuring the safety of passengers and the public, provide adequate vehicles that are maintained appropriately).

The Act also sets out the conditions of accreditation. Vehicles must be inspected according to the criteria set out in s 54 of the Act.

The *Passenger Transport (General) Regulations 1994* and *Schedule 5 – Code of practice: bus operators* sets out high level principles for bus operators that relate to areas including:

- customer service;
- advertising;
- employing appropriate staff and monitoring staff performance;
- keeping vehicles clean and maintained;
- provision of parking and service areas; and
- ensuring the employees do not contravene any laws.

This is then underpinned by a 'Code of Practice for Buses' which lays out prescriptive measures to ensure that operators will meet their legislative requirements. There is also a Bus Age Limit Policy that essentially prohibits large passenger vehicles over 25 years being operated unless specifically exempted (vintage or classic vehicles).

Safety

The operator is primarily tasked with meeting and maintaining accreditation, which means that safety is implied as an outcome of accreditation, through meeting prescriptive standards, rather than explicit.

3.6 Tasmania

Legislation: *Passenger Transport Act 1997* and *Passenger Transport Regulations 2000*

Regulator: Department of Infrastructure, Energy and Planning (Vehicle operations branch responsible for vehicle standards, compliance, enforcement and operator accreditation)

The *Passenger Transport Act 1997* states that a person must be accredited, and maintain accreditation, in order to provide a public passenger service. The purpose of accreditation is to ensure that the accredited operator is fit and proper, accepts responsibility for the safety of the service and will be held accountable for failure to comply with appropriate safety standards. The Act also deals with the accreditation application process and conditions of accreditation.

The *Passenger Transport Regulations 2000* deal with some other specific administrative details (notification of responsible officers, period of accreditation and renewal, evidence of accreditation, etc). Section 13 is a specific clause relating to placing drivers and passengers at unreasonable risk. The operator must not put another person's safety at unreasonable risk. The penalty for breach of this condition is a sum not exceeding \$6,000 (according to current calculations). There are penalties for not meeting the terms of accreditation (of no more than \$12,000 for a first offence and no more than \$24,000 for a second offence, according to the current formula employed through the *Penalty Units and Other Penalties Act 1987*), and there are also disqualifying offences under the Act.

The Transport Operator Accreditation Board issues a guideline that prospective operators use as a template for accreditation. In meeting the requirements of the guideline they meet their legal obligations.

Safety

The Tasmanian legislative framework does have an emphasis on safety in its primary legislation. Although elements of the framework are still relatively prescriptive, there is a duty in the Regulations to not put any person (either driver or passenger) at unreasonable safety risk and there is a penalty of up to \$6,000 for breaching this. The Tasmanian regulator allows operators who have a good inspection track record to apply to the department to have annual inspection periods moved from 6 months to 12 months. At present, about 75% of the fleet is on an annual inspection timeframe.

3.7 Western Australia

Legislation: *Transport Coordination Act 1966* and *Transport Coordination Regulations 1985*,

Regulator: Department of Planning and Infrastructure approves the vehicle maintenance programme.

The *Transport Coordination Act 1966* requires buses (omnibuses) to be licensed. The application for the licence must be accompanied by information such as a description of the vehicle, the maximum number of passengers, and the proposed service to be offered (including the routes and the fares to be charged). In considering the licence application, the Minister may consider whether the service is in public interest (i.e. necessary/affordable/meets demand), the capability of the applicant (financial stability, character and qualifications, etc).

In addition, the bus must be maintained so that it is fit and serviceable, insured, meet the conditions of industrial awards (or any other relevant agreement) with regard to persons engaged in the operation of the bus and comply with the Minister's directions to pick up and put down passengers. The Minister may also attach conditions to the bus licence. A licence will be granted for no longer than 7 years.

There are regulations made under the Road Traffic Act including Road Traffic (Omnibus) Regulations 1975 which specify rules relating to drinking, smoking, unruly passengers, and records to be kept by the bus owner.

Safety

Western Australian legislation differs from other jurisdictions in that it attaches the 'right to operate' to the vehicle, rather than the bus operator (who is qualified separately). However, the conditions relating to the awarding of a licence are varied and some relate to safety and others do not. There is no high level legislative requirement to manage safety and safety is considered in the same context as commercial considerations like the need for the service and whether it is affordable.

3.8 Summary

The evolution of safety regulation in the bus industry in the past 20 years has largely been:

- individual;
- prescriptive;
- focussing on vehicle standards (introducing roll over standards etc); and
- has not focussed on processes or systems for safety.

For most states and territories, the legislation emphasises the *need to be accredited* and it is considered that safety is managed inherently by maintaining accreditation. Outside the scope of this legislative review is Occupational Health and Safety legislation, which each jurisdiction has, which would require bus operators to provide safe conditions of work for employees and a safe service for passengers. However this would not necessarily encompass all aspects of the operation.

If an operator is found to have unsafe practices then they risk having their accreditation removed or prohibited in some way. This could be described as the 'nuclear option' which is commonly not a particularly effective sanction mechanism because removing a service

has many other flow on effects (and is probably not feasible in the cases of urban public transport providers). Prohibition notices can be immediate, temporary and targeted at a specific problem (i.e. A bus that has failed inspection can be taken off the road until the problem is rectified) but this is still a reactive solution and only has the potential to remedy a particular identified problem rather than requiring (for instance) a review other parts of the fleet, or a system or practice.

Accreditation requirements for bus operators (and therefore safety requirements) are specified in passenger transport legislation, which differs from other areas of road transport where safety is managed through road transport legislation. There may be some merit in considering options to transfer the safety aspects of bus operator accreditation to road transport law, leaving the passenger transport legislation to deal with administration and business delivery.

4. ACCREDITATION AND LICENSING IN OTHER TRANSPORT AREAS

The following discussion is about recent regulatory changes in the road freight transport and rail transport industries.

4.1 Accreditation in the Road Freight Industry

The government accreditation scheme (called the National Heavy Vehicle Accreditation Scheme) for the road transport industry was introduced in 1999 as an 'alternative compliance' mechanism. Accreditation under the scheme acts as 'evidence' that truck operators are meeting system management standards. The National Heavy Vehicle Accreditation Scheme is a voluntary scheme that allows operators regulatory concessions in return for complying with the requirements of accreditation. It is incentive-based regulation. It is administered by the states using common set of standards, audit procedures and business rules. At present there are two modules available, mass management and maintenance. From September 2008, a fatigue module will be offered to operators wanting access to more flexible arrangements of work. Operators can seek accreditation through one or both current modules if they choose and are granted mutual recognition in all jurisdictions (apart from Western Australia). At present the National Heavy Vehicle Accreditation Scheme is only offered in Queensland, New South Wales, Victoria, Tasmania and South Australia. The Northern Territory is adopting National Heavy Vehicle Accreditation Scheme as part of the new fatigue reform, however the Northern Territory and the Australian Capital Territory both recognise National Heavy Vehicle Accreditation Scheme accreditation granted in other jurisdictions.

The road transport industry has also developed its own accreditation scheme called TruckSafe. Participants in TruckSafe perform to an industry 'best practice' standard which is considered to be above the minimum compliance level required. Trucksafe contains four modules. One module in TruckSafe, the maintenance module, is the same as the National Heavy Vehicle Accreditation Scheme maintenance standard, leading to many TruckSafe accredited operators also joining the National Heavy Vehicle Accreditation Scheme to access the regulatory concession.

Western Australia operates its own accreditation scheme which is mandatory for access to the network in Western Australia. There are many similarities between the National Heavy Vehicle Accreditation Scheme, TruckSafe and the Western Australia accreditation scheme,

which means some aspects can be recognised across the schemes, like the requirements for auditing. Third-party audits are conducted by accredited auditors for the operator and are recognised by all schemes, avoiding unnecessary duplication.

Since the inception of the National Heavy Vehicle Accreditation Scheme (and other schemes) there have been significant changes in the regulatory landscape, particularly with the introduction of more performance based duties and the concept of Chain of Responsibility into legislation. NTC is currently conducting a review of the National Heavy Vehicle Accreditation Scheme to reflect these regulatory developments. Part of the review includes examining evidence that suggests that accreditation has led to an increase in safety performance for accredited operators.

4.1.1 Review of the National Heavy Vehicle Accreditation Scheme

A review of the National Heavy Vehicle Accreditation Scheme began when NTC led an examination of the business rules in 2006, and introduced a new standard as part of the concessional mass limits package that allows accredited operators to gain access to Commonwealth diesel fuel tax credit. From September 2008 it will also include a fatigue management module for those seeking accreditation as part of the new fatigue reform.

The review looked at the issue of compliance. At present conventional enforcement is reliant on the physical detection of breaches, which is resource intensive. Ideally, compliance would be high without the need for greater enforcement resource. This can be done through creating a perception of a greater chance of being caught, or by identifying good compliance operators from the non-compliant ones and concentrating resource efforts on the latter. Other strategies include providing incentives for good compliance, better informing operators about the benefits of good compliance records, using targeted enforcement consistently through training and education, and monitoring the effectiveness of different compliance mechanisms.

A review of crash rates for operators in either Trucksafe or National Heavy Vehicle Accreditation Scheme found that crash rates were lower for trucks in accreditation than crash rates for unaccredited operators. Although accreditation is not specifically aimed at improving safety outcomes, there are flow-on benefits that impact on safety. For instance, trucks geared for greater mass allowances may actually have superior braking performance and shorter stopping distances because of better maintenance procedures, which may make a difference in the event of a collision.

The review concluded that there is a need to encourage as many operators as possible into 'beyond compliance' by providing more incentives, and to find ways to concentrate enforcement efforts on the identified 'low compliance' end of the spectrum. The report notes that it may not be practical for smaller operators to do this, but that they could pick up some aspects of risk-based management while still having minimum standards, recognising accreditation is not 'one size fits all'.

4.1.2 Chain of responsibility

The new Compliance and Enforcement package has an objective to achieve better outcomes in road transport safety, productivity, asset protection and environmental reforms. Beginning in the early 1990s, NTC worked collectively with all police and road agencies on a series of projects that resulted in the development of the model *Road Transport Reform (Compliance and Enforcement) Bill*. This was approved unanimously

by ATC in 2003. The Bill sets up provisions for the establishment of a nationally consistent, and more effective and equitable, scheme for encouraging compliance with the requirements of the road transport law and for the enforcement of those requirements. Importantly, the Bill also incorporates the concept of Chain of Responsibility.

Chain of Responsibility means all those with responsibility for activities that affect compliance with the road transport laws should be held legally accountable if they do not meet their responsibility. This is done through imposing obligations on all parties in the transport chain, and all individuals in the corporate chain of command — not just the driver — to either take reasonable steps to prevent a contradiction of the road transport law, or to not encourage or coerce others to contravene those laws. The supply chain includes 'off-road' parties, like consignors, packers, loaders and receivers, who may be held legally liable for breaches.

To date, the reform has been enacted in New South Wales, South Australia, and Victoria. Other jurisdictions have indicated that they will adopt the new package within due course. At present, Chain of Responsibility has been directed at the road freight industry, and primarily applies in the areas of mass, dimension and loading. However, the forthcoming reforms on fatigue management and speeding will also incorporate the bus industry. It is also noted that the intended approach to public transport safety in Victoria may include a general duty on people within the chain of delivery of passenger transport.

4.2 Rail industry – revised safety management approach

In recent years there has been a significant safety reform undertaken in the rail industry. Like the bus and coach industry, rail is also a passenger transport provider, so while the risk of an incident might be low, the consequences of an accident can be very high. A train derailment in January 2003 near Waterfall in New South Wales, which resulted in 7 deaths and 41 serious injuries, led to the Hon Peter McInerney QC undertaking an inquiry into rail safety¹². His report noted that the train had a large capacity (of 406 seated passengers and up to 800 including standing room)¹³ and this highlights the potential for the incident to have been far more catastrophic.

The report found multiple causal factors for the incident, which appears to have been triggered by the driver having a heart attack, but that mechanical failures and failures in procedure highlighted “a pervasive lack of safety awareness within the management of the company involved”¹⁴. The report recommendation that governments foster a safety culture in the rail industry led to the introduction of a risk management approach to safety management through a regulatory requirement for rail operators to have a Safety Management System.

4.2.1 Rail regulatory reform

The NTC recently led a national rail safety reform project, which included developing a framework to strengthen and improve the co-regulatory system for rail safety in Australia. The objectives of the reform were to:

¹² McInerney, *Interim Report of the Special Commission of Inquiry into the Waterfall Rail Accident*, January 2004, pg 25.

¹³ *ibid*, pg. 32

¹⁴ *ibid*, pg. 365

- improve consistency between jurisdictions in accreditation procedures and the administration of accreditation requirements;
- improve the effectiveness and consistency of rail safety management processes; and
- examine issues and develop proposals for the management of safety risk factors such as fatigue, drugs and alcohol and the medical fitness of rail safety workers.

NTC developed national model legislation which now includes the *Rail Safety Bill 2006* and national model Regulations. This has been introduced in some states.

Accreditation arrangements for rail transport operators were altered with the introduction of the new regulatory reform in the rail safety area. An operator of rolling stock (freight or passenger), and the infrastructure manager must be accredited by the rail regulator. An application must demonstrate that the party has the competence and capacity to manage safety risks associated with railway operations and to implement a Safety Management System as required by legislation.

Other conditions of accreditation include demonstrating financial capacity to deal with potential incident liabilities, and evidence of adequate consultation in preparing the Safety Management Systems and interface coordination plans. Regulators must consult with each other to ensure a consistent outcome when approving an application in more than one jurisdiction.

The requirements of the Safety Management Systems are set out in model legislation. At minimum the party seeking accreditation must specify potential risks that have arisen, and have the potential to arise, in order to undertake an assessment of risks. Controls, and procedures for monitoring, reviewing and revising the adequacy of the controls, must also be specified. This includes interface coordination plans to manage risks arising from interface between rail operations (or where a rail operation interfaces with a road or port), security management, emergency plans, and programmes for drug and alcohol management and health and fatigue.

5. IS SAFETY RISK BEING MANAGED?

While serious bus crashes are infrequent events in Australia, this does not necessarily mean that safety is being well managed. A shortcoming of looking at reported statistics is that this only captures a part of the whole picture on safety. In most states and territories police are only called to crashes that result in a death or serious injury, and as noted in the discussions in Section 3, while some road transport agencies collect incident information, national reporting and collation of data is far from complete.

Many 'incidents' or situations could increase the likelihood of a serious crash, but unless a crash occurs the issue may go undetected. Driver impairment is a good example of this. A driver may be fatigued, have a medical condition or be under the influence of drugs and alcohol and, while a prescriptive regime may have a medical requirement that requires the driver to pass a minimum health check and uses this as evidence that the driver is fit for duty, it may not necessarily pick up short term or specific medical problems that can lead to job impairment on that day. A driver may function for a period of some time while being impaired, but is literally 'an accident waiting to happen', as illustrated by the train driver in the Waterfall accident.

5.1 Establishing a safety culture

McInerney highlighted the fact that there was a lack of a safety culture in the State Rail Authority at the time of the Waterfall rail incident. His assertion is that this lack of safety culture led to many shortcomings in the way safety was managed, in policies and procedures, in management strategies and the general importance that was placed on safety workers in that company. Through creating an effective safety culture within the workplace, the status of safety is elevated and safety is a fundamental consideration in all aspects of the operation.

The question that needs to be asked is, is there a safety culture in the bus industry? Can industry demonstrate that there is an effective safety culture in the delivery of bus services and can governments be satisfied that this safety culture demonstrably exists?

A highly prescriptive regime may have safety as an overarching objective, but is not the best way to engender a safety culture. From an operational point of view the focus of compliance is 'not getting caught out', which tends to foster a tendency to only meet the minimum legal standard, rather than providing an incentive to reach higher levels, or achieve the same outcome through a more effective means.

In addition, prescriptive regimes tend to need a high level of enforcement to be effective, which is resource intensive and costly. Some road transport regulators admit that because the bus industry does not appear to have many problems, often enforcement is targeted at other public transport service areas, which means that the bus industry may have the opportunity to 'fly under the radar'. Rather than being able to point to how processes and procedures within industry actively mitigate safety problems by targeting risks, the fact that there are few crashes and complaints about the industry, and that vehicles generally pass regular inspections, is taken as a proxy that safety within the bus industry is being well managed.

5.2 Regulatory best practice

As discussed earlier in Sections 2 and 4, there have been significant changes in regulation in both the rail and road freight transport sectors in recent years, which have seen a shift from prescriptive regimes to risk-based approaches to safety. The current bus accreditation regimes all contain prescription, although some are less prescriptive than others. These prescriptive standards generally have evolved over time and changes represent movement in priorities and approaches for the jurisdiction.

The Office of Best Practice Regulation highlights some potential drawbacks of explicit government regulation, including that:

- it can be standard and inflexible, which means that it may not adequately deal with a diverse industry that changes over time. This can in turn result in regulation becoming outdated, counter-productive and impede innovation;
- it can generate more regulation over time, particularly to close gaps or adapt original regulations to new situations; and
- there can be a significant time-lag between identifying a situation that needs addressing and amending legislation to deal with.¹⁵

¹⁵ Best Practice Regulation Handbook pg. B-10

Once a crash has occurred there may be external pressure to introduce a measure to address risk quickly, without sufficient time to develop the most effective solution. In addition, 'quick fixes' may result in heavy handed regulation, aimed at assuaging public fears, but introducing far more severe conditions than are necessary. The primary drawback with a reactive approach is that it deals with incidents or accidents *after they occur*.

The Office of Best Practice Regulation notes that there is now a move away from prescriptive regimes. A risk-based, or 'proactive' approach seeks to identify the potential for accidents or incidents *before they happen*.

'Risk' refers to combination of the probability of a particular event to cause harm and the magnitude of the consequences of it occurring. Risk analysis involves determining actions to reduce or eliminate the hazard and/or consequences of the event, for example:

- identifying hazard and mechanisms that cause it;
- estimating the probability that the hazard will occur;
- assessing the potential consequences;
- analysing alternative responses and recommended appropriate response; and
- monitoring and reviewing the effectiveness of the response.¹⁶

An alternative risk-based method could be less costly and more flexible than meeting prescriptive standards, thereby providing more effective regulation¹⁷.

A regulatory scheme should be reviewed on a regular basis to ensure the continued relevance of particular standards or measures to test that these still achieve the original objective. Prescriptive standards are likely to only be reviewed in instances where a problem is found, and an assumption made that the standard is lacking. Commonly, this results in the level of the standard increasing, rather than assessing whether there is a different way to tackle the problem, or ascertaining whether the standard needs to be increased for everybody, or just to cover a specific area.

Prescriptive standards are often set by government, where in some instances industry may be in a better position to determine standards or countermeasures, given its relative position of expertise. The role of government regulators in this should be to monitor that industry has considered what performance standards it needs to meet, or remedies it needs to employ, and ensure that these standards are met, rather than setting prescriptive standards.

The 25 year old bus policy in South Australia is a good example a prescriptive measure currently used for bus accreditation where the safety merits are arguable. The policy essentially says that buses over 25 years old are likely to be unsafe, but does not require consideration about the safety performance of a bus that is (for instance) 24 years old. Perhaps a more useful way to approach this would be to require a minimum safety performance that a particular vehicle is capable of and use this as a basis for deciding whether it is suitable to be used.

A lot of consternation is caused by the fact that each state or territory defines a bus differently (according to the number of seats) which leads to different accreditation requirements. Another way to define which operators should or should not be accredited

¹⁶ Best Practice Regulation Handbook pg. D-1

¹⁷ Best Practice Regulation Handbook, pg. B-1

would be to look at the nature of the service they provide, and use that as a basis for whether they need to be accredited. This could then avoid situations of people removing seats to avoid being accredited, or the need to revise the 'number of seats in a bus' definition in order to capture a wider portion of the fleet within accreditation.

6. OPTIONS

The purpose of this paper is to outline some options for consideration with regard to bus safety regulation. These have been cast to reflect aspects of the discussion about safety best practice and how safety is managed in other transport areas. This section discusses five options for managing safety through bus operator accreditation and makes an evaluation about how these options could deliver a good level of safety management.

Costs and benefits

The following options discussion does not attempt to comprehensively cover costs and benefits. It is acknowledged that, should ATC choose to pursue a particular option, this would be subject to a full regulatory impact assessment (according to Office of Best Practice Regulation requirements) before recommendations about the suitability of an option can be made.

6.1 Option 1 – Status quo

This option maintains the status quo for accreditation arrangements, as they stand currently. It would mean no additional or alternative regulatory requirements imposed by ATC.

Discussion

The primary consideration in maintaining the status quo is the current level of safety in the bus industry, and whether this level of safety is satisfactory. While the safety record of the bus industry can be considered good, there are a lot of gaps in information about how or why the current systems work (or if indeed they do work). While it can be assumed that the many features of bus accreditation are contributing to safety it is not clear which ones are effective, and whether all the measures are necessary or appropriate.

While the current level of safety in jurisdictions may be satisfactory at present, it is not clear that the current systems are well equipped to handle changes to the nature of the bus industry, without changing themselves. Any changes to the current regime are likely to include more prescription, which will increase costs for operators and regulators. This will fail to take account of the risk posed by the safety issues identified in this paper.

Rock throwing is an example of this. To deal with the problems created by rock throwing, individual operators may need to devise a risk management plan that encompasses a number of physical and operational factors unique to their particular operation. Prescriptive measures may form part of this.

Several transport agencies also mention problems with parts of industry that currently fall outside accreditation regimes. It is unlikely that these could be dealt with without shifting the accreditation boundaries (by requiring more operators to become accredited). This could result in significant cost increases for industry and regulators.

While this option would have no impact on the objectives of altering current safety levels, or increasing or decreasing costs for operators and jurisdiction regulators, it does not address other objectives including considering mandatory review requirements, the issue of regulatory best practice (in the context of recent reforms in other parts of the transport sector), and does not allow for enhanced data capture and collation.

6.2 Option 2 – Introducing a general risk management requirement into primary legislation

This option includes developing a general duty to manage safety, which would be incorporated into individual state and territory law. An example could be to borrow from similar duties used for fatigue management in the road transport industry and also the rail industry.

An example of a proposed provision could be:

General duty to manage passenger safety:

- *Parties in the bus chain of responsibility must take all reasonable steps to ensure the safety of passengers transported on a bus;*
- *Chain parties would include: driver, employer, primecontractor, operator and a passenger service contractor;*
- *If a party identifies, assesses and eliminates or reduces risks to the extent that is reasonably practicable, they will be taken to have taken all reasonable steps.*

There could also be some additional subordinate duties. These could include complementary duties for particular purposes that may be required relating to: commercial arrangements, business practices, schedules and any other matters particular to passenger safety on buses.

This could be underpinned by some additional requirements to use risk-analysis to manage safety and that the risk documents must be audited and reviewed on a regular basis. The purpose of this is to elevate the notion of safety, and also specifically require a risk-management consideration of safety as part of bus operator accreditation or licensing.

The option works on the assumption that jurisdictions would continue to administer accreditation regimes as they currently do. This legislative change would complement existing regimes, although would impose an additional need to make a connection between how existing actions contribute to meeting the general duty.

Discussion

Road transport regulators and the bus industry would need to assess whether the existing accreditation arrangements were adequate to fulfil the general duty. The assessment may identify gaps and as a result accreditation arrangements may need to be approved. This approach should allow the same, or a higher, level of safety for all states and territories. If it included specifying a risk management approach to safety, it would be consistent with regulatory developments in other areas like the rail industry.

This would be a national initiative in that there would be an element of commonality if all states and territories agree an approach with the same intent. It could also be useful to consider some issues that may benefit from a national approach (like common data capture), although this need not necessarily be achieved through legislation (could be a guideline or agreed national policy).

This approach could capture those who currently fall outside of accreditation boundaries. For example, if the general duty applied to all passenger vehicles over a certain mass, it would apply to some vehicles that may not currently fall under the accreditation requirement. Road transport operators and industry would need to consider how the operators of these buses could meet the duty. Options include industry codes, extending accreditation, audit arrangements and so on.

6.3 Option 3 – Develop an accreditation module

This option recommends developing an accreditation module specifically for safety. There are some existing models that could be used for this, and more recent examples have an emphasis on risk management. The module would centre on risk identification and could be incorporated into existing accreditation schemes. The magnitude of the risk assessment task would be proportional to the risk posed by the operation (small effort for low risk and major effort for high risk).

The accreditation module would need to be supported by some rules. Either the module could have its own rules, or it could be incorporated into an existing accreditation scheme where it could share business rules specifying, among other things, the application and auditing process.

The intention is that operators would need to review their current practices to show how they align with the minimum requirements set out in the accreditation module.

An example of a module is below:

Fitness for Duty: Can you demonstrate that you have considered risks relating to staff in the following areas?

- *Are they medically fit to perform their job? How do you know this?*
- *Do staff meet appropriate character requirements? How do you know this?*
- *Do you have a drugs and alcohol policy? What is it and how is it communicated?*
- *Have your drivers had any traffic offences (dangerous driving etc)? If so, have you considered whether this may pose a risk to your business?*

Knowledge and Awareness: Can you demonstrate that your staff have the appropriate knowledge to safely perform their jobs?

- *Do your drivers know the road rules?*
- *Do they know about safety procedures?*
- *Do they know how to operate a heavy vehicle?*
- *Do they know how to ensure the safety of passengers while they are on their bus?*
- *Do staff know about legislative requirements (i.e. fatigue risks, drugs and alcohol, etc)?*
- *Have you identified any appropriate qualifications that staff could gain (i.e. bus operator training/defensive driving course/competency based training)?*

Management Responsibilities: Can you demonstrate all staff know what their responsibilities about safety are with regard to their job?

- *Are these responsibilities clearly defined? (depot manager, supervisors, drivers, mechanics etc job descriptions)*
- *Do management practices deter non-compliance?*
- *Are there communication processes in place to communicate responsibilities?*

Internal Review and Compliance Monitoring: Can you demonstrate that your safety processes are regularly reviewed and updated and compliance is monitored?

- *Do you have an internal review process for x period?*
- *Who undertakes reviews/is this person competent?*
- *Do you have a system for monitoring compliance and identifying/recording/remediating non-compliance?*
- *Do you have procedures to investigate non-compliance?*

Records and documentation: Can you demonstrate that appropriate records are kept and documentation maintained?

- *Do you have a record keeping procedure? What is it?*
- *Is this communicated? How?*
- *Do you have a document approval process?*
- *Do you have a procedure to retain documents for audit processes?*

Vehicle Standards: Can you demonstrate that your vehicles meet minimum requirements?

- *Australian Design Rules/Australian Vehicle Standards Rules and other guidelines (like seatbelt retrofit, etc).*
- *Are there any other legal requirements relating to vehicle design that you may need to meet?*
- *Have aids to help disabled/elderly passengers.*

Vehicle Maintenance: Can you demonstrate that your vehicles are appropriately maintained?

- *Do you have a regular maintenance schedule for your vehicles? What is it?*
- *Are your vehicles regularly inspected for roadworthiness?*

Passenger issues: Can you demonstrate that you have considered risks to safety potentially caused by passengers?

- *Have you considered incidents that may cause the driver to lose control of the vehicles (e.g. violence)?*
- *What situations (e.g. drunken and disorderly passengers) could potentially threaten other passengers?*
- *Do you have procedures in place in the event of a situation arising?*

Discussion

This option would be capable of achieving the objectives set down at the beginning of this paper.

Bus operators would need to have a risk-based document that was audited and reviewed, but this document would be underpinned by their current management systems and practices. The magnitude of the risk assessment task would be proportionate to the risk posed by the operation (small effort for low risk or major effort for high risk). The additional burden would only be where current practices were found to be lacking. This could potentially increase safety without incurring unnecessary additional costs.

This approach would introduce a requirement that bus operators, and anyone who has significant interface with a bus operation, must consider their role in the delivery of the service from a safety perspective. This elevates the status of safety to be a primary consideration to assist in developing a safety culture within the operation.

There are a number of ways this could be done:

1. Introduce a 'bus safety' module into an existing bus accreditation requirement – minimum standards for bus safety could be created as a 'module' and fitted into existing accreditation requirements in each jurisdiction.
2. Introduce a 'bus safety' module into another existing accreditation scheme – there are accreditation schemes in the road sector which could easily accommodate a module, for instance, the National Heavy Vehicle Accreditation Scheme. The National Heavy Vehicle Accreditation Scheme is currently under review so NTC could accommodate a bus safety module in a framework proposed by the review. A bus safety accreditation module would be supported by the common business rules of the scheme.

This would also mean that there is a nationally consistent part of accreditation (although the ways to demonstrate compliance may differ depending on what state or territory is an operator's 'home' jurisdiction) that should increase accreditation portability. Other parts of accreditation that are not safety related are likely to still differ, so it would not mean that accreditation would be wholly nationally consistent.

3. Adopt an already existing risk management standard – There is an Australian Standard AS 4360 Risk Management which could be adopted as a basis for a module about bus safety to be developed against.

This option would not capture those operators currently outside accreditation without also changing the boundaries about who accreditation applies to. In order to demonstrate compliance, it would not be sufficient to just 'tick a box' indicating that an action had been completed, rather the operator would need to describe what risk management systems are in place, and demonstrate that they were carried out. This would be subject to a combination of internal and external auditing for compliance.

6.4 Option 4 – Introduce a general duty underpinned by a mandatory accreditation module

This option is a combination of the second and third options. As in Option 2, states and territories would introduce a general duty for bus operators. However, instead of this being underpinned by the existing accreditation regimes to demonstrate how an operator meets

the duty, the duty would be underpinned by a mandatory accreditation module that would set minimum standards.

Discussion

The advantages of this option over options two and three are that it would potentially offer more national uniformity than option two, and provide additional weight to the intent behind option three.

Under option two, jurisdictions could leave their existing arrangements in place with just an additional requirement to add 'risk analysis' to accreditation documentation. However, this would not necessarily result in a nationally recognisable method. Under option three there would be a common risk analysis method, but the intent behind the module may risk being undermined without a legislative framework to provide high level objectives.

This option is essentially the same approach taken in rail safety.

6.5 Option 5 – Introduce a co-regulatory option

This option consists of introducing a general duty to manage safety (similar to Option 2), but the difference would be that at the same time as approving the general duty, ATC would repeal existing accreditation arrangements. In the absence of government accreditation the bus industry would have the opportunity to develop its own compliance mechanism in order to demonstrate how it was meeting its legislative duties. This could be done in a number of ways, such as through an industry-developed accreditation scheme or an industry Code of Practice.

ATC could choose to help industry establish a mechanism (including developing the standards and also administrative arrangements like audit mechanisms). The replacement accreditation scheme could contain a number of modules to address areas of accreditation that are not safety related. The primary role for regulators would be to monitor compliance with the proposed system.

Discussion

The attraction of this option is that the bus industry would be responsible for determining its actions with regard to delivering quality safe services. It would also allow for continuous improvement under the performance-based regulatory duty imposed through legislation.

Potentially, this would address all of the objectives of this paper because it would allow industry to devise a mechanism that could be tailored to the individual needs of operators (which should reduce administrative costs), it would minimise the enforcement costs borne by regulators because their role would focus purely on monitoring compliance and not on administration of applications.

The intent of introducing a general duty on all parties who are involved in the delivery of the bus service is to engender a safety culture, and raise safety to high level of importance in all aspects of the operation. A requirement to have a risk analysis of operations should identify all potential risks and counter-measures to reduce the number of underlying factors that contribute to accident and incidents.

In addition to this, requirements to audit and review risk management procedures would ensure that practices are carried out, and do not become outdated or irrelevant.

It can be argued that approaches based on assessing the risk profile of a particular organisation allows mitigation techniques to be tailored appropriately to an individual operation, rather than using the 'one size fits all' formula. This means that the administrative compliance burden should match the size of the risk posed by the operator (and so acts as an incentive for operators to have a good safety performance as this will minimise their administrative costs).

Prescriptive regimes also rely heavily on personnel to 'inspect' compliance indicators, which is resource intensive. An accreditation scheme with mandatory auditing and review requirements ensures that operators will 'self-report' on performance and regulators can focus efforts on places where 'flags' have been raised about safety performance, rather than having to inspect all parts of the fleet equally, trying to 'catch people out'.

A national approach allows some certainty for industry about the portability of the safety aspects of accreditation for interstate operators and/or operators who operate more than one business in different states. A national approach should minimise or eliminate unnecessary duplication of administration costs as well as make accreditation processes clear and easy to understand. Compliance would still be monitored at jurisdiction level, although another issue to perhaps consider would also be the feasibility of introducing a single national bus/passenger transport operator regulator.

A more significant advantage of a national approach is the ability to build a national picture about safety performance through harmonised incident and accident data reporting and the collection and collation of statistics. At present, data capture is patchy and focussed on specific areas and, because the numbers are so small, it is difficult to make meaningful assumption about this. Collation of statistics on a national basis would provide a much more comprehensive picture.

7. CONCLUSION

The NTC will put a proposal to ATC to consider, informed by the feedback received through public consultation, in mid-2008. NTC would like to hear from government regulators and the bus industry regarding the proposed options, including comments on what suggestions have merit and why, and what suggestions may be problematic and why.

Some issues NTC would like feedback on are:

- Should operators 'currently outside accreditation' be captured by new requirements? For instance, operators of smaller buses, and if so, what would be a good/fair way to define these operators (for instance, 'all vehicles that are not a taxi')?
- What other problems not canvassed in this paper does industry face with regard to safety, and which option would best address these problems?
- Is industry not able to innovate due to current restrictions created by accreditation? Or do current accreditation restrictions prevent industry from using creative solutions to solve safety related problems?
- Do individual operators employ risk analysis techniques and how do current requirements assist or hinder these?