

**Review of Rail Safety
Accreditation Costs**

Issues Paper

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL
OF NEW SOUTH WALES**

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Accreditation Costs**

Issues Paper

Submissions

Public involvement is an important element of the Tribunal's processes. The Tribunal therefore invites submissions from interested parties to all of its investigations.

Submissions should have regard to the specific issues that have been raised. There is no standard format for preparation of submissions but reference should be made to relevant issues papers and interim reports. Submissions should be made in writing and, if they exceed 15 pages in length, should also be provided on computer disk in word processor, PDF or spreadsheet format.

Confidentiality

Special reference must be made to any issues in submissions for which confidential treatment is sought and all confidential parts of submissions must be clearly marked. *However, it is important to note that confidentiality cannot be guaranteed as the Freedom of Information Act and section 22A of the Independent Pricing and Regulatory Tribunal Act provide measures for possible public access to certain documents.*

Public access to submissions

All submissions that are not subject to confidentiality will be made available for public inspection at the Tribunal's offices immediately after registration by the Tribunal and also via the Tribunal's website. Transcriptions of public hearings will also be available.

Public information about the Tribunal's activities

A range of information about the role and current activities of the Tribunal, including copies of latest reports and submissions can be found on the Tribunal's website at www.ipart.nsw.gov.au

Submissions on the issues raised in this paper should be received no later than 27 November 1998.

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Independent Pricing and Regulatory Tribunal of New South Wales

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1 INTRODUCTION

The Premier has asked the Independent Pricing and Regulatory Tribunal (the Tribunal) to review the safety accreditation fees charged to participants in the NSW rail industry. The review is being carried out under Section 12A of the *Independent Pricing and Regulatory Tribunal Act 1992*.

All owners of rail track and operators of rail services in NSW must be accredited by the industry's safety regulator, the Transport Safety Bureau (TSB). The TSB recovers its costs by levying fees on those seeking or holding accreditation. The terms of reference ask the Tribunal to recommend:

- an appropriate methodology for the calculation of accreditation costs, and
- an appropriate distribution of these costs amongst participants in the rail industry.

In conducting its review, the Tribunal is required to examine the standard, quality and reliability of safety accreditation services, and consider whether the total costs faced by rail operators to achieve safety accreditation (including TSB fees and compliance costs) are reasonable. Additionally, the Tribunal is to evaluate whether the total costs of achieving rail safety accreditation are a significant barrier to entry to the rail industry. The full terms of reference for this review are presented in Appendix A.

NSW created a separate rail safety accreditation bureau within the Department of Transport in 1993. Most other Australian States are still in the process of creating separate agencies or establishing their safety accreditation processes and fees. The Tribunal's review should provide a useful forum to explore the lessons from five years of rail safety accreditation in NSW and identify options for reform useful to other jurisdictions.

Section 103 of the *Rail Safety Act 1993* requires that the Act be reviewed after a period of five years. The TSB commenced this review in 1998 and it is scheduled for completion by September 1999. The Tribunal's review of rail safety accreditation costs will provide input to the TSB's review of the Act. The timetable for the Tribunal's review is:

Actions	Time frame
Submissions due	27 November 1998
Public Hearing	15 December 1998 IPART Offices Level 2, 44 Market St Sydney NSW 2000
Final Report	28 February 1999

This issues paper explains how the review will be undertaken, provides background to the rail industry as it relates to safety regulation, highlights the issues that will be covered in the review and calls for submissions from interested persons. It identifies areas where the Tribunal seeks input and public comment. However, the Tribunal also welcomes submissions on other issues that interested persons feel should be addressed in answering the terms of reference.

All submissions should reach the Tribunal by Friday 27 November 1998.

2 THE CURRENT SYSTEM

2.1 The history of rail safety regulation

Australia's passenger railways have generally been developed, owned and operated by governments. In NSW, legislation governing railways was first introduced in 1848, and until the late 1980's with the introduction of the *Transport Administration Act 1988* most railway activities were conducted by government departments. The railway operator's obligation to operate safely was seen largely as part of the general responsibility of governments towards their constituents. Safety obligations were not separately codified in legislation.

While private sector involvement in the rail industry is increasing, the underlying social imperative for high levels of public and industry safety remains. The impetus for legal codification of safety requirements in NSW began in 1991 because of concern by government that private heritage rail operators were not subject to the internal safety disciplines of a government-owned railway.

This was reinforced by a government policy of the day that core government responsibilities (such as setting safety standards), should be independent from government-owned businesses (such as railway operation), which should be commercially focussed and, ultimately, subject to competition. The introduction of the Rail Safety Act in 1993 marked the first time any Australian State separated safety requirements from the myriad of other issues covering the establishment and operation of government railways.

Subsequently, all other States have adopted, or are intending to adopt, a similar approach. However, the extent of each State's progress towards separate rail safety accreditation has been limited where rail ownership and operation have remained integrated within a government railway organisation.

2.2 Rail safety accreditation in NSW

The NSW system of rail safety accreditation requires certification that owners of rail track and railway operators meet agreed standards of safety in their business processes, equipment and infrastructure. Achieving and maintaining certification are legal requirements to operate railway services in NSW.

An initial application for safety accreditation must be sought when a new section of rail track is created, a new type of rolling stock is developed or a new train route or service is proposed. Accreditation is then permanent, but continuing compliance with agreed safety standards is monitored or audited. Nominal fees are charged for the initial application, while more substantial fees are charged annually for monitoring and compliance checking. Current fees are reproduced in Appendix B.

Infrastructure ownership, access provision, provision of transport services (freight or passenger), track, signals, and vehicle construction and maintenance are all activities which impact on railway safety and must be assessed and accredited under the *Rail Safety Act 1993*.

Safety standards are not prescribed. Those seeking accreditation choose or develop safety management systems appropriate for their particular rail operations. These are then submitted to the TSB for assessment. Once accredited, the railway owner/operator is obliged to maintain and operate the services in accordance with the terms of its accreditation.

The TSB has the authority to direct an owner/operator to carry out specific duties or maintenance in order to ensure acceptable levels of safety. While financial penalties for non-compliance are available, a constructive approach to encourage rectification of any concerns is the stated preference of the TSB.

2.3 Competition policy reforms

The rail industry in Australia has been subject to criticism over an extended period for low efficiency levels and, in some cases, for over-charging captive customers, especially coal traffic. Recent legislative and structural reforms have sought to encourage greater competition as a mechanism for driving improved efficiency and competitive pricing in the industry.

Changes to the *Trade Practices Act 1974* in 1995 created the legislative framework for access to facilities (such as railway tracks) which are essential for competition in other markets (such as freight and passenger transport). Consistent with the Act, the NSW Government developed the NSW Rail Access Regime which provides the regulatory basis for access to railway tracks in NSW, including a process for resolving any disputes.

In practice, safety accreditation and access agreements are usually pursued concurrently rather than sequentially. This is a practical approach to address the paradox arising when the gaining of accreditation and an access contract (or contract to work as a maintainer, for example) are pre-requisites for each other.

Competition policy reforms reinforce the need to have safety standards set independently to ensure government businesses and private operators compete on an equal basis.

2.4 Responsibilities of the TSB

The object of the Rail Safety Act 1993 is “to promote the safe construction, operation and maintenance of railways.” The safety regulator is the Director-General of the Department of Transport. Under Section 91 of the Act, the functions of the Director-General are to:

- provide advice to intending applicants on safety standards and rail safety generally
- accredit owners and operators
- certify railway employees as competent
- develop safety performance standards and monitor their effectiveness
- monitor and where necessary enforce compliance with standards
- investigate railway accidents
- provide general safety advice to the Minister.

The Tribunal seeks comments on the role and responsibilities of the Director-General of the Department of Transport with respect to rail safety and how these should be reflected in accreditation fees.

2.5 The costs of administering rail safety in NSW

The TSB employs 23 staff to administer the Director-General's rail safety functions. Five of the positions are funded by the DoT. The remaining 18 positions are funded by accreditation fees.

The TSB's 1997/1998 operating budget includes an amount of \$1.8 million to be recovered by fees. The vast majority of fees (95 percent) are recovered from annual fees paid by accredited organisations.

Incident investigation costs are in addition to this budget and are typically recouped from the industry participants on a case-by-case basis. This is intended to avoid costs accruing to those who are not involved in the particular incident. This may be contrasted with alternative approaches where investigations are carried out by a separate government funded body as occurs in New Zealand.

It has been argued that recovery of the full TSB budget overcharges the industry, since there are several items which should not be borne by the industry. These include functions such as an advisory service for the Minister, and internal and administrative costs of the department which are unrelated to the services provided directly to industry. As noted, some positions are funded by the DoT.

It has also been argued that since there is a lack of contestability for the TSB's functions, no mechanism exists to ensure continuing efficiency. NSW's accreditation agency has substantially more staff allocated to rail safety than any other state. However, the TSB has been established longer than its counterparts in other states and the task is different because of the detail of the Act (eg the TSB is required to issue certificates of competency for railway employees), the industry structure and number of participants. It has been suggested that the staffing levels in other states are lower than can reasonably be expected in the long term because the agencies are still developing.

The Tribunal seeks comments on the current level of costs incurred by the TSB to administer rail safety accreditation in NSW.

3 INDUSTRY STRUCTURE

3.1 The NSW rail industry

The rail industry in New South Wales now includes a mix of private, government and quasi-government organisations which are engaged in interstate and intrastate services and which pursue commercial and/or public service objectives. The range of activities undertaken by the participants in the industry is broad. Both complementary and competitive relationships exist between these participants.

The rail industry in NSW underwent a major structural change in 1996 aimed at improving transparency and encouraging greater competition. The State Rail Authority was restructured into four separate organisations with distinctly different roles and responsibilities:

- Rail Access Corporation, which owns and manages all publicly owned rail infrastructure in NSW.
- State Rail, which operates rail passenger services, and, in some cases, network control services.
- FreightCorp, which operates intrastate rail freight services in NSW.
- Rail Services Australia (RSA), which provides maintenance services.

Each of these organisations is covered by an interim accreditation which was granted when the State Rail Authority was restructured. The interim accreditations are essentially a continuation of standards originally required of the State Rail Authority. The TSB intends to grant new accreditations to these organisations, customised to their changed circumstances.

Rail maintenance entities, together with interstate and intrastate freight operators are carrying out their business activities in markets which are becoming increasingly competitive (although the SRA, FreightCorp and RSA receive government CSO contributions for certain functions). It is desirable to ensure that safety accreditation costs are no higher than they need to be and are distributed between industry participants in the most economically efficient manner.

Many in the industry argue that it is important to ensure consistency across modes. The road industry does not fund any separately identifiable government safety initiatives applying to roads and road transport.

The Tribunal seeks comments on the impacts of safety accreditation costs as a competitive factor both within the rail industry and with respect to other transport modes.

Apart from the former State Rail Authority businesses, the National Rail Corporation is the most significant operator of rail services in NSW. The National Rail Corporation (NRC) was established in 1993 to operate interstate rail freight services and is owned by the Commonwealth, NSW and Victorian Governments.

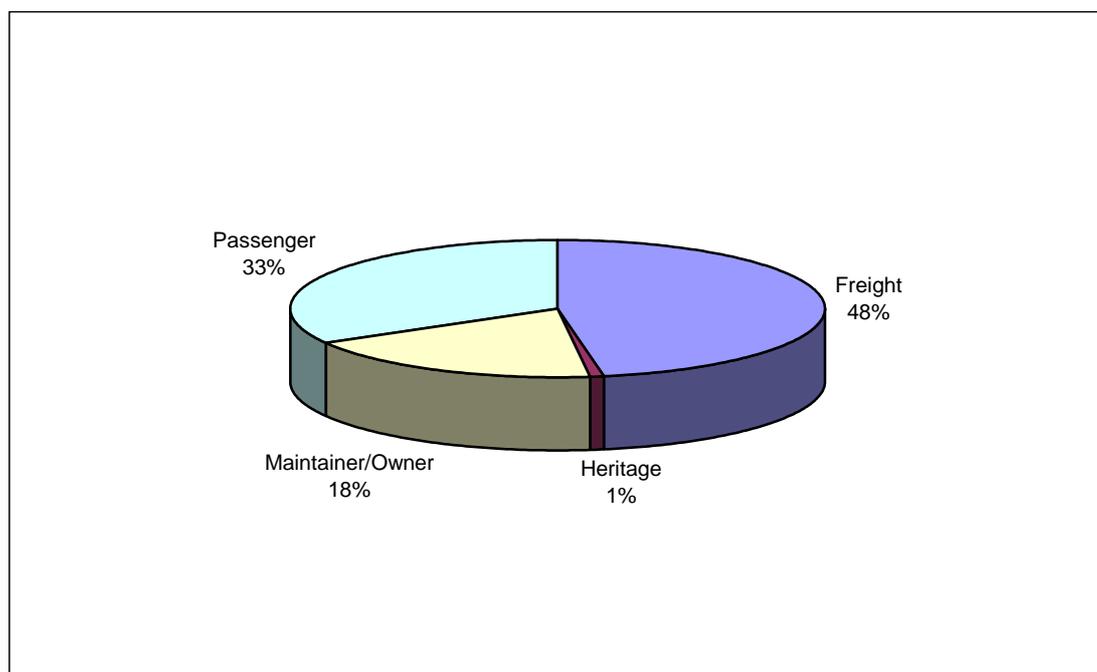
Various private operators also now exist in NSW and several major freight industry participants have either sought access or have been actively investigating the potential for operating freight services in NSW.

The costs associated with ensuring safe operations and obtaining accreditation vary with both scale and scope of rail industry participants' businesses. The Tribunal seeks comments on the significance of safety-related costs as they relate to different types of rail businesses.

3.2 Organisations currently accredited

As at July 1998, 86 organisations had either been granted accreditation by the TSB or had an application in process. The *Rail Safety Act 1993* assigns each rail industry participant to one of four defined categories for accreditation purposes. Figure 1 shows the proportion of the TSB's total revenue from fees which is derived from charges on passenger railway operators, freight railway operators, track owners or those maintaining track, and heritage train operators.

Figure 1 Proportion of fee revenue recovered from accreditation categories (1996/97)



Source: Transport Safety Bureau.

The TSB revised its fees in April 1998 (see section 6 below). This should alter the balance of revenue from each defined category so that passenger services will contribute 42 percent, freight 41 percent and track owners/maintainers 16 percent. The proportion contributed by heritage owners will remain unchanged. All participants incur safety management costs in addition to these fees including the costs of system development and administration.

Rail Access Corporation (RAC) may have a common law obligation to ensure a safe environment for its customers. Therefore, RAC believes that it is required to conduct a due diligence on the suitability of a rail operator to conduct safe operations. This leads to a duplication of some rail safety regulatory functions, which could be inefficient. While opinions differ on the actions necessary for the TSB and Rail Access Corporation to fulfil their respective obligations, the current situation requires resolution. In particular, it has been suggested that some safety requirements for access are excessive or unnecessary.

The Tribunal seeks comments on any circumstances where duplication of safety activities occurs under current arrangements and the impacts of such duplication, in terms of both direct costs and delays and any examples of conflicting or overly restrictive requirements imposed.

4 ISSUES IN THE ADMINISTRATION OF RAIL SAFETY

The existing rail safety accreditation system is based on a regulatory model of co-regulation between the TSB and industry. This choice of regulatory model affects the total costs of safety accreditation and who bears these costs.

4.1 Possible regulatory models

There are several possible models for safety regulation. These range from a fully prescriptive regime (sometimes termed command and control), where all standards are defined and administered by the regulator including the application of sanctions for non-compliance, to complete self-regulation where operators define their own standards.

In a command and control regime, the operator is required to comply with the regulator’s requirements and to meet the costs of doing so. In a true self-regulating model, there is no specific safety regulator, operators set their own priorities to resolve conflicts between commercial goals and safety, and are accountable only under the general laws of society.

Between the two ends of this spectrum is co-regulation. The intent of the current regulatory model is to allow the operator to run its business as it sees fit, defining its own technical and management standards and systems. The regulator’s role is to ensure that these systems ensure the continuing safety of operators.

Table 1 depicts some of the features of these regulatory options.

Table 1 Regulatory Approaches: advantages and disadvantages

Regulatory approaches	Advantages	Disadvantages
Command and control	The oversight agency has clear responsibility for enforcement.	Regulations do not readily allow for new methods and technologies.
Co-regulation	Enforcement is based on a high degree of trust between the oversight agency and operators.	New technologies grow at a moderate pace, based on safety demonstration and approval by oversight agency.
Self-regulation and certification	More readily allows for certification of new advanced methods and technologies.	Liability for safety falls upon self-certifying body with limited capacity for external preventative action.

Risk-based regulation and performance-based regulation are terms which are sometimes employed in describing regulatory arrangements. These approaches can arguably be applied in either self-regulatory or co-regulatory environments.

Risk-based systems adopt a structured methodology of identification, assessment, treatment and ongoing monitoring of risks. Performance-based systems use past history and/or statistics to demonstrate acceptable performance.

A performance-based management system is usually not an option for a new entrant because there is a lack of relevant data. In some cases, where a new entrant can demonstrate a safe working history in some other jurisdiction then a modified performance based system could be employed. When a performance based system is considered to be inadequate then the usual procedure would be to include some sort of assessment of risk in the regulatory system.

The Tribunal seeks comments on the link between the choice of regulatory model for safety accreditation and the costs of administering and achieving accreditation.

4.2 Approaches adopted in other jurisdictions

Rail Safety Accreditation in North America has historically been based on very stringent command and control specifications. These requirements have included specific signal technology standards, construction techniques, operational rules and maintenance standards. More recently, North American regulatory agencies have started to move toward performance-based regulations, similar to those used by the commercial aircraft industry since the 1970s. This move has, in part, been driven by the need to begin accepting new technologies such as high speed rail and magnetic levitation trains.

The Federal Railroad Administration in the United States recovers the cost of rail regulation through the imposition of penalty fees on participants for breaches of the safety requirements.

In 1995, the United States government passed legislation requiring rail operators to develop and manage a written safety program plan. This legislation has helped to de-centralise the safety oversight functions from the federal to the state levels. In addition, these changes have helped progress from command and control regulation to performance based self regulation.

In the United States, passenger rail operators and track owners are required to certify that rail lines are safe. Self-certification is normally carried out by complying with a well-defined safety program plan which is prepared by the rail participant and approved by a state oversight agency. Freight railroads are regulated and licensed solely by the Federal Railroad Administration (FRA), using strict and narrowly defined command and control regulations.

In the United Kingdom the approach to rail safety is referred to as a cascade. The access provider (i.e. Railtrack) and the safety regulator work closely with each other. Railtrack's safety arrangements are assessed and approved by Her Majesty's Railway Inspectorate, part of the Health and Safety Executive. Each operator in turn submits a safety case to Railtrack for approval. Railtrack then manages all safety requirements (approvals, audits, monitoring, etc) of the operators using the infrastructure, in accordance with the procedures and criteria approved by the safety regulator.

Progression from the prescriptive standards inherited from the former nationalised industry toward an approach more strongly aligned with risk management principles is continuing. The costs of rail safety management are recovered in access charges.

Co-regulation is the regulatory model used in New Zealand and in the other Australian states.

The Tribunal seeks comments on the regulatory model and resultant costs of safety accreditation in other Australian States and in overseas jurisdictions. What lessons can NSW learn from the regulatory models adopted and the costs of administering and achieving safety accreditation elsewhere?

4.3 Issues raised by the current NSW safety regime

4.3.1 Absence of common standards

One of the features of the NSW system is an absence of common standards. Rail participants develop their own safety standards and systems for approval by the TSB. Some industry participants have called for common standards to facilitate ready acceptance and simplify the accreditation process. The use of multiple signalling and communications systems across the nation is often considered to be excessively costly and a cause of inefficiencies in interstate operations. However, the desire to foster innovation and competition may suffer in such a mandated environment, and the suggestion is seen as a retrograde step by others.

A manual of *Engineering Standards and Practices* was developed a number of years ago by the Railways of Australia Committee (ROA) to document the minimum standards applicable to inter-system services. These standards were of a prescriptive nature and have been overtaken by market and technological developments to a degree. They were effectively used for some time as a minimum set of requirements for any new entrant to the rail industry.

One of the major criticisms of these standards was the mandatory nature of requirements which, while not rigidly applied by the government systems themselves, did create logistic and bureaucratic hurdles for private sector participants. While the detail of such inconsistencies was often of a minor nature, the resulting situation was often considered to be discriminatory.

The ROA standards have been updated by an industry committee but are not yet in the public domain. Debate continues on several key issues.

The Tribunal seeks submissions on how the costs of safety accreditation are affected by the absence of common safety standards for all NSW rail industry participants.

4.3.2 Mutual recognition

The need to minimise duplication of accreditation and ensure consistency between States has been recognised in the *National Guidelines for Rail Safety Accreditation Applications* issued by the Rail Safety Committee of Australia for all States and the Commonwealth in May 1995. The document is often referred to as the "IGA" since the committee was formerly named the Rail Safety Inter-Governmental Agreement (IGA) Working Group. The IGA provides for the enactment of appropriate legislation, the accreditation of owners and operators and the mutual recognition of safety accreditation across jurisdictions. The process of mutual recognition between states for safety accreditation is intended to avoid the situation where regulators in different states impose different requirements on an operator.

This IGA included reference to legislation allowing for the application of the Australian Rail Safety Standard, AS4292 Railway Safety Management. AS4292 comprises six parts, which were published progressively between 1995 and 1997. Additions to this suite of standards are in the planning stage. An important element of both the *Rail Safety Act 1993* and AS4292 is the systematic management of risk. Risk management procedures and standards are contained within AS4360.

The NSW legislation pre-dates the IGA, AS4292, but the inclusion of reference to AS4292 is an expected outcome of the TSB's current review of the Act.

While the IGA governs mutual recognition of the initial safety accreditation, each State conducts some element of ongoing monitoring of compliance with accreditation standards. The extent of monitoring and auditing appears to vary significantly between States. In NSW, Section 50 of the Act requires inspections to be no less frequent than once every twelve months and the costs of these inspections are recovered in fees annually.

The current NSW system could lead to multiple fees being paid where an operation outsources more functions than a competitor, such as where an owner and a maintainer may pay fees based on the same units of rolling stock.

While safety accreditation arrangements in other States are still evolving, there is potential for duplication of effort where a number of States require the same operator to demonstrate compliance with standards.

The Tribunal seeks comments on the effectiveness of current arrangements for mutual recognition between States and the cost implications of any duplication.

4.3.3 Accreditation costs as a possible barrier to entry

The costs of accreditation take two forms:

- the fees for accreditation itself, including the ongoing fees for monitoring and auditing
- the internal cost of actions required to attain and retain accreditation.

There is some concern that certain aspects of safety regulation have become economic regulation as prospective rail participants are prevented from seeking access to the rail network because of uncertainty in the level and calculation of accreditation fees. The TSB has engaged a consultant to identify if any of the safety regulation functions that may act as a form of economic regulation. The results and recommendations of the consultant will form a part of the TSB review of the *Rail Safety Act 1993* as previously mentioned.

The accreditation fees charged appear to be too small to be a fundamental barrier to doing business. The total fees charged for accreditation and compliance, which includes monitoring and auditing, are less than one percent of total rail operating costs in the state.

However, the costs of establishment and administration of acceptable processes and the need for duplication of approvals, reporting, auditing and similar requirements may impose substantial costs on rail based businesses.

The cost to industry for compliance with safety standards includes the initial actions to attain accreditation plus the need for ongoing systems to comply with accreditation standards.

There may be significant internal costs associated with attaining initial accreditation and subsequent recognition in other jurisdictions. This could be a result of:

- the time lag between initial application and approval
- the number of iterations before approval is granted
- the number of entities to be dealt with
- administrative duplications and any differences in requirements.

The ongoing cost of accreditation includes the development and documentation of the systems required for a particular entity to conform consistently to certain standards, training courses, internal audits and monitoring of standards. These costs may be greater than otherwise in a prescriptive regulatory environment.

Discussions with organisations which have recently entered the rail industry in New South Wales and attained safety accreditation suggest that, whilst representing another hurdle to market entry, the process (and cost) is not prohibitive.

Recent surveys of industry participants have resulted in positive feedback regarding the value of the process. Some survey respondents have since indicated greater reservations than suggested by their initial responses.

Familiarity with or a previous history of involvement in the rail industry greatly assists in the process of attaining accreditation.

However, there appears to be uncertainty within the industry regarding the fees to be charged for a proposed operation. The publication of a pricing schedule has improved this position (see Appendix B).

The Tribunal seeks comments on specific instances where the existing regulatory processes have hindered the entry of new participants to the rail industry. Any information regarding the difficulties encountered would also be of assistance.

4.3.4 Possible overlap with more generic legislation

Some industry participants have argued that there is not a clear demarcation between the *Rail Safety Act 1993* and the Occupational Health and Safety (OH&S) legislation. For example, the safety requirements relating to the drivers' compartment are stipulated in the OH&S Act but the suitability of the locomotive for providing adequate protection to the driver comes under the provisions of the Rail Safety Act. There may also be some overlap with environmental legislation, although to a lesser degree.

The Tribunal seeks comments on possible areas of overlap between the Rail Safety Act 1993 and other legislation and the significance of any overlaps in terms of the costs to industry participants to achieve safety accreditation.

5 WHO SHOULD PAY FOR RAIL SAFETY ACCREDITATION?

Rail safety regulation is a service which is provided to reduce the probability of events such as collisions, derailments and fire. These events can injure passengers, rail staff and the general public, and may involve damage to public or private property. Personal injury and property damage impose costs on society through medical treatment, emergency services and the loss of income or assets. The provision of safety regulation therefore brings benefits to society, the rail industry and private individuals through the overall reduction in the cost of adverse events.

Whilst rail safety regulation brings benefits to many groups in society there are costs associated with the conduct and implementation of a regulatory system. Firstly, there are the costs incurred by the regulator in employing staff and renting office space. Secondly, there are the costs incurred by individual rail operators in developing safety management systems or specifications. These operators need to employ additional staff to ensure the effective implementation of safety procedures.

A regulatory system should result in benefits which exceed the total costs incurred by regulators and rail operators.

5.1 The benefit of safety management systems for the rail operator

A rail operator will benefit from the implementation of a safety management system. Under a system of self regulation, the rail operator will spend on safety management to the point where the benefit equals the cost. The benefit to the operator, will depend on the amount of losses avoided both in direct expenditure and from civil and criminal damage claims. The operator will implement a safety/risk management system to achieve its preferred level of risk.

5.2 The benefit of safety regulation for the rail industry

Individual rail operators will equally derive a benefit from external safety regulation. This is because the regulator may be able to reduce the risk that a rail operator faces from the activities of another rail operator. For example, an unregulated rail operator with deficient safety systems may cause damage to the first rail operator.

Presumably a rail safety operator will benefit from safety regulation to the extent that regulation requires the operator to do the things the operator would have chosen in the absence of regulation.

Although rail operators, as a group benefit from safety regulation, individual operators may be unwilling to pay for the regulation if they think that other operators are willing to pay for the regulation they need (thus, there may be a free-rider problem). Hence, there is a case for compulsory contribution.

The Tribunal seeks comments on assessing the costs and benefits to the rail industry from safety regulation. Are these costs and benefits assessed through any rigorous methodology successfully employed by other jurisdictions in Australia or overseas? How can rail safety charges be distributed equitably amongst rail participants?

5.3 Safety regulation as a public good

Public perceptions of rail safety standards and performance can impact on the business of all rail participants. If the public feels safe when using passenger trains and business considers that their goods are likely to be secure when carried by rail, then there is likely to be a greater usage of rail services.

Even when a system of safety regulation overcomes the free-rider problem and meets the needs of operators, there may be still a higher level of safety regulation desired by the public. It could be argued that this additional safety regulation should be paid for by the government. However, if most of these additional benefits accrue to customers of rail services then they would be willing to pay for these services. The rail industry would build the cost of this additional safety regulation into their prices and develop services targeted to meet the needs of customers.

The costs of the TSB are relatively small in comparison to the substantial revenues generated by the rail industry. Therefore, a certain level of judgement and reasonableness will be required in assessing the proportions that government and industry should pay for the optimal provision of safety regulation.

The Tribunal seeks comments on the costs to society from rail incidents. What are the benefits to society from rail safety regulation? How should the costs of rail safety accreditation be shared between government and industry? What lessons can be learnt from other jurisdictions regarding the appropriate balance between government and industry funding?

6 DISTRIBUTION OF COSTS BETWEEN INDUSTRY PARTICIPANTS

The fees levied on rail participants are used to cover the cost of the TSB's 18 rail related staff members and overhead costs. Ideally, charges should be related directly to the resources expended by government in setting, accrediting and monitoring safety standards.

The *Rail Safety Act 1993* does not require a systematic approach to risk assessment or a rigorous cost allocation method to be adopted. Rather, the Act allows the TSB to employ one of several approaches for the calculation of accreditation charges for any given user. For example, can charges be calculated on one or more of the following bases:

1. the quantity of freight or number of passengers (or both) hauled
2. the length of railway track owned
3. the number of units of rolling stock.

The TSB has advised that the approach adopted for any particular entity is not mandated and is therefore not necessarily consistent across entities.

Some operators have argued that the first option relating to the quantity of freight carried does not take into account the distance travelled by the operator. There are some operators who carry very large quantities of freight only short distances whilst other operators may travel from one end of the State to the other. Under the existing methodology, both operators could be charged exactly the same accreditation fees. Alternatives include the charging of fees based on gross tonne kilometres or net tonne kilometres. However, some participants view these type of charges simply as an additional access charge.

If the accreditation fees for each operator were published then the industry would be able to compare charges. This would encourage a consistent approach and provide rail operators with some scope for appeal or negotiation. However, it is understood that there may be commercial reasons why individual operators would want confidentiality to be maintained.

The current methodology provides a level of discretion in how fees are applied. This structure provides the opportunity to ensure that no one is disadvantaged because of different styles and scope of operations. While this may be a strength of the current system, it also results in a concern that discretionary assessment of fees could potentially be applied in a discriminatory manner.

Most other Australian States are moving to a similar methodology for charging rail operators and all intend to implement a system which recovers the cost of their safety bureaus activities. Western Australia, Northern Territory and Tasmania are yet to decide on a cost recovery method. The emphasis of Victoria's charging system is placed on the number of carriages and locomotives maintained or based within the State of Victoria.

From April 1998, the TSB has revised the allocation of its costs between industry sectors to reflect a subjective assessment of the risk of each category of participant. The following table shows how the TSB has assessed the relative risk (Likelihood) of a particular incident and the ramifications (Exposure) of that incident for the class of participant and the wider community.

Table 2 Relative assessment of Likelihood and Exposure to risk by rail participants

Incident	Passenger	Freight	Track	Heritage (passenger)²
Derailment	1(1)	1(1)	1(1)	1(0.05)
Collision	1(1)	1(1)	1(1)	1(0.05)
Fall on train	1(1)			1(0.0004)
Fall on platform	1(1)			1(0.0004)
Strike	1(1)	1(1)	1(1)	1(0.004)
Fire	1(1)	1(1)	1(0.5)	1(0.1)
Total	6(6)	4(4)	4(3.5)	6(0.248)
Relative Exposure ¹	44%	29%	25%	1.8%
Cost allocation	45 – 50%	30 – 35%	15-20%	5%

Notes:

1. Total Exposure distributed by relative likelihood, expressed as a percentage.
2. Heritage trains relative risk estimated on the basis of 100,000 heritage train passenger journeys versus 250 million general service passenger journeys.

The above table indicates that general passenger services are considered to be subject to any one of the 6 incidents mentioned in the first column and are therefore assigned a one. If one of these events were to occur then the exposure is considered to be substantial and hence the exposure rating of (1) is allocated. Comparing this to track owners, it can be seen that “Fall from train” or “Fall on platform” are incidents which do not concern track owners and hence they have been assigned a zero rating. Similarly, the likelihood of a fire is considered to be on par with that of a passenger service but the exposure or impact is considered to be

only (0.5) since passenger lives are generally not at risk in the same way as for a passenger train fire.

This risk based determination of the basis of fees is quite general and appears to be tempered by consideration of the relative usage of the TSB's resources by the industry sector or individual participant.

The Tribunal seeks comments on the methodology in use to distribute the costs of accreditation between industry groups. Would a more complicated system for the calculation of accreditation fees significantly lower any possible barriers to entry into the rail industry and improve efficiency?

Another risk based allocation of TSB's costs could be based on the insurance premiums paid by industry participants themselves. However, this may create distortions due to commercial decisions such as excess levels or type(s) of cover carried.

An alternative approach is to consider the total economic cost of incidents for one operation as distinct from another, and hence, the total cost which may be avoided through regulation. For example, the cost of serious accident for a passenger train, involving personal injury and fatality, could be much higher than for a freight train. To the extent that conforming to safety standards assists in mitigating such incidents, a case can be mounted for a higher allocation to those parts of the industry carrying a higher incident cost risk; particularly passenger related components of the industry.

The Tribunal seeks comments on the appropriate allocation of current government costs across industry participants.

APPENDIX A: TERMS OF REFERENCE

This review has been referred to the Tribunal by the Premier, under Section 12A(1) of the *Independent Pricing and Regulatory Tribunal Act 1992* (Reference 98/113).

The Tribunal is required to investigate and report on the following by 28 February 1999:

1. An appropriate methodology for the calculation of accreditation costs for the rail industry under the Rail Safety Act 1993.
2. An appropriate distribution of these costs among participants in the rail industry.

In conducting the investigation the Tribunal shall have regard to:

- a) the appropriate level of costs for rail operators required to achieve safety accreditation;
- b) any existing charges paid to the Department of Transport;
- c) other costs incurred by rail operators to achieve accreditation;
- d) standards of quality, reliability and timeliness of safety accreditation services provided;
and
- e) the importance of these costs as a barrier to entry to efficient rail operations.

APPENDIX B: SCHEDULE OF FEES UNDER THE RAIL SAFETY ACT

Application fees

Section 45	
Fee to accompany applications for accreditation as owner/operator Actual fee will be determined having regard to the complexity and scope of the application	\$50 - \$5,000
Fee to accompany application for interim accreditation	\$50 - \$5,000
Fee to accompany applications for certification	\$5
Registration of private siding Section 45	\$55

Annual Accreditation Fees

(fixed on one or more of the following bases)

Rate for quantity of freight carried by railway per annum	\$0.00952 per tonne
Rate for quantity of passengers carried by railway per annum	\$0.00264 per passenger

Rate for each kilometre of track:

Track under 5 km in length (flat fee)	\$108
Track 5 km to 20 km in length (flat fee)	\$267
Track 20 km to 200 km:	
First 20 km (flat fee)	\$267
Each additional 10 km or part thereof	\$108
Track in excess of 200 km:	
First 200 km (flat fee)	\$2,211
Each additional 100 km or part thereof	\$2,046

Rate for each unit of rolling stock where a railway operates in accordance with the definition of operate contained in Section 7(3)(a):

Self propelled over 500 HP, including locomotives	\$214 per unit
Self propelled under 500 HP, but over 100 HP, including locomotives	\$108 per unit
Self propelled under 100 HP, excluding locomotives	\$55 per unit
Hauled vehicles	\$55 per unit
Track inspection vehicles	\$55 per unit

Rate for each unit of rolling stock where a railway operates in accordance with the definition of operate contained in Section 7(3)(b):

\$7,500 (flat fee)

Minimum fees

For payment according to the rates established under Section 49 a minimum fee of \$7,500 will apply.

Minimum fees do not apply to heritage train owner/operators who are not-for-profit volunteer organisations, primarily involved in the restoration, preservation, and operation of vintage trains. These owners/operators shall pay the relevant amount as determined by the prescribed fee in accordance with section 47(2)(b) and/or (c).

Minimum fees do not apply to the owners (by reason of ownership) of balloon loop railways with bulk loading and unloading facilities. A flat fee of \$500 is to be applied to these railways.

Late fees

Where payment of fees is made after the due date then payment should be accompanied by a late fee of five percent of the fee payable.