

**IMPROVING THE REGULATORY  
FRAMEWORK FOR RAIL SAFETY  
IN AUSTRALIA  
ISSUES PAPER**

**May 2004**



**Prepared by  
National Transport Commission in  
association with  
Jaguar Consulting Pty Ltd**

*National Transport Commission*

Improving the Regulatory Framework for Rail Safety in Australia

Report Prepared by: **National Transport Commission in association with Jaguar Consulting Pty Ltd**

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## REPORT OUTLINE

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**Abstract:** Purpose is to promote discussion on the options for improvement of the co-regulatory framework for rail safety regulation in Australia.

**Purpose:** For comment

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**Comments to be addressed to:** Chief Executive  
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## FOREWORD

The National Transport Commission (NTC) is an independent body established under Commonwealth legislation and an Inter-governmental Agreement to progress regulatory and operational reform for road, rail and intermodal transport in order to deliver and sustain uniform or nationally consistent outcomes.

Australia has a regulatory system for rail safety whereby responsibilities for regulatory development, implementation and enforcement are shared between industry groups and Governments (known as a co-regulatory system). Reform of rail safety regulation is one of a set of key rail initiatives that NTC has been directed to undertake.

The release of this Issues Paper signals the commencement of consultation on this work. It is intended to promote discussion on what changes could be made to the co-regulatory framework in order to improve safety and efficiency outcomes. It has been released at a time when Australia's rail industry is changing rapidly as a result of initiatives by Commonwealth, State and Territory governments to reform historic structures, policies and practices.

Rail organisations are also improving customer service, safety, asset quality and commercial performance. While the outcomes from these changes have been significant, further reform is required to enable rail to meet its full potential. This is especially the case if it is to carry a much larger proportion of the nation's rapidly growing non-bulk freight task.

Recently a number of high profile accidents and incidents have caused doubt about whether the regulatory framework for rail safety is adequate and is capable of generating the safety outcomes being sought by industry and the community.

In addition, key changes to industry structure, ownership and operational patterns have occurred. For instance, there is the increasing number of rail freight organisations which operate across State and Territory borders. This exposes differences between State and Territory regulations, interpretations and rules and procedures.

Submissions received in response to this paper will become important inputs to the development of a discussion paper. The discussion paper will consider proposals for changes to the current co-regulatory model. Following the release of the discussion paper, NTC will facilitate a consultative review and refinement process involving all key stakeholders.

The NTC's task is to propose a strengthened model for rail safety regulation to the Australian Transport Council (ATC). It is anticipated that ATC will be asked to vote on this issue in early 2005.

The Commission acknowledges the significant contribution made by Mr Rex Deighton-Smith of Jaguar Consulting and the following NTC officers: Paul Salter, Marc Thompson, Kirsty McIntyre and Phil Giltinan. The NTC also wishes to thank all representatives of track managers, train operators, the Australasian Railway Association and governments who have, and continue to, generously participate in the Rail Safety Reference Group.



Stuart Hicks  
Chairman

Submissions are due on the **19th of July 2004**.

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Submissions by e-mail are preferred, however responses may be mailed to the following address:

Mail Comments to:       Mr Tony Wilson  
                                  Chief Executive  
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## SUMMARY

The aim of the NTC's work in this area is to develop:

- Nationally consistent regulation that takes into account the need for flexibility of application to particular operations and environments;
- A strengthened rail safety regulatory system that, when implemented by jurisdictions and industry, leads to improvement in safety and efficiency outcomes;
- Proposed changes to the co-regulatory system that are widely supported by industry and by Australian Transport Ministers; and
- A system reflecting regulatory best practice.

The NTC is committed to taking a systematic approach to the future development of the co-regulatory structure for rail safety. As part of the process of development and consideration, NTC wishes to consult with representatives of industry and Australian Governments and seek their views and perspectives.

This paper discusses a range of topics, from high level principles through to specific matters related to the operation of the existing co-regulatory framework for rail in Australia at the present time. Questions are posed in order to draw a response from stakeholders on the major issues (problems and possible solutions) which may require attention in order to strengthen the existing framework.

The release of this Issues Paper signals the commencement of the first consultation phase. Comments are sought from all key stakeholders. Key stakeholder groups have been identified in Appendix A.

The following questions are posed in the paper:

What is co-regulation? (Section 2)

How does the present regime operate? (Section 3)

What are the regulatory objectives in rail? (Section 4)

Does the present regulatory regime meet the regulatory objectives? (Section 5)

What needs to be changed in order to better meet regulatory objectives? (Section 6)

In responding to these questions you are asked to consider a number of issues including:-

- Adequacy of principles for co-regulation that were proposed by the Accreditation Authorities Group (May 2001).
- Appropriateness of the ALARP criterion for managing trade-off between safety and efficiency objectives.
- Adequacy of process regulation as presently applied to rail safety in Australia.
- Definition of roles and responsibilities
- Key priorities for harmonisation and the mechanism for driving harmonisation.
- Overlap or inconsistency between rail safety regulation and other regulation (e.g. OHS)

Your views are sought on what needs to be changed in order to better meet regulatory objectives.

The following reports may aid your consideration of issues raised in this paper. These reports are accessible on the NTC website at [www.ntc.gov.au](http://www.ntc.gov.au) :

- *Rail Safety Co-regulation – Roles and Accountabilities of Accreditation Authorities and Accredited Railway Track Managers and Operators*, Accreditation Authorities Group, May 2001
- *Identification and examination of best practice principles for national rail regulation*, Working paper, Jaguar Consulting, January 2004.
- *Rail Safety Accreditation, Mutual Recognition, and Rail Safety Management*, ACIL Tasman, November 2003.
- *Rail safety regulation: a one stop shop?* ACIL Tasman, December 2003

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## 1. INTRODUCTION

The National Transport Commission (NTC) is an independent body established under Commonwealth legislation and an Inter-governmental Agreement and funded jointly by the Commonwealth, States and Territories. The NTC has an on-going responsibility to develop, monitor and maintain uniform or nationally consistent regulatory and operational reforms relating to road, rail and intermodal transport.

The NTC's principal objectives are to improve transport efficiency, safety, environmental performance and regulatory efficiency in a uniform and nationally consistent manner. The principal objectives are achieved through the effective implementation (by others) of transport reforms based on nationally consistent policy and regulation developed by the NTC. The NTC works in cooperation with industry, road and rail agencies and transport departments, and reports to the Australian Transport Council (ATC), a council of transport and road Ministers from all jurisdictions.

The Inter-Governmental Agreement for Regulatory and Operational Reform in Road, Rail and Intermodal Transport (the IGA) details the responsibilities and functions of NTC. As stated in the IGA, one of NTC's tasks is to "...develop proposed reforms in relation to:

- (i) A framework to improve and strengthen the co-regulatory system for rail safety including the application of mutual recognition;
- (ii) A national policy on key rail safety issues and procedures and standards to manage major risk factors;..."<sup>1</sup>

## 2. WHAT IS CO-REGULATION?

In circumstances where it has been determined that regulation is required to achieve a community objective, a key question is whether government will be solely responsible for the regulatory structure or whether it will co-opt industry groups in systems that are co-regulatory or self-regulatory in nature.

### 2.1 Definitions

- A **co-regulatory** system is one in which some of the responsibilities for regulatory development, implementation and/or enforcement are shared between industry groupings and Governments. Governments delegate certain responsibilities to industry by lending legislative backing to codes or other instruments that are primarily industry developed.
- A **self-regulatory** system is one in which there is very limited government intervention. Government does not participate in regulatory development, implementation and enforcement. Government may encourage industry to develop such a system as an alternative to being regulated formally by government.

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<sup>1</sup> Clause 5.1(b)

- **Direct government regulation** describes a situation where a government organisation (typically an authority rather than a government department) has responsibility to develop, implement and enforce regulatory controls. There is little or no industry involvement in development and enforcement. Industry participates in implementation by putting in place systems of compliance.

## 2.2 Choice of Model

The choice between these models depends on the nature of the harm that is being regulated, the nature of the broader market within which it exists and the nature, capacities and behaviour of the industry in question, including its consumers and other relevant stakeholders. Broadly speaking, the following are determinants for the use of each type of regulation:

- Direct government regulation provides a high level of control and standardisation and is likely to be used where potential harms are substantial and there is an imperative to establish and maintain public confidence. Government regulation may also be required where industry capacities to develop or implement regulatory type standards are low or where industry is relatively fragmented or non-cohesive.
- Co-regulation provides for greater industry involvement, while maintaining significant government control. It may be appropriate where very complex regulatory tasks must be completed and there is a substantial need to draw on industry expertise. Co-regulation requires significant cohesive industry capacity and a high degree of acceptance of and commitment to the co-regulatory structure by most or all industry participants.
- Self-regulation may be appropriate where potential harms are relatively modest and/or where there is no history of regulation. In some cases, self-regulation can be a light-handed approach to a regulatory issue, which may come to be seen as transitional toward a more government-based approach. A high level of industry cohesiveness and consent is likely to be necessary to achieve good performance, since there are, by definition, limited possibilities to impose sanctions for non-compliance in a self-regulatory context.

## 2.3 Forms of regulation

Regardless of whether a direct, co-regulatory or self regulatory model of regulation is employed, another dimension of regulatory choice is between different regulatory forms. Traditional regulation is **prescriptive** in nature:

- it focuses on input standards and specifies precisely the actions that must be taken to achieve compliance.

In recent decades, there has been increasing movement toward the use of **performance based** regulation:

- this kind of regulation is output focused, being based on identifying what specifically needs to be achieved if the regulatory objective is to be met.

Performance based regulation provides greater flexibility in compliance and can therefore lower costs. It is also less prone to becoming outmoded over time as circumstances change. On the other hand, it can reduce certainty of compliance and create difficulties in enforcement.

**Process regulation** is also increasingly used, particularly where there are multiple risks to be regulated and responses are inter-dependent. Process regulation:

- focuses on ensuring that appropriate management systems are evolved to deal systematically with risks.

In practice there is a combination of prescriptive, performance based and process regulation within the existing regulatory structure for rail safety in Australia:

- The existing rail accreditation system constitutes a form of process regulation: it places an onus on railway businesses to develop safety management systems that systematically manage risk.
- Rules and procedures devised by track managers and operators (as part of their safety management plans) can be prescriptive (e.g. train must stop at the red signal) or performance based (e.g. train needs to be able to stop within 400m).

The characteristics and operation of the current co-regulatory framework for rail safety is discussed in more detail in section 3.

## 2.4 Dimensions of co-regulatory models

Models of co-regulation can differ substantially, particularly in relation to the following four dimensions:

- The distribution of powers between government and industry bodies.

A key point in this regard is recognition that Government must retain overall authority and responsibility for the regulatory structure, and so must have sufficient powers to ensure that the regulatory arrangements meet public policy objectives and are of high quality.

- The structure of the co-regulatory industry bodies.

Co-regulatory industry bodies (i.e. industry based bodies exercising regulatory-type powers) must include broad representation of all stakeholders. At the narrowest level this means ensuring all interests within the regulated industry are represented.

- The kinds of regulatory instruments to be employed.

A cohesive and consistent structure of different regulatory instruments is required. Government must set out broad objectives, processes and responsibilities in primary legislation, while allowing sufficient flexibility in the development and implementation of codes and other documents to ensure that the potential benefits of a co-regulatory approach are obtained in practice.

- The transparency and accountability mechanisms employed.

Ensuring transparency and accountability are especially important to assuring good regulatory performance and establishing and maintaining public confidence. There is a need to ensure the openness of the processes by which codes and standards are developed, ensuring adequate public and stakeholder access to those documents when in force and providing transparency in investigative and disciplinary proceedings and performance reporting.

A continuum of models of co-regulation exists depending on how responsibilities are shared between industry and Government with respect to these four dimensions.

## 2.5 Proposed principles for the rail co-regulatory framework

In May 2001 the Accreditation Authorities Group comprising the jurisdictional rail regulators developed, in consultation with industry, a set of the following co-regulatory principles:

- There is structural separation between strategic policy setters, the rail safety regulators and the service providers (railway Track Managers and Operators). This is done to:
  - ensure the Accreditation Authority remains separate from and independent of any rail industry participant;
  - remove direct conflicts of interest between strategic policy setters, Accreditation Authorities and Track Managers/Operators;
  - assist parties to achieve a tight focus on performance in their respective functions and improve accountability;
  - to ensure Track Managers/Operators maintain appropriate safety standards and ensure safe services are maintained while improving commercial performance; and
  - to facilitate competition between Operators on a level playing field.
- Rail safety regulation is achieved through a consultative approach and mutual co-operation;
- Accreditation Authorities set the minimum requirements for scope and content of safety management systems;
- Track Managers and Operators, rather than the Accreditation Authority, are accountable for conducting their railway activities safely. They will assess their own safety risks and ensure that the identified risks are controlled by applying appropriate technical and management standards they have proposed to Accreditation Authorities and demonstrated will provide acceptable levels of safety for their type of railway;
- Accreditation Authorities are accountable under their respective legislation for continuously monitoring the safety performance of Track Managers and Operators by applying a compliance audit based approach rather than prescriptive standards or a methods based approach;
- Accreditation Authorities are to operate under guidance of the Inter-government Agreement on Rail Safety (IGA) and consistently apply nationally agreed administration processes;
- Accreditation Authorities are to recognise codes of practice developed by the rail industry for national application and accepted nationally by way of a formal process;
- Accreditation Authorities and Track Managers are not to have duplicate roles in regulating safety of Operators; and
- Track Managers and Operators are to rely on the accreditation process to ensure that each other are applying effective safety management systems.

**Question**

**2.1 Do the principles proposed by the Accreditation Authorities Group (May 2001) form an adequate basis for co-regulation? What other principles might be considered?**

**3. HOW DOES THE PRESENT REGIME OPERATE?****3.1 Overview**

While there are some variations from jurisdiction to jurisdiction, the general nature of the regulatory system for rail safety in Australia is as follows.

**3.1.1 Accreditation Process**

In accordance with the legislative requirements that have been established, all 'railway' businesses are required to be accredited. 'Track managers' and 'operators' are accredited separately. Vertically integrated entities seek accreditation as both a track manager and an operator.

The accreditation process places the onus on the party seeking accreditation to demonstrate to the rail safety regulator that it has (a) identified the risk of injury or damage to property associated with the construction, maintenance and operation of railways it plans to undertake; and (b) taken action to mitigate against these risks.

The regulator grants accreditation if it is satisfied that all relevant risks have been identified and that mitigating actions proposed by the party seeking accreditation are 'appropriate' or 'acceptable'. Companies are not permitted to conduct rail operations on designated railways without first obtaining accreditation.

**3.1.2 Compliance and enforcement**

Legislation in all jurisdictions contain provisions which relate to:

- periodic reporting requirements, whereby operators provide prescribed safety-related information relating to actual performance;
- audit / inspection regimes, whereby the actual operations, infrastructure and/or rollingstock of the accredited person are inspected;
- directions to undertake remedial safety work to remedy defects identified during inspections; and
- general ability to direct that certain safety related works be carried out.

Rail safety regulators use such powers to undertake periodic audits and inspections to monitor the compliance of the accredited party with the terms of accreditation. In cases where there is found to be non-compliance, the regulator has the power to remove accreditation, or alternatively, where legislation makes provision, the regulator can implement other sanctions.

### **3.1.3 Change Management**

Any proposed change to infrastructure, rollingstock, work practices etc which could materially affect safe operation requires:

- (1) a risk assessment;
- (2) the identification of suitable controls;
- (3) consultation with affected stakeholders;
- (4) consideration by the regulator; and
- (5) is approved if determined to be appropriate.

The process is formalised through what is known as a Material Change Application (MCA).

A material change is said to occur when the proposed extension and/or modification of an accredited party's rail activities results in:

- New risks to be controlled;
- Increase in existing risk levels;
- Modification or replacement of existing approved procedures or methods; or
- An impact on another party.

(Accreditation Authorities Group, May 2001)

There has been comment received from industry that the triggers for material change applications vary considerably between jurisdictions. This may point to either a poorly defined process or differing perceptions of risk between jurisdictions.

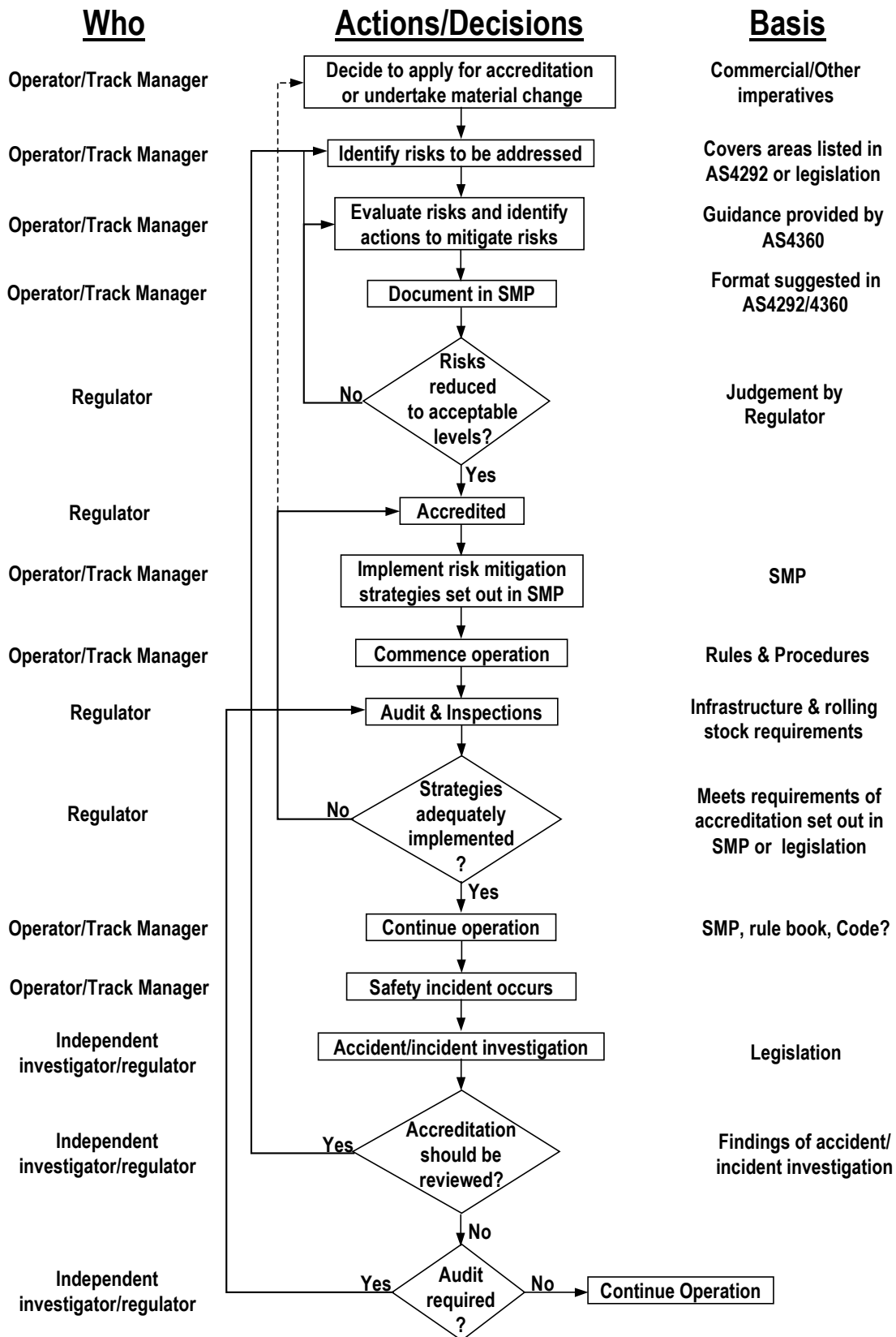
### **3.1.4 Accident / Incident Investigation**

Operators and track managers have an obligation to investigate all accidents / incidents and provide information to rail safety regulators in accordance with provisions in legislation, their own SMP and associated terms and conditions of accreditation. The primary purpose is to share lessons learned and identify whether risk assessments need to be revisited, new or improved risk control measures need to be implemented, or compliance strategies need to be strengthened, etc.

The rail safety regulator can, either on its own initiative, at the request of accredited party, or at the request of a relevant Government Minister investigate any railway related accident that causes or results in a person's death, serious personal injury or major property damage. The regulator may undertake the investigation itself or appoint a third party.

The Commonwealth, through the Australian Transport Safety Bureau (ATSB) has broad powers to investigate rail accidents and serious incidents on the Defined Interstate Rail Network (DIRN).

Figure 1. Overview of how current regulatory systems operate



## **3.2 Instruments**

Legislation, Standards, Safety Management Plans, Rules and Procedures, Codes of Practice and Regulations are the instruments used to establish the current regulatory framework. The use of these instruments is discussed in the following sections.

### **3.2.1 Legislation**

Each State and the Northern Territory has enacted legislation that establishes regulatory powers that are intended to be used to promote the safe construction, operation and maintenance of railways.

In South Australia, Western Australia, Tasmania, Northern Territory and NSW there are specific ‘*Rail Safety*’ Acts. In Queensland, powers are established under the *Transport Infrastructure Act 1994*. In Victoria, powers are established under the *Transport Act 1983*.

There is a high degree of commonality in the approach taken in the Acts. The legislation generally has the character of being no more than a framework for the regulatory structure and typically provides very little detail.

The general approach is that of establishing a process based regulatory regime based on accreditation. Primary legislation in each jurisdiction: (a) establish the powers and functions of the rail safety regulators; (b) defines which parties require accreditation (c) sets a requirement for such parties to develop a Safety Management Plan (SMP); (d) requires party’s seeking accreditation to submit proposed SMP to the identified regulator; and (e) prohibit a party conducting railway operations on designated railways without first obtaining accreditation.

Acts reference Standards as a means of specifying specific requirements with which parties seeking accreditation must comply.

Acts establish extensive regulation-making powers which could be used as another mechanism for specifying requirements. These powers are largely unused (see further discussion under 3.2.6).

### **3.2.2 Standards**

The Australian Rail Safety Standard (AS4292) provides a framework for what constitutes an ‘appropriate’ Safety Management Plan (SMP) by identifying key areas that need to be addressed in developing a Safety Management System (SMS).

A further standard (AS4360) provides guidance on the practice of risk management.

Neither standard provides direction regarding how risks should be mitigated. The party seeking accreditation has to determine how best to mitigate against the risks identified.

Not all State and Territory Legislation explicitly refers to AS4292 as defining the contents of a SMS / SMP, nevertheless all jurisdictions require the party seeking accreditation to have a SMS / SMP that addresses key areas identified in the standard.

### **3.2.3 Safety Management Plans**

The SMP outlines the contents of a SMS. The SMS documents the risk assessment process undertaken and the risk mitigation strategies (e.g rules, procedures, infrastructure, rolling

stock, staff competencies and training, etc) put in place or to be implemented within a specified time period.

The accredited party is required to adhere to its SMP and accordingly it must have a compliance strategy in place as part of its SMP.

The SMP is a regulatory instrument in that the development and implementation of the SMP is a condition of accreditation. While notionally self-generated, the need for the SMP to be consistent with AS4292 clearly closely constrains its content in practice.

### **3.2.4 Rules and Procedures**

Rules and Procedures are developed by the individual railway businesses as sources of operational requirements to be referred to during day to day operations. Thus, they are written in more detailed and prescriptive form than the above instruments. Rules and Procedures, infrastructure requirements, rollingstock requirements etc form the substantive content of the SMS / SMP.

The rules and procedures effectively constitute regulatory instruments (albeit in an indirect form) to the extent that SMPs state that they must be complied with. Beyond this, they can be considered quasi-regulatory in nature, as non-compliance with them would be likely to be construed as, or used as, *prima facie* evidence that non-compliance with an SMP had occurred, even if the SMP did not directly refer to them (Jaguar Consulting, 2004).

### **3.2.5 Codes of Practice**

Codes of Practice contain suggested Rules and Procedures, infrastructure standards, rollingstock standards and maintenance practices that may be adopted by railways for the purpose of managing safety issues and meeting business requirements. As such, Codes of Practice may be used as a basis on which to meet the requirements of both AS4292 and the rail safety regulations in each jurisdiction.

Use of the term: ‘The Code’, is usually meant to refer to the Code of Practice for the Defined Interstate Rail Network (now known as the ‘Australian Code of Practice’). It should be noted that use of overseas Codes or old Codes is permitted by rail safety regulators provided that it can be demonstrated that use of Codes (or aspects thereof) will effectively mitigate against the risks to safety that have been identified.

Development of the Australian Code of Practice commenced in response to the findings of an Australian Transport Council report and was intended to remedy “deficiencies and differences that create impediments to efficient and effective rail operations on the interstate rail network” – it was a mechanism that was intended to enable harmonisation across the interstate network.

The Australian Code of Practice could currently be regarded as a quasi-regulatory instrument. It is a set of rules and standards used to influence business behaviour, but does not form part of explicit Government regulations.

### **3.2.6 Regulations**

Regulation-making powers are in some jurisdictions are extremely extensive. For example, provisions in some Acts allow for adoption of codes or standards ‘as they exist from time to time’, allow regulations to be ‘general or limited application’ and allows different regulatory provisions to be applied to different persons. As well, some Acts (e.g

South Australia) allow for sub-delegation of regulatory power to the Minister – that is, they provide that regulations may allow the Minister, the Administering Authority or another prescribed authority to ‘determine, dispense with, regulate or prohibit’ anything within the ambit of the regulatory power.

Despite the extensive set of regulatory powers, the actual use made of them to date in most jurisdictions is very limited. Regulations do not contain any reference to matters directly relating to the responsibilities of accredited operators and the requirements with which they must comply. The exception is the use of regulations to set requirements for fitness for duty of safety critical employees (e.g. NSW and Victoria).

#### Question

**3.1 Please comment on whether this is an accurate description of (a) how the framework operates; and (b) how the framework is structured at present? If not, what do you believe to operate differently, including any differences between jurisdictions?**

## 4. WHAT ARE THE REGULATORY OBJECTIVES IN RAIL?

Any review of the appropriate structure and content of rail safety regulation must be based on a clear appreciation of the underlying regulatory objectives. At a general level these can be specified as the achievement of high levels of safety in rail operations and contributing to the efficiency of rail operations by ensuring that safety regulation does not impose unnecessary impediments on those operations.

### 4.1 Public trust

Government policy makers argue that regulation of railways is required to establish ‘public trust’ - Trust that railways are both safe and have on-going financial viability.

The need for public trust focuses government on using its influence to achieve outcomes that are largely consistent with those outcomes desired by industry<sup>2</sup>, mainly safe on-going service delivery at lowest possible cost.

This is most true with respect to the provision of public transport services. In contrast, it could be argued that with respect to freight services the public interest is limited to that of ensuring safety only – the viability of the business is the concern of the operator and not of the Government. However, there is not a universal view on this matter. It can be observed that the NSW and Queensland Governments financially support the provision of freight services through track subsidies and CSO payments. Presumably the NSW and Queensland Governments would argue that there is public interest in ensuring the viability of certain freight services within those States.

### 4.2 Safety Objective

The safety objective must encompass the safety of rail users, as well as the general public. The safety of railway employees is also relevant, but this dimension of safety is

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<sup>2</sup> Industry also seeks safe, on-going service delivery at lowest cost but also seeks to maximise profit it obtains as a result of providing the services.

substantially regulated through specific occupational health and safety (OHS) regulation. While the ambit of OHS regulation is broad, it is also apparent that elements of rail safety regulation per se necessarily affect outcomes in relation to OHS.

### 4.3 Efficiency Objective

In its 1993 report to SCOT the then Inter-Governmental working group on rail safety made the following statement:

*'While there is an ideal level of safety, the practical costs of obtaining this ideal might far outweigh the benefits, and limit the viability of rail operations'*

The working group identified the aim of rail safety regulation as:

*'to ensure that railways take appropriate action to limit to acceptable levels, the risk of injury to persons or damage to property.'*

Implicit in this statement is that the primary objective of rail safety regulation is safety, but not safety at any cost. There is a need to balance safety and efficiency by limiting risk to 'acceptable' levels. Differing views exist as to what is an acceptable level of safety and how safety decisions are most appropriately managed in the context of a business with limited resources.

### 4.4 Other considerations

There are other considerations relevant to the design of the regulatory framework, some of which can be expressed as objectives:

- *To establish a rail safety management system that is not able to be used as a barrier to entry.*

The introduction to the Rail Safety Inter-Governmental Agreement (IGA) clearly highlights the perceived importance of this issue at that time (1996). In the IGA it is stated that '...[jurisdictions] have agreed to establish a cost effective nationally consistent approach to rail safety which ensures there is no barrier to the entry of third party operators'.

- *To establish a framework that delivers regulatory oversight at lowest possible cost.*

Track managers and operators are only now becoming profitable following privatisation and substantial reform of business activities. There would appear to be limited capacity to absorb the cost of additional regulatory oversight. If such imposts are significant, then this could impact on viability, perhaps resulting in the transfer of freight and passengers from rail to road (a mode of transport that is considered to be less safe).

- *To establish a framework that provides for consistency of regulatory practice, rules and procedures etc between jurisdictions.*

Consistency provides a means of avoid unnecessary duplication of administrative effort; and/or avoid the need to alter operational arrangements, labour input or hardware required (when crossing borders) due to differences rules and procedures that can not be justified due to the circumstances (and associated safety risks).

**Question**

**4.1 Please comment on what you think the key regulatory objectives for rail safety should be? Why?**

## **5. DOES THE PRESENT REGULATORY REGIME MEET THE REGULATORY OBJECTIVES?**

This section considers elements of the regulatory framework and provides a brief commentary before posing general questions for consideration. The focus of the questions is on drawing out matters of concern. Section 6 takes the next step of seeking comments or proposals for improvement to the system.

### **5.1 Accreditation**

The accreditation system for rail safety is essentially a form of process regulation. The OECD argues that process regulations:

“...are based on the idea that, given the right incentives, producers are likely to prove more effective in identifying hazards and developing lowest-cost solutions than is a central regulatory authority”.

This is because the challenge of drafting prescriptive regulation that deals effectively with multiple risk sources and does so in a manner that avoids overlap and inconsistency is a substantial one that carries a high risk of failure. As well, there is no guarantee that businesses will respond to a complex, prescriptive rule-set by implementing systematic, objective based approaches.

Thus, process regulation allows regulators to require such a systemic approach to be developed and audited for quality. This offers the possibility of both improved regulatory effectiveness and greater efficiency – that is, lower cost means of achieving objectives resulting from the necessarily individually tailored approaches.

#### **5.1.1 Use of process regulation**

According to the OECD, process regulation is becoming more widely used in a range of member countries. It is used notably in relation to food safety regulation (e.g. United States, Canada, Australia), environmental regulation (e.g. Netherlands, Mexico) and Occupational Health and Safety (e.g. Netherlands). Clearly, all of these areas of regulation share the characteristic of having multiple, interacting and complex sources of risks (Jaguar Consulting, 2004).

The indicators for use of process regulation are:

- where a systematic, or managerial approach is needed for effectiveness (often because risk sources are multiple and/or inter-dependent);
- where there is a potentially high regulatory burden associated with a prescriptive approach;
- where industry capacities and compliance incentives are high; and

- where pressures for good regulatory performance are likely to be imposed through effective public, press and/or consumer actions.

Gunningham & Johnstone (1999) in discussing the application of process regulation make the following comment in light of empirical evidence:

“At their worst, [systems based approaches] can be behaviourist, coercive, exacerbate power differentials between workers and management, and suffer from implementation failure. Yet, at their best, they hold out the promise of continuous improvement in OHS performance, cultural change, and of ensuring a greater coincidence between public and private objectives”. p337

“We have advocated limited experimentation with a two track system of regulation, arguing for the provision of incentives for participation in a systems based approach, but not for mandating it...In doing so, we emphasise that we do not advocate any removal or weakening of existing regulatory models. On the contrary, we are conscious that some may seek to abuse the privilege of greater self regulation implicit in a systems based approach, and it is for this reason that we have stressed that those that abuse regulatory flexibility should be subject to not only existing controls, but also to rapid escalation up the enforcement pyramid.” p338

### **5.1.2 ‘One size fits all’ process**

As with performance based regulation, process regulation can place substantial demands on small businesses, due to their lack of the resources required to develop individualised compliance options. However, this potential drawback can be ameliorated to some extent. Process based regulation can be implemented via the use of ‘template’ risk management systems that are customised to some degree by individual users. This approach retains much of the benefits of a systematised approach, while reducing the demands on individual businesses in terms of compliance effort.

In theory the use of a risk management approach as prescribed in AS4292 and AS4360 (supplemented by use of Codes) should provide a scaling mechanism for developing a safety management plan that is appropriate to the size and complexity of an operator’s activity while adequately controlling operational risks. Nevertheless, there is question as to whether ‘off the shelf’ SMS could be developed for use by heritage railways and the like that may have insufficient resources to develop appropriate SMS. Two significant questions are: (a) who would develop such ‘off the shelf’ SMS? and (b) how could regulators be certain that such SMS would be appropriately applied to the particular circumstances of the railway in question?

### **5.1.3 Compliance**

The effectiveness of process regulation, as well as its perceived legitimacy in the eyes of the public, is highly dependent on the auditing and monitoring processes that are implemented as part of the requirement. Regular reviews of the risk management processes that are developed must be required if they are to be kept up to date and implemented rigorously. Auditing must be sufficiently frequent to provide strong compliance incentives and underpin public confidence. Auditing must be sufficiently thorough if it is going to be able to reliably pinpoint areas in which plans no longer adequately address the business circumstances as well as weaknesses in implementation. Auditing must also be independent, with results reported to, and monitored by, regulators if public confidence is to be established and maintained.

At the same time, auditing, monitoring and reporting requirements are potentially highly resource-intensive and, if over-specified, can undermine the regulatory efficiency advantages which were sought through implementing process regulation in the first instance. Thus, a critical analysis of the nature and extent of monitoring and reporting is essential as part of an analysis of the appropriateness of process regulation to particular circumstances.

#### **5.1.4 Enforcement**

Whilst co-regulation encourages responsible behaviour and co-operation, the ability to identify and to stop or correct unsafe practice is essential to establish public trust in the safety of the system. Rail safety regulators generally (depending on legislation in each jurisdiction) have the power to suspend or remove accreditation, suspend operation on part of a system and/or require the railway to fix / improve its system.

Some regulators have indicated to NTC that, in certain circumstances, regulators have an insufficient range of enforcement powers. For example, in circumstances where removal or suspension of accreditation would cause considerable disruption to passenger services. A regulator would be reluctant to pursue this course of action in all but the most serious circumstances. The operator knows this and therefore does not consider the 'threat' of suspension of accreditation or operation on part of the network as being credible. This would be particularly the case where there is disagreement about a matter that has not been publicly identified as an area of concern (e.g by virtue of an accident). A wider range of powers, possibly including financial penalties and/or power to direct changes of staff or processes may provide a more flexible and appropriate set of tools for regulators.

#### **5.1.5 Focus on performance**

At present, process regulation is utilised for rail safety in Australia without reference to an established set of performance targets. A safety regulator will accredit a track manager / operator if satisfied that risks have been reduced to 'acceptable levels'. There is little or no direction provided in legislation to give track managers / operators a target level of risk mitigation (i.e. what risk levels trigger the need for a control) or to aid regulators in determining whether a residual level of risk is 'acceptable' or not.

Differing views exist as to what is an acceptable level of safety and how safety decisions are most appropriately managed in the context of a business with limited resources, albeit that there is agreement that safety can not be pursued at any cost. A criterion known As Low As Reasonably Practicable (ALARP) is generally utilised by regulators.

The ALARP principle suggests that some risk is tolerable if risk reduction is impracticable or if its cost is greatly disproportionate to the improvement gained. If a party seeking accreditation proposes to accept risk, it remains the responsibility of that party to demonstrate that risk reduction is impracticable. However, given the scarcity of data within the existing system, the ability to demonstrate that the proposal is cost and risk effective is debateable and exposed to a high degree of subjective assessment by both regulators and operators.

#### **Question**

**5.1 Please comment on the adequacy of process regulation (accreditation and audit) as it presently applied to regulation of rail safety in Australia.**

- 5.2 Are rail safety regulators suitably resourced (in order to undertake audits) and skilled (in order to assess appropriateness / acceptability of SMS and practices)?**
- 5.3 What are your views on the ALARP criterion as an appropriate means to manage the various conflicting safety and commercial objectives?**

## **5.2 Roles and Responsibilities**

### **5.2.1 Separation of Powers**

In order to provide a robust basis on which to progress any matter of importance to government or the community in general, policy development should to the greatest extent possible be independent of the role of implementation. In the Australian context, the history of rail until recent times has been one of largely Government owned entities, which often combined the roles of policy maker, regulator and service deliverer.

The more recent changes, which have seen the emergence of privatised or corporatised entities, have to some extent separated these roles, at least that of service delivery. A number of State and Territory Governments have moved further to separate the roles of policy development and regulation. However, almost exclusively, these separated roles still remain under the same portfolio or within the same agency.

One of the risks of these arrangements is that the regulator, who may have a limited view of the issues of the portfolio, may dominate policy development. Safety policy, which is at the heart of the rail regulation discussion, provides fertile ground for a variety of views. Principal among these is the need to consider the extent to which safety itself will be pursued when considered against commercial and other community expectations.

From the alternative viewpoint, it is important that the regulator has independence and is allowed to fully implement safety policy that has been set by Governments.

The future nature of any regulatory framework should include careful consideration of the degree to which the role of policy development should be quarantined from that of regulatory implementation and oversight and vice versa.

### **5.2.2 Ownership of instruments**

In general, co-regulation presents the opportunity for a more co-operative approach to regulation. There may be enhanced regulatory credibility, arising from the involvement of a respected industry association as an active participant in the regulatory scheme and, by extension, endorsing its validity. This, in turn, can improve compliance levels. Involving industry and other interested parties in the regulatory process allows a ‘leveraging’ of resources provided at little or no cost, by making these parties participants in regulatory monitoring and, in some cases, enforcement activity. From a broader perspective, as the OECD notes:

- “...it also encourages participants to see good industry-wide performance as a common good, through its impact on public perceptions.”<sup>3</sup>

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<sup>3</sup> OECD (2002), op cit, p137.

In arriving at the most appropriate form of co-regulation, consideration must be given to the nature of the risks being regulated, the nature and capacities of the industry being regulated and of the individual parties within it. A key dimension, which characterises one co-regulatory framework from another, is the distribution of powers between Government(s) and industry groups. Table 1 indicates the split of responsibilities that currently exists.

**Table 1. Current co-regulatory model: Distribution of powers**

	Industry	States & Territories	Cwth	Comments
<b>Legislation</b> 'Rail Safety Acts'				SA, WA, TAS, NT legislation is almost identical – refers explicitly to AS 4292. Qld, NSW and Vic legislation is unique – Does not refer to AS 4292 but establishes system of accreditation that is practically the same as in other states.
<b>Regulations</b>				Regulation-making powers are extensive, but use of these regulatory powers for specifying requirements to be met by accredited parties is limited.
<b>Standards</b>				AS4292 established by Standards Australia Committee ME/79 in 1995. Is in the process of being updated. AS4360 used to guide risk management and is used extensively.
<b>Codes</b> Known as 'Code of practice for the Defined Interstate Rail Network'				Developed by Industry with assistance of Commonwealth Australian Rail Operations Unit (AROU). Full responsibility transferred from AROU to newly established Code Management Company (CMC). 'Australian Code of Practice' (as it is currently named) has no explicit role in current model.
<b>Safety Management Plan</b>				Generated by party seeking accreditation – could be operator, track manager or both. Scope is specified by AS 4292 and/or legislation. Content influenced by regulator as regulator needs to be satisfied that all risk areas have been identified and appropriately addressed using a robust risk assessment process.
<b>Rules</b>				Generated by party seeking accreditation. Code provides guidance. Regulator accepts or rejects.
<b>Accreditation</b>				Administered by regulator established under State and Territory legislation.
<b>Audit</b>				Regulator responsible for undertaking audit of compliance monitoring that is undertaken by operator and/or track manager.
<b>Investigation</b>				Accredited party has responsibility to report and investigate all accidents or incidents as part of SMS. State and Cwth selectively investigate serious accidents in order to determine its circumstances and make any necessary safety recommendations.

The principle question is: Is the split of responsibilities between Government and industry for the development and maintenance of regulatory and quasi-regulatory instruments appropriate?

It is noteworthy, that:

- In the current co-regulatory system Standards Australia effectively exercises quasi-regulatory powers by virtue of compliance with AS4292 being made either compulsory or quasi-compulsory under the legislation of the different jurisdictions. The Standards Australia committee (ME/79) that produced AS4292 consisted of representatives of railway businesses, rail safety regulators, government policy makers, unions, training authorities and the Australian Chamber of Commerce and Industry. It could be argued that this body is sufficiently broad to represent stakeholder views and interests. On the other hand, the ME/79 committee operates on the basis of consensus, meaning that there is potential for any proposed changes to the standard to be blocked by one party on the committee. This hints at a broader issue of whether the processes by which quasi-regulatory instruments are developed are sufficiently robust. While regulations *per se* are subjected to public scrutiny on the basis of published benefit/cost assessments in most jurisdictions, equivalent disciplines are not applied directly to technical standards.
- There is no explicit role in the current regulatory framework for the Australian Code of Practice developed and maintained by industry (more precisely the Code Management Company). The Code has essentially been developed as a guidance document, which is quasi-regulatory in nature and exists simply as a means of assisting the achievement of greater harmonisation between rules and procedures manuals and aspects of safety management plans. There is question about whether the Code requires some form of legislative backing or formal endorsement by government in order to achieve greater harmonisation as per its original intent. Countering against providing legislative backing for the Australian Code of Practice is the desirability for flexibility. A motivation for adoption of process regulations is that it supports innovation and choice by the railway in what codes, rules and procedures, etc it decides best suit its proposed operational needs.
- It is proposed to adopt nationally consistent medical standards for safety critical railway employees as statutory codes of practice. Other aspects of fitness for duty such as policies with respect to drugs and alcohol and fatigue management could also be adopted as statutory codes of practice. There are alternative means of managing fitness for duty issues, for example, agreed standards could be incorporated into the Australian Code of Practice. This latter possibility is somewhat contingent on what status (if any) the Australian Code of Practice is afforded in the future.

### **5.2.3 Split of roles and accountabilities between Government and Industry**

The adoption of a process-based system of regulation that focuses on the accreditation of track managers and operators generally suggests a limited role for regulators in terms of the formulation of specific safety management requirements (e.g. rules and procedures).

A guidance document published by the Accreditation Authorities Group in May 2001<sup>4</sup> suggests that ‘the rail safety regulator’s role is to review the safety management system to

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<sup>4</sup> P18, *Rail Safety Co-regulation: Roles and accountabilities of accreditation authorities and accredited railway track managers and operators, May 2001*

ensure it includes appropriate processes in accordance with AS4292 and that these are being followed' ie. 'endorse process, not contents' (p18, Accreditation Authorities Group, May 2001).

However, the level of intervention applied in practice appears subject to considerable discretion on the part of rail safety regulators in each jurisdiction. Some rail safety regulators appear to have quite a different philosophy to that which was endorsed in May 2001 – in order to attest to the safety or otherwise of a SMP, there is a belief that the content of SMP's needs to be reviewed and assessed.

In Victoria, the regulator is planning to go a step further by generating some of the content of track manager and operator SMPs in that jurisdiction (ie. the development of a common rulebook). It should be noted that the track managers in question and operators affected have apparently not objected to the regulator undertaking this role. Thus, in at least this case, the differences between the 'formal' and 'actual' role undertaken by the regulator appear to have developed by consent on the part of stakeholders.

It might be appropriate to view the Victorian regulators intervention as an example of 'leadership' to overcome a Victoria wide problem that industry alone has not been capable of dealing with. However, such action does raise questions of (a) whether the regulator has the necessary skills and knowledge to generate such a document and whether it will in fact assume at least partial liability for incidents which may occur as a result of rules and procedures being inadequate, etc; (b) whether Victorian leadership will aid regulatory harmonisation (at an operational level) or will it impede it; and (c) whom will have responsibility for on-going maintenance of such a rule book.

### **Is the current system co-regulatory?**

Under the current accreditation model, ultimate authority is vested in the safety regulator though its power to grant, suspend or remove accreditation. No railway activities are permitted to occur unless accreditation has been granted. No 'material' changes to work practices, infrastructure or rollingstock are permitted to occur unless changes to the accredited party's safety management plan have been approved.

Given these factors, it has been argued by some that the current regulatory system for rail safety is not 'co-regulatory' because there is no true devolution of regulatory responsibility to industry regarding setting the rules and enforcement of the rules – at present, industry merely proposes rules, while regulators have the power to accept or reject.

The alternative view is that these factors are common to all co-regulatory systems and that a system which does not include the right for a regulator to reject proposed rules and procedures is more accurately characterised as self-regulatory than co-regulatory. Indeed, the current system arguably involves a greater level of devolution of regulatory powers to stakeholders than most other co-regulatory arrangements. In particular:

- Acts are largely procedurally based, with the range of matters that must be addressed in an SMP being in most cases established via AS4292 – a document authored by a body external to government and referenced in most Acts – rather than included in the Acts themselves;
- AS4292 is itself very general in its formulation, thus granting substantial autonomy to operators in the design of their own SMPs;

- The industry-developed Codes of Practice are in many areas performance oriented. This, plus the non-binding nature of the Codes, means that individual operators retain substantial autonomy in developing Rules and Procedures.

More generally, it is clear that the key question is not whether the system is co-regulatory, or what form of co-regulation is employed, but whether the system is structured in the best possible way to achieve the underlying regulatory objectives.

As per section 2.5, a key principle of co-regulation is that ‘track managers and operators, rather than the Accreditation Authority, are accountable for conducting their railway activities safely. They will assess their own safety risks and ensure that the identified risks are controlled by applying appropriate technical and management standards they have proposed to Accreditation Authorities and demonstrated will provide acceptable levels of safety for their type of railway’ (Accreditation Authorities Group, May 2001).

In consultation with NTC, members of the industry have asserted that rail safety regulators frequently depart from the ‘light handed’ approach that, arguably, underlies a process-based regulatory system. For example, it is argued that regulators exert a high degree of influence over the content of safety management plans, and, in some cases mandate the use of certain rules and procedures instead of those proposed by industry. Parties seeking to gain or maintain accreditation see these actions resulting in a transfer of responsibility and accountability from the operator / track manager to the regulator.

#### **5.2.4 Split of roles and responsibilities between track manager and operator**

There is little or no direction in legislation, regulations or standards as to the different roles and responsibilities of the track manager relative to that of the operator, or as to how track managers and rail operators should consult each other about establishment of interface management agreements (required by rail safety regulator wherever safety interfaces exist). In circumstances where there is vertical integration this issue is not relevant<sup>5</sup>. In circumstances where there is vertical separation, the apparent lack of direction causes some ambiguity.

There has been an attempt to address this ambiguity as well as the ambiguity regarding the division of responsibilities between the regulator and accredited parties. The Accreditation Authorities Group suggested that Figure 2 provides the basis of discussion on how the co-regulation model should work and the respective roles and accountabilities of rail safety regulators, Track Managers and Operators.<sup>6</sup> (p4, , May 2001).

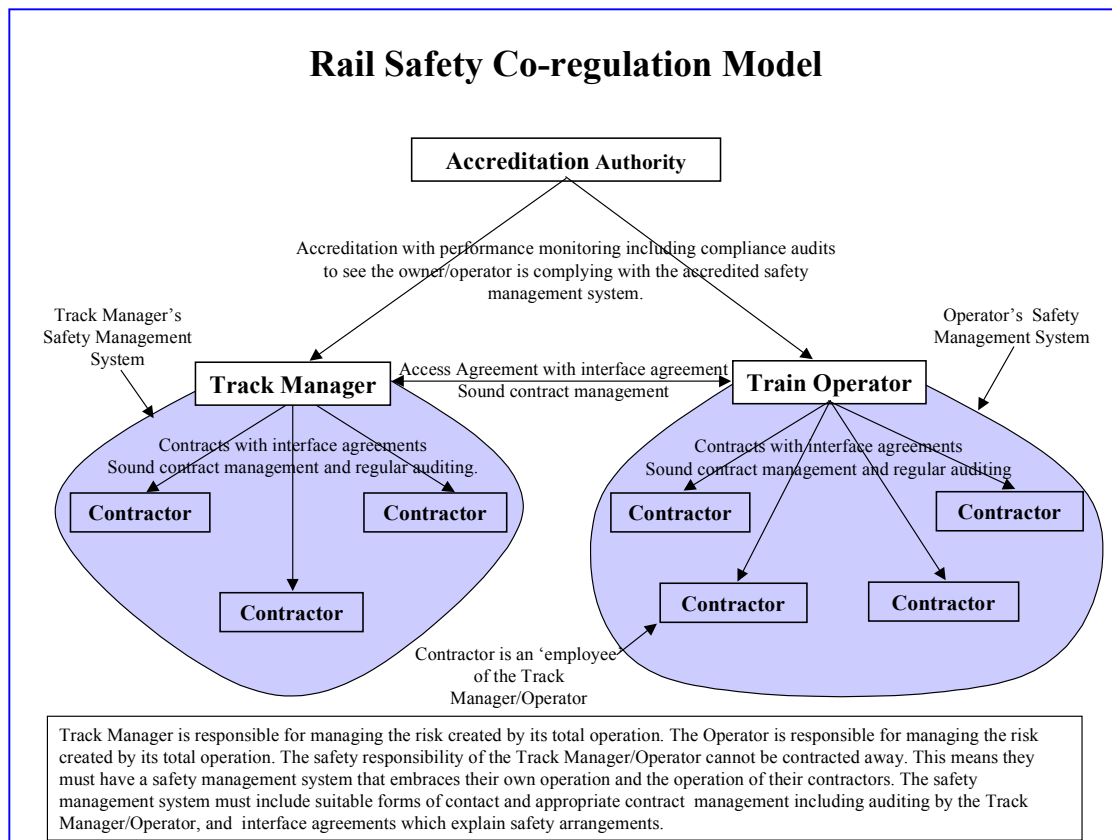
The Accreditation Authorities Group asserted that the strategic role of the rail safety regulator is to oversee and enforce a co-regulatory rail safety regime to enable and promote safe railway operations. The operator is to present a safe train operation, while the track manager is to present a safe and reliable rail infrastructure and rail traffic management system.

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<sup>5</sup> It may become relevant if a third party seeks access to the track of the vertically integrated railway in order to compete or simply to provide services that the vertically integrated railway is not interested in providing.

<sup>6</sup> In this model of co-regulation the term “employee” refers to a person who performs railway safety work for an Owner or Operator and includes an employee or contractor and a person who performs railway safety work on a voluntary or unpaid basis.

**Figure 2. Roles and Responsibilities of Rail Safety Regulator, Track Manager and Operator**



(source: Accreditation Authorities Group, May 2001)

It is noteworthy that the split of responsibilities proposed by the Accreditation Authorities group (May 2001), suggests that only the track manager and operator need be accredited and that safety responsibility of either party cannot be contracted away. The rationale underlying the thinking of the Accreditation Authorities Group was that risk accountability should not be able to be contracted out or shifted to the rail safety regulator by attempting to require the service provider to be accredited. In practice, the treatment of infrastructure maintainers and rollingstock providers / maintainers is different between jurisdictions.

### Problems persist

Operators assert that ambiguities persist (regarding roles and responsibilities) and that the process of developing SMPs that are integrated (between track manager and operator) is not well defined. Reviews in the past have found that confusion over the role of Track Manager, in particular, arises from:

- additional requirements being imposed by Track Managers above that of the rail safety regulator;
- uncertainty about what constitutes appropriate content of access agreements and interface co-ordination plans;
- concern that network Track Manager requirements may conflict with regulator requirements;

- Track Managers conducting audits that duplicate those that are the responsibility of the regulator; and
- the responsibilities of Track Managers in relation to safety not being defined and overlaps with regulators not being clarified.

The documentation publicised by the Accreditation Authorities Group (May 2001), attempts to address all such issues. It would appear, however, that in practice, implementation of principles identified has not occurred. ACIL Tasman recently questioned rail safety regulators in the mainland states about whether they adhered to the principles, processes and roles and responsibilities recommended in the Accreditation Authorities Group (AAG) publication. The findings are indicated in Table 2.

**Table 2. Adherence to principles, process and roles and responsibilities recommended by AAG, May 2001**

New South Wales	Not used, but some processes similar
Queensland	Not used, but some processes similar
South Australia	Usually used*
Victoria	Not used, but some processes similar
Western Australia	Always used

\* Used except that subcontractors are separately assessed rather than covered by the principal's accreditation.

(source: ACIL Tasman, November 2003)

A reason for lack of implementation may be the absence of mechanisms and instruments by which this can be achieved. The document published by the Accreditation Authorities Group (known in some industry circles as the 'greenbook') has no regulatory status – at best it could be considered to be a guideline. In addition, track managers may have incentives to disregard suggested limits of their roles and responsibilities in order to impose high standards on access seekers. A track manager would have such an incentive if it were able to reap the benefits of such higher standards without bearing significant costs as a result.

### **5.2.5 Accident investigation**

One of the points highlighted by Table 1 is the overlap of responsibility for accident investigation. A degree of overlap is likely. The key issues for consideration are whether each body has appropriate responsibilities, whether these are co-ordinated as well as possible with each other, and whether bodies have sufficient independence, resources and powers in practice to ensure an objective view is brought to bear on all significant accident issues in the public interest.

NTC is advised that Memoranda of Understanding (MoU) exist between ATSB and jurisdictions to define the roles, responsibilities and processes to be followed when there is a serious accident on the DIRN. For serious accidents not on the DIRN, the ATSB can investigate when commissioned to do so by States and the Northern Territory under their legislation. For example, the Victorian government appointed ATSB to investigate the Broadmeadows runaway train incident that occurred on 3 February 2003.

In practice, it is the State or Territory regulator that is made responsible for triggering the independent investigation of ‘serious’ accidents. Depending on the legislation or who the appointed investigator may be, this may give rise to a potential conflict of interest where:

- elements of an approved safety management plan have proven inadequate and are found to have led to the failure of the system – yet investigation of the failure is to be undertaken by the agency that approved the system and in effect attested to its adequacy.

Recent reviews of rail safety in some other countries (e.g. the Cullen Report in the United Kingdom) have emphasised the need for an appropriately resourced independent accident investigatory body, with adequate powers, to have the primary role in relation to accident investigation. Independence from both regulators and industry is seen as necessary in order to ensure that investigations and subsequent recommendations for improvement are not compromised by conflicts of interest. The current arrangements are arguably inconsistent with these emerging best practices.

#### Question

**5.4 Please provide your views on whether the roles and responsibilities in the current co-regulatory framework are appropriate, clear and well understood? Include comment on areas where you believe improved role definition, independence or accountability is required.**

### 5.3 Harmonisation

Assuring that rail safety regulation is sufficiently harmonised to prevent such regulation forming a barrier to the effective and efficient functioning of rail as a mode has been a fundamental concern of reform in this area and, in particular, has provided the impetus for the DIRN Code of Practice.

#### 5.3.1 Harmonisation of Regulatory Practice

The ARA view is that the current safety and accreditation system is sub-optimal. Currently:

- different States and Territories have different safety legislation;
- different States and Territories have different philosophies, ranging from less prescriptive to more prescriptive; and
- different States and Territories interpret regulations in unique ways.

Key areas for concern include a lack of regulatory consistency regarding the assessment of applications for variation to accreditation and assessment of the adequacy of the management of risk by track managers and operators.

#### 5.3.2 Harmonisation of Rules and Procedures

Within the rail industry, track managers employ safety management systems that include operating rules and procedures that may or may not be compatible with those of adjoining track managers. Track managers may also require additional safety requirements as a

condition for access that may or may not be consistent with other rail networks. In many cases these inconsistencies are the inevitable result of different track infrastructures.

### **5.3.3 How significant are the problems?**

Harmonisation efforts are costly, both directly and indirectly, and so harmonisation efforts should be targeted and limited to areas in which there are sufficient benefits to justify these costs and not driven by a philosophy of harmonisation for its' own sake..

Relatively little research has been carried out to determine the key areas in which achieving uniformity would yield important gains in safety and efficiency. There is significant debate about the degree of harmonisation that is required between isolated networks or even across networks.

Inconsistent approaches by regulators and track managers potentially impose costs and inefficiencies on operators, for example, extra training so staff can work under more than one regime, rigidity's in staff deployment, and management time absorbed in learning about and complying with differing requirements. It can also be argued that, to a certain extent, differences in safety requirements and operating rules and procedures creates a rail network that would be inherently less safe than one with a greater degree of consistency.

### **5.3.4 Mechanism for achieving operational harmonisation**

Development of the DIRN Code of Practice commenced in response to the findings of an Australian Transport Council report and was intended to remedy “deficiencies and differences that create impediments to efficient and effective rail operations on the interstate rail network (Maunsell 1998)” – it was a mechanism that was intended to enable harmonisation across the interstate network.

When the market is left to itself, it is financial gain that provides the primary driver to harmonisation. Benefits and costs of harmonisation may fall unevenly across industry players: in aggregate it may be optimal to increase standardisation; but for individual parties the costs may exceed the benefits. In such circumstances, it could be argued that there is a market failure.

As the DIRN Code is voluntarily adopted by track managers and operators, there is no means to resolve market failures (if indeed they exist). The question of whether there is a greater regulatory role for Government in these areas must therefore arise.

Some views expressed<sup>7</sup> have indicated concern at the costs of pushing forward with uniformity via a regulatory framework. However, it is arguable that these costs are essentially associated with the degree of uniformity being sought (and the timeline), rather than being determined by whether the mechanism is one of government regulation or more intensive industry-based co-operation. The question is whether a larger government role is likely to be more effective and/or efficient as a means of achieving harmonisation.

### **5.3.5 Mechanisms for harmonising regulatory practice**

At question is the degree and nature of inter-governmental co-operation needed. That is, what mechanisms should be employed to enhance harmonisation within a federalist context.

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<sup>7</sup> NTC Rail Safety Workshop, Melbourne, 16 December 2003

Does harmonisation require alignment of legislation between jurisdictions or can it be achieved despite legislative inconsistency? If legislative alignment is required can it be achieved and maintained through jurisdiction co-operation or would it require Commonwealth legislation? Beyond legislation what is required to harmonise regulatory practice (interpretation, etc).

Options include use of ‘mirror’ legislation to achieve effective uniformity, improved mechanisms for co-operation between jurisdictions (Regulators panel), reduced transaction costs through reduced interfaces (‘one stop shop’), regulatory guidelines, and/or the creation of a single national rail safety regulator. The appropriateness of such options is to a considerable degree linked with the questions of ‘how much uniformity’ is required in the interests of efficiency and effectiveness.

### Questions

**5.5 Is harmonisation desirable? At what level (regulatory practice and/or rules and procedures)? What are the key priorities for harmonisation?**

**5.6 What should be the preferred mechanisms for driving harmonisation activities?**

## 5.4 Overlap with other forms of regulation

A further complication in the total regulatory framework is the potential for overlap between rail safety and other regulatory authorities. The Commission is aware of a number of formal protocols in existence, which provide for the management of regulatory portfolio interfaces, where there is the potential for differing directives from regulatory bodies responding to the same issue. Notwithstanding such agreements, anecdotal evidence suggests that, particularly in the event of serious incidents, significant regulatory overlap occurs, resulting in confusion of roles and responsibilities.

### 5.4.1 OH&S Regulation

In rail, there exists the potential for overlap between rail safety authorities and OH&S authorities. Anecdotal evidence suggests that this is a real issue, particularly where incident investigation is concerned. For example, Commonwealth, State and Territory OH&S authorities may all become involved in the investigation of an accident due to ownership of the operator or track manager concerned. The overlap between OH&S and industry specific regulation, whilst not unique to the railway industry, creates a potential for differing drivers in setting safety objectives and accountability for managing incidents. Further, it can lead to a lack of clarity on responsibility for managing the response to incidents and any the implementation of recommendations for regulatory changes that result.

### 5.4.2 Economic Regulation

Anecdotal evidence suggests that it is a quite widespread practice for track managers to implement quasi-regulatory safety-related requirements as a condition of access. Given the structure of state based rail access regimes, there are circumstances where a track manager could be part of a vertically integrated railway that is required to negotiate access with an operator that intends to compete with the vertically integrated business. In such circumstances, the track manager may have incentives to use safety requirements as a

barrier to entry. To the extent that such a dynamic exists, there would potentially be an argument for (economic and safety) regulators to attempt to act to prevent such matters being used as access conditions – particularly if there was a potential for anti-competitive impacts to result from them.

### **5.4.3 Other regulatory impacts**

Whilst of a potentially lower order of complication, the interface with other regulatory regimes may affect both the safety and efficiency of rail operations.

For example, the requirements of environmental regulation, where applied to such matters as site contamination, waste management requirements and/or emission standards, may directly impact on employee health or safety. Another example relates to the recent emergence of terrorism as a threat to trade – it has resulted in the development of new security regulations which will inevitably directly impact the rail sector.

#### **Question**

**5.7 Please provide your views on current and emerging issues relating to duplication, overlap and/or inconsistency between rail safety regulation and other regulatory processes (e.g. OH&S, Access, Environment, Security).**

## **6. WHAT NEEDS TO BE CHANGED IN ORDER TO BETTER MEET REGULATORY OBJECTIVES?**

Previous sections of this paper have sought the views of stakeholders on a range of issues, ranging from the broad principles of regulation to specific issues related to the operation of rail safety regulation in Australia. In particular, questions have sought to determine where there is a common understanding of key issues and to identify perceived problems with the present system.

What is now sought is commentary on the areas which stakeholders regard as warranting attention in order to improve the existing system of regulation.

Please note that the Commission is seeking comment on specific issues, rather than proposals for any particular ‘model’ of regulation. Stakeholders should bear in mind that the end ‘model’ proposed may in fact have elements from other forms of regulation, but in fact be unique to the Australian situation.

Comments or proposals to change the existing system should therefore focus on the following:

- High level issues which warrant attention, with suggestions for improvement and a broad rationale for the proposal.
- If there are a number of issues, some indication of priority, in order that responses may be considered against other submissions received.
- If available, indications of where data may be sourced to enable the Commission to further investigate the proposal.

Stakeholders may wish to consider the following in proposing areas for specific attention:

- Given the direction of ATC to further develop a co-regulatory model, views on the maturity of the industry in order to assess where in the regulatory ‘continuum’ an improved system may fit.
- Changes to the roles of the major parties, including policy makers, regulators, industry peak bodies and organisations and those ‘external’ to the industry such as standards associations or other regulatory agencies.
- Changes to the content of regulatory instruments (legislation, codes etc) and the need or otherwise for them to be formally linked within the regulatory framework.
- Changes to the ownership or approval processes of regulatory instruments
- Areas in which harmonisation of legislation/regulation is important and the means by which this may be achieved
- Areas in which it is important for mutual recognition to be fully effective

## 7. REFERENCES

*Rail Safety Co-regulation – Roles and Accountabilities of Accreditation Authorities and Accredited Railway Track Managers and Operators*, Accreditation Authorities Group May 2001

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*Choices of Policy Instruments*, OECD (1997)

*Rail Safety Accreditation, Mutual Recognition, and Rail Safety Management*, ACIL Tasman, November 2003

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*Regulating Workplace Safety, systems and sanctions*, Neil Gunningham and Richard Johnstone, Oxford University Press, 1999

## APPENDIX A

### Stakeholder Groups

The Australian rail industry can be divided into five broad categories:

- interstate freight;
- intrastate freight;
- interstate passenger;
- intrastate passenger; and
- urban passenger.

Within each of these categories there are rail operators, track managers and vertically integrated railways (both operator and track manager).

The industry is made up of a number of private and government owned operations. There is one main industry body, the Australasian Railway Association (ARA). The dominant representative of railway employee interests is the Railway Bus & Tram Union (RBTU).

### Freight Railways

With the exception of Queensland Rail (QR), all above rail operators for freight are now privately owned and operated – including those isolated railways that are involved in the haulage of bulk minerals from mine to Port – such as those railways that operate in the North West of WA and the North West of Queensland

The Australian Railroad Group (ARG), Freight Australia (FAL), Pacific National (PNL) and QR are the main intrastate and interstate operators. The intrastate networks are leased and managed by QR (Queensland), ARG (WA and SA), and FAL (Victoria). The majority of the interstate network is leased and managed by the Australian Rail Track Corporation (ARTC)<sup>8</sup>. Until recently, the NSW network was owned and managed by the Rail Infrastructure Corporation of NSW (Government owned). A lease and a management agreement has been agreed between the NSW government and ARTC. ARTC will assume management responsibility for the NSW network.

### Passenger Railways

Urban passenger networks are primarily operated as vertically integrated railways by State Government owned businesses, with the exception being in Melbourne where two private sector passenger franchises operate<sup>9</sup>. Railcorp (Sydney), TransAdelaide (Adelaide), Public Transport Authority (Perth), and QR (Brisbane) are the service providers. All urban rail passenger transport services are subsidised by States to varying degrees.

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<sup>8</sup> Except section from Kalgoorlie to Perth and from NSW/QLD border to Brisbane.

<sup>9</sup> Connex and National Express were the original franchisees. National Express is in Administration. The State Government has assumed control of the business.

A number of government subsidised passenger services operate on regional lines and interstate lines between major population centres. While a number of jurisdictions are considering rationalisation of such services (e.g. NSW) others are increasing the scope of services (e.g. Victoria).

A private company, Great Southern Railway, profitably operates passenger services on the interstate corridors (e.g. the Ghan). In addition, there are many privately owned heritage and/or tourist railways. In most cases tourist / heritage services are offered on rail tracks that are isolated from intrastate, interstate and metropolitan networks. These railways are vertically integrated.

### **Government Stakeholders**

Rail safety regulators have been established in each State and the Northern Territory.

Government Departments in States and Territories are responsible for the development and amendment of legislation that governs the Industry.

OH&S regulators in States and Territories are stakeholders due to potential for significant overlap of responsibility between rail safety regulators and OH&S regulators.

Organisations associated with the operation of economic regulation, e.g. ACCC, NCC and State and Territory regulators such as ESC (Victoria), IPART (NSW) and QCA (Queensland) are also expected to have an interest due to interfaces between economic regulation and safety regulation - in particular - the potential for safety regulation to act as a barrier to entry.

### **Service Providers**

Rollingstock providers / maintainers, infrastructure constructors / maintainers and providers of communications and signalling systems are also important stakeholders. Indeed in some jurisdictions (eg NSW) such parties are required to be separately accredited.

### **Customer Groups**

Users of passenger transport services and users of freight services are both equally concerned about safe, on-going service delivery. The perceptions of these groups are important in deterring whether regulation has achieved the primary governance objective: that of generating public trust