

**SINGLE, NATIONAL RAIL SAFETY
REGULATORY AND
INVESTIGATION FRAMEWORK**

**REGULATORY IMPACT
STATEMENT**

VOLUME 2

APPENDICES

July 2009



National Transport Commission

Prepared by

National Transport Commission with Booz and Company

This Regulatory Impact Statement (RIS) was provided to the Council of Australian Governments to inform its consideration of national transport regulatory reform proposals in July 2009. As such, the RIS does not necessarily represent the final outcomes that will be developed and agreed as Governments progress the reform process.

National Transport Commission

**Single, National Rail Safety Regulatory and Investigation Framework:
Regulatory Impact Statement – Volume 2**

Report Prepared by: National Transport Commission with Booz and Company

ISBN: 978 1 921604 03 4

REPORT OUTLINE

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|------------------------|--|
| Date: | July 2009 |
| ISBN: | 978 1 921604 03 4 |
| Title: | Single, National Rail Safety Regulatory and Investigation Framework: Regulatory Impact Statement – Volume 2 (Appendices) |
| Address: | National Transport Commission Level 15/628 Bourke Street MELBOURNE VIC 3000 E-mail: ntc@ntc.gov.au Website: www.ntc.gov.au |
| Type of report: | Regulatory impact statement |
| Objectives: | To improve rail safety regulation and investigation |
| NTC Programs: | Rail safety |
| Key Milestones: | Regulatory impact statement to the Council of Australian Governments (COAG) in 2009 |
| Abstract: | This regulatory impact statement examines the options for, and likely costs and benefits attributable to changes to institutional arrangements for rail safety regulation and investigation in Australia. |
| Purpose: | For presentation to ATC and COAG |
| Key words: | rail, regulation, safety, impact assessment |

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APPENDIX 1: REGULATION

This section examines rail safety regulation practices in other countries and safety regulation arrangements in other transport modes and sectors in Australia.

1.1 Practice in other modes, sectors and countries

The following discussion outlines a range of state-based and national approaches to regulation.

1.1.1 State-based regulation

There are means to enhance the current state-based regulation of rail safety to improve safety outcomes and address industry efficiency. Stakeholder feedback indicates the Rail Safety Regulators Panel works very well, but it is inherently constrained by its governance arrangements and consequent need to use a collegiate approach to achieve consensus.

The Competent Authorities Panel model in dangerous goods has been suggested as a suitable basis for further promoting nationally consistent rail safety regulation. Dangerous goods regulations for road and rail transport are administered by each state and territory. Instances arise where, like rail safety, a matter needs to be considered by more than one jurisdiction. In this event, a panel of 'Competent Authorities' (the Competent Authority in each state is responsible for the enforcement of the dangerous goods legislation and of the technical dangerous goods code) issues approvals and variations to the existing regulations.

The Competent Authorities Panel operates as a 'clearing house' for important decisions allowing nationally consistent application of the model legislation and ensuring mutual recognition of decisions taken across jurisdictions. The panel meets quarterly and considers submissions from industry and industry associations. Submissions to the panel for either an exemption, approval or administrative determination must first be considered by the Competent Authority in the relevant state or territory to ensure that the matter is of national effect and the submission is complete and in accordance with the regulations. The secretariat for the panel is provided by the Department of Infrastructure, Transport, Regional Development and Local Government.

The panel has a number of functions including:

- the consideration of applications and referrals in respect of determinations, approvals and exemptions to vary the operation of the Australian Dangerous Goods Code and making decisions intended to ensure the consistent national application of the Code and its implementing legislation; and
- providing advice to the Australian delegation to the UN Sub-Committee of Experts on the Transport of Dangerous Goods and nominating the technical expert to support the delegation.

Each Competent Authority of each participating state and territory is a member of the panel and is entitled to appoint a representative to participate and vote on its behalf in relation to decisions of the panel. The panel must consider all matters referred to it for advice or decision by a Competent Authority under the dangerous goods legislation, including related administrative matters. If a matter is put to a vote of the panel, the matter is approved if there is a majority. If a participating jurisdiction has more than one

Competent Authority, the vote of a representative of any of those authorities has a value of one/number of Competent Authorities. Meetings of the panel are to be convened by the Chairperson. The Chairperson of the panel is appointed by and is from among the member representatives. The term of office for a Chairperson is two years. The panel may publish any of its decisions, or any part of any of its decisions, that it believes it would be in the public interest to publish.

Across Australia, maritime safety is regulated by eight independent maritime safety agencies administering more than 50 pieces of legislation. The Australian Maritime Safety Authority is a statutory authority within the transport portfolio. Australian Maritime Safety Authority's primary role is in maritime safety, protection of the marine environment and maritime and aviation search and rescue services. The possibility of a single national system for maritime safety regulation, administered by the Australian Maritime Safety Authority, is currently the subject of consultation and a regulatory impact statement. Under this proposal, safety matters relating to recreational boating would remain the responsibility of the states and the Northern Territory.

The regulation of heavy vehicles and their operations is largely the responsibility of the states and territories. The Commonwealth plays a role in relation to heavy vehicles through the Australian Design Rules (ADRs) and for those heavy vehicles engaged in interstate trade that choose to register under the *Interstate Road Transport Act 1985*. The Commonwealth Government is also responsible for setting the effective rate of fuel tax paid by the trucking industry—the road user charge—under the *Fuel Tax Act 2006*.

Using the corporations and international trade and commerce power, the Commonwealth has enacted the *Motor Vehicle Standards Act 1989* to regulate the safety and environment standards of new motor vehicles, including trucks (the Australian Design Rules). These set minimum standards for supply to market, providing trade facilitation, and involve obligations under international treaties, to which Australia is a signatory.

In heavy vehicle regulation there are model laws that now cover heavy vehicle charges, transportation of dangerous goods, registration, vehicle standards, mass and loading, oversize and overmass vehicle standards, restricted access vehicles, higher mass limits, driver fatigue management, heavy vehicle speeding and generally applicable compliance and enforcement provisions for those modules.

In September 2008, the Acting Prime Minister, the Hon Julia Gillard MP wrote to First Ministers proposing that a regulatory impact statement on a possible single, national system of heavy vehicle regulation, registration and licensing (including the financial implications), should be prepared. The heavy vehicle regulatory impact statement is to be considered, along with this regulatory impact statement and one relating to national maritime safety regulation, by ATC prior to reporting to the Council of Australian Governments (COAG) in 2009.

1.1.2 National safety regulation in Australia

Air safety is administered nationally by the Civil Aviation Safety Authority. The Civil Aviation Safety Authority was established on 6 July 1995 as an independent statutory authority. It is a body corporate separate from the Australian Government. The Civil Aviation Safety Authority's primary function is to conduct the safety regulation of civil air operations in Australia and the operation of Australian aircraft overseas. It is also required to provide comprehensive safety education and training programs, cooperate with the

Australian Transport Safety Bureau, and administer certain features of Part IVA of the *Civil Aviation (Carriers' Liability) Act 1959*.

There are at least two examples of national safety regulation in other sectors – the National Offshore Petroleum Safety Authority and the Office of the Gene Technology Regulator. The National Offshore Petroleum Safety Authority is a statutory agency regulating Commonwealth, state and territory coastal waters with accountability to the relevant Ministers. The Authority has its headquarters in Perth and commenced operations on 1 January 2005. The National Offshore Petroleum Safety Authority was formed after the Australian Ministerial Council of Mineral and Petroleum Resources, comprising the Commonwealth Minister for Resources and Energy and relevant state and Northern Territory Ministers, identified the need for a consistent national approach to safety regulation in Australia. It replaced a formerly state-based system of safety regulation.

The team which recently reviewed the National Offshore Petroleum Safety Authority made twenty recommendations, addressing:

- more and better guidelines;
- consequences of decisions resulting from change;
- scope and focus of regulatory activities;
- better consultation between industry and governments;
- improved regulatory processes;
- re-assessment of key performance indicators;
- implementation of regulation by individual regulators of a meta-regulatory approach;
- clarify the role of the regulator's advisory board;
- regulatory audit regimes; and
- consultation and industry involvement.

The review team also made recommendations about actions for industry to undertake.

The Office of the Gene Technology Regulator has been established within the Australian Government Department of Health and Ageing to provide administrative support to the Gene Technology Regulator in the performance of its functions under the *Gene Technology Act 2000*. The *Gene Technology Act 2000*, which came into force on 21 June 2001, introduces a national scheme for the regulation of genetically modified organisms in Australia, in order to protect the health and safety of Australians and the Australian environment.

1.1.3 International examples

A variety of approaches have been taken internationally to rail safety regulation in Europe and North America.

Rail safety regulation in the United States of America is primarily developed and administered by the Federal Railroad Administration. The Federal Railroad Administration employs more than 415 Federal safety inspectors nationwide operating out of eight regional offices, as well as 160 state safety inspectors in 30 states to allow for adequate on the ground representation. State safety inspectors are subject to Federal Railroad Administration training programs to oversee consistency. In practice railway safety

legislation is uniform across the country, with responsibilities listed in the Federal Railroad Administration. However, United States law permits the establishment of additional regulations by a state where the additional enforcements are necessary to reduce or eliminate local safety hazard.

The regulatory framework for railway safety in Canada encompasses the federal and provincial legislation, regulations, rules, and standards. Federal regulation applies to interprovincial or Canada-United States operations and is looked after by the Rail Safety Directorate of Transport Canada which delivers its program by means of a national headquarters and regional offices. Provincial regulation applies for railways operating entirely within a single province and is undertaken by provincial governments.

Rail safety regulation in the European Union is undertaken on a country by country basis. However, since 2004 the possibility of a harmonised European system for rail safety regulation is the subject of consideration by the European Railway Agency. The agency's main task is to provide the European Commission and the Member States with technical assistance in order to improve the interoperability of the European railway system (railway rolling stock should be able to travel across networks with a minimum of impediment) and its safety.

Rail safety regulation in the United Kingdom is administered by the Office of Rail Regulation. The Office of Rail Regulation looks after the rail system nationwide. The Office of Rail Regulation has a range of statutory powers under the *Railways Act 1993*. They also have concurrent jurisdiction with the Office of Fair Trading under the *Competition Act 1998*. In addition to safety oversight, to encourage continuous improvement in health and safety performance, compliance, respective policies and legislation; the Office of Rail Regulation enforces economic regulations for access and competition arrangements.

1.1.4 Discussion

In evaluating the various regulatory environments within other transport modes, along with international rail systems, we are able to gain a valuable insight into the priorities and capabilities that may assist with the further growth of Australia's rail industry.

By assessing industries with a similar risk profile to that of rail, we are better able to examine how these comparisons are relevant to this regulatory impact statement.

One of the simplest comparisons to make is with the Australian aviation sector, which has an extremely high risk involved in operating the sector and has maintained a significant focus on safety measures through the independent national regulatory body that is the Civil Aviation Safety Authority, which includes capacity for an investigation system. Like rail, given the possible impacts on the general public in the event of an aviation incident, stringent safety management systems are a necessity.

The maritime sector is also in a transitional phase with the management of its safety regulation and investigation systems. While there is considerably less risk involved, particularly for passenger movement, in this sector there are some comparisons to be made with rail. Maritime incidents more generally have a larger impact on the environment; the sector requires significant guidelines for vessel maintenance and a substantial port infrastructure network around the country that must be linked with road and rail networks to ensure efficient operation of commodity movement. These measures assist in ensuring the safety of the personnel working in the industry and the protection of cargo and the environment.

Non-transport sectors such as the petroleum extraction industry also operate with highly dangerous commodities that require precise and specific safety management systems to ensure the safety of the personnel manufacturing and transporting the commodity. This sector, like rail, has a significant infrastructure requirement in order to refine and transport the output, which places significant pressures on maintaining a consistent level of safety regulation for the benefit of sector employees and the general public. In creating the independent National Offshore Petroleum Safety Authority it was considered that providing a single, national regulatory system would ensure consistency and aim to provide an improvement in safety outcomes.

The safety regulation of gene technology to manage the effects of genetically modified materials being consumed by the general public is also an appropriate system with which to compare the rail industry. The Gene Technology Regulator provides a nationally consistent guideline for the management of genetically modified commodities being imported, created and consumed in Australia. In making this comparison, there is a considerable link between the governance arrangements required for the possibility of any single, national rail regulation and investigation framework and the management of gene technology. Like rail with the management of occupational health and safety, the Gene Technology Regulator is required to incorporate various aspects of other sectors in the management of its regulation and therefore can provide valuable insights into the establishment of any single, national framework.

Importantly, it is appropriate to note that each of these organisations is independent of government and has various arrangements for recovering the costs of their operation. More detailed information including governance and funding arrangements on these comparisons can be found in the appendices.

In comparing the Australian rail industry with that of its international counterparts, we are able to glean important information from the approach taken in countries that have a similar landscape and government processes.

The regulatory frameworks in the European Union, the United States and Canada deliver specifically for an industry that operates across jurisdictional borders. The international comparison shows that governments have acknowledged the potential of cross-border impediments as inconsistencies, and shaped their regulation and investigation approaches accordingly. Although these countries address interoperability in various ways, their regulatory frameworks demonstrate certain commonalities:

- to provide for rail safety regulation in a consistent manner for those operators active in more than one jurisdiction;
- while ensuring adequate on the ground representation to allow for responsiveness and accessibility of the regulator and the investigator.

It should be noted that the efforts currently undertaken in the European Union are a means to provide commonality. That is, there appears to be widespread acknowledgement of the significance of consistent regulation as a means to facilitate growth; however a single regulatory approach has yet to be developed. Given the vast differences in Europe's regulatory landscape, European Railway Agency's task is challenging. As far as Australia is concerned, it is important to monitor the events unfolding in the European Union as its system is reasonably similar only on a much larger scale and Australian can capitalise on its experiences.

Table 1. Regulation in other modes and sectors

| | Air | Sea | Road | Dangerous Goods | National Single Safety Regulator Models | | International Comparison |
|--|---|---|---|---|---|--|--|
| | Civil Aviation Safety Authority (CASA) ¹ | Australian Maritime Safety Authority (AMSA) ² | National Heavy Vehicle Regulator ³ | Dangerous Goods Code ⁴ | National Offshore Petroleum Safety Authority (NOPSA) ⁵ | Gene Technology Regulator ⁶ | United Kingdom rail sector ⁷ |
| Reason for creation | To fulfil international treaty obligations under the external affairs Power of Constitution (relating to a 1967 high court decision) | To provide on request services on maritime issues to the Australian, state and territory governments and their agencies | In order to achieve the vision of a seamless, coordinated transport system, ATC agreed that the best direction for reform would focus on vehicle registration and licensing | There was no mechanism for mutual recognition of decisions made by the state and territory Competent Authorities for managing the transportation of such substances | The Future Arrangements for Regulation of Offshore Petroleum Safety Report, published in 2001, identified a number of shortcomings in the legislative and administrative structures. It recommended the framework of laws be revised, and the regulatory system be restructured by establishing NOPSA | The Gene Technology Act 2000 was developed in consultation with all Australian jurisdictions over a number of years to establish a nationally consistent regulatory system for gene technology | The UK Government announced its intentions for the regulation of rail health and safety together under a single public regulator, the Office of Rail Regulation, will streamline the regulatory system, reduce bureaucracy, and ensure that these issues are looked at as a whole and not in isolation from one another in its White Paper |
| Objectives | Conduct the safety regulation of civil air operations in Australia and the operation of Australian aircraft overseas. | To be a superior provider of maritime safety , marine environment protection, and maritime and aviation search and rescue. | To provide a safer travelling environment and reduce regulatory burden on industry. ATC agreed that the target for the regulator must be to deliver: <ul style="list-style-type: none"> world-class economic efficiency and safety outcomes in the Australian road freight industry; and excellent and professional regulatory and compliance services | In the early 1990s ATC agreed that a national process should be established to develop nationally uniform dangerous goods transport legislation. Although the Dangerous Goods Code was adopted under each state and territory's dangerous goods legislation, this legislation varied widely in the duties and obligations placed on persons handling dangerous goods. | The role of NOPSA is to administer offshore petroleum safety legislation. The organisation's primary objectives include: <ul style="list-style-type: none"> improving health and safety outcomes; ensuring health and safety regulation is provided to standards that are equal to the best in the world; and reducing the regulatory burden on industry operating across multiple jurisdictions, by delivering a consistent and comprehensive health and safety regime | To provide a national scheme for the regulation of genetically modified organisms in Australia, in order to protect the health and safety of Australians and the Australian environment by identifying risks posed by or as a result of gene technology, and to manage those risks by regulating certain dealings with genetically modified organisms | The Office of Rail Regulation is a combined safety and economic regulator. Its objectives are to: <ul style="list-style-type: none"> improve health and safety performance; and secure improved efficiency and performance of the main-line railway |
| Governance | Independent Statutory Authority with a chief executive and no Board. CASA, Department of Infrastructure, Transport, Regional Development and Local Government and Airservices Australia constitute a tripartite structure, each with separate and distinct functions. | Statutory Authority with a seven member Board, including the chief executive. Members are drawn from private industry and government. | To be determined | Largely, through consistency with international standards. The Dangerous Goods Unit provides policy advice on national and international dangerous goods matters, along with secretariat support to the Competent Authorities Panel. | Statutory agency with a seven member Board, appointed by the Federal Minister for Resources, Energy and Tourism | Statutory office holder with a supporting office located in Canberra and comprises some 50 scientific, legal, policy, professional and administrative staff. | Independent statutory body with a Board, appointed by the Secretary of State for Transport for a fixed term of up to five years. |
| Responsible Parliament/Minister | Commonwealth Parliament through the Minister for Infrastructure, Transport, Regional Development and Local Government | Commonwealth Parliament through the Minister for Infrastructure, Transport, Regional Development and Local Government | To be determined | The Dangerous Goods Unit also works with the National Transport Commission (NTC) and all states and territories on the maintenance of the Australian Dangerous Goods Code (Road and Rail) and the nationally harmonised regulatory framework. | Accountable to relevant Commonwealth, state and territory Ministers, reporting via the Ministerial Council on Mineral and Petroleum Resources | Accountable to the Gene Technology Ministerial Council and reports to the Commonwealth Parliament | The Office of Rail Regulation's Board is accountable to Parliament. Board members are appointed by the Secretary of State for Transport. This includes the obligation to provide written and oral evidence to Parliamentary committees when required. |

¹ www.casa.gov.au² www.amsa.gov.au³ www.atcouncil.gov.au⁴ <http://www.infrastructure.gov.au>⁵ www.nopsa.gov.au⁶ www.ogtr.gov.au⁷ www.rail-reg.gov.uk

| | Air | Sea | Road | Dangerous Goods | National Single Safety Regulator Models | | International Comparison |
|--------------------------------------|---|--|---|---|--|---|--|
| | Civil Aviation Safety Authority (CASA) ¹ | Australian Maritime Safety Authority (AMSA) ² | National Heavy Vehicle Regulator ³ | Dangerous Goods Code ⁴ | National Offshore Petroleum Safety Authority (NOPSA) ⁵ | Gene Technology Regulator ⁶ | United Kingdom rail sector ⁷ |
| Funding/ Performance Measures | In line with Australian government policy, CASA is required to recover costs for providing regulatory services to the aviation industry. CASA began charging for a wider range of regulatory services from 1 January 2006 and must charge fees that reflect the real cost of providing those services. Currently budgeted at approximately \$130m, 700 people, 800 accredited operators | AMSA's services are mainly provided on a cost recovery basis from fee and levy revenue sources. It also receives Community Service Obligation funding from the Australian government specifically relating to aviation and maritime search and rescue operations and boating safety education. 2007 income approximately \$96 million | To be determined | Guidelines administered by state and territory legislative requirements | Costs of the Authority are recovered from industry in line with the Australian Government's Cost Recovery Guidelines for Regulatory Agencies and the charges have been set accordingly. Total expenditure in 2006-07 was \$243 million | The Secretary of the Department of Health and Ageing has financial accountability for the Office of Gene Technology Regulator | The Board of the Office of Rail Regulation must discharge the statutory duties placed upon it by section 4 of the Railways Act 1993. The Office of Rail Regulation is funded through a combination of license fees (economic regulation activities) and a railway safety levy (health and safety activities). |
| Current/ Future Reforms | Work has begun on the development of a national aviation policy statement. The policy statement will provide greater planning and investment certainty for the industry and provide clear commitments for users of aviation services and communities affected by aviation activity. Governance arrangements, such as the need for a board, may be considered in the future | ATC is investigating a single national system of maritime safety regulation that might see the AMSA take responsibility for regulating commercial and fishing ship: design, construction, equipment, operation, crew certification, and manning. The national system would allow for the option of regulatory services currently being delivered by state and territory maritime agencies. A regulatory impact statement is currently being prepared | Ministers will consider proposals for a single national system for the regulation, registration and licensing of heavy vehicles. Ministers agreed the work is a matter of priority and aim to seek in-principle support of COAG in October 2008 | Considered in line with domestic and international developments | The National Energy Safety Assessment will identify key strategic energy security issues in the liquid fuels, natural gas and electricity sectors currently, and those likely to influence the level of energy security in 5 years (2013), 10 years (2018) and 15 years (2023) | - | The Office of Rail Regulation will conduct the 2008 Periodic Review (PR2008), as a primary means by which it can secure delivery of the vision set out for the main-line railway. |

1.2 Discussion of other options put forward for regulation: option 3

Table 2. Summary responses to key regulatory impact statement responses

| Suggestion (submitter) | Summary Assessment |
|--|--|
| Assumption by a national regulator of responsibility for the administration of Occupational Health and Safety laws, as well as rail safety laws (Australasian Railways Association/New South Wales Government). | There is no logical or insurmountable legal obstacle to the achievement of this result. A question would be which occupation health and safety law the regulator would assume responsibility for administering under this model. This would depend on the response of Workplace Ministers to the <i>National Review Into Model Occupational Health And Safety Laws</i> and it seems imprudent to commit ATC to such a path until the outcomes of this process are clearer. This proposal could form part of any implementation plan for the single regulator as the outcomes of the national occupation health and safety process become apparent. |
| A national policy and regulation setting body could be established to oversee state-based compliance with all state transport departments agreeing to comply with national policy and regulation (New South Wales Government). ⁸ | This model assumes the existence of an agreed single national rail safety law and the persistence of local regulators. It seems to offer a reasonable means of making the transition from the current arrangements to a single regulator under a purchaser provider arrangement. However, given there is already an Intergovernmental Agreement and ATC vote to implement national rail safety legislation, it is difficult to see what it adds in practice. It might be best understood as a means of achieving a national regulator, rather than an alternative to Option 4. |
| <p>Consideration should be given to allowing ministers to assign agreed regulation to other jurisdictions. For example, the Western Australian minister could agree to assign regulation of a railway (accreditation, variations to accreditation, compliance, fees, reporting etc) to the ‘principal’ jurisdiction for each operator but with Office of Rail Safety having the ability to:</p> <ul style="list-style-type: none"> • investigate safety matters in the event of the relevant railway operator being involved in a reportable occurrence in Western Australia and take compliance action; and • inspect operations at the request of the ‘principal’ regulator⁹ <p>There would need to be reciprocal provisions in legislation to allow ministers to assign regulatory powers across borders and for regulators to exchange compliance information such as that collected during a compliance investigation.</p> <p>Such an arrangement would improve Office of Rail Safety efficiency and safety would benefit as Office of Rail Safety could focus better on assisting the local industry. Presumably (according to the regulatory impact statement) Pacific National would benefit by having a single regulator for accreditation matters and gain some efficiency also (Western Australia Department of Planning and Infrastructure, Office of Rail Safety).</p> | The sub-delegation of the whole of the regulatory discretion as suggested would require very clear legislative authorisation by the Western Australian Parliament and any national model law which sought to rely upon it. |
| Mutual recognition provisions (Western Australia Department of Planning and Infrastructure, Office of Rail Safety). | The submission proposes that the Model Rail Safety Bill does not contain provision for ‘mutual recognition’ and that such provisions “could go a long way to overcoming the complaints driving this exercise to prove the case for a single regulator”. It would be difficult to draft such provisions in light of the frequently and strongly stated contention that “risk and risk controls due to local network conditions are different.” (Office of Rail Safety submission page 5). Essentially, the accepted definition of mutual recognition precludes the retention of substantial regulatory discretion by definition. ¹⁰ |
| National panel of regulators with decision making authority based on a majority voting system (Public Transport Safety Victoria). | The regulatory context in which the dangerous goods Competent Authorities Panel functions is highly prescriptive when compared to that of rail safety. The decision making functions of the panel are narrow in scope and it has no formal role in the administration of accreditation provisions. The concept would require some development before it could be proposed as a viable mechanism for national regulation in the rail sector (including, for example, effective merits review provisions). |

⁸ Analogous to the Civil Aviation Safety Authority/International Civil Aviation Organisation arrangements in air safety and US Federal Railroad Administration/State regulators approach for rail in the United States

⁹ In practice this would mean, using Pacific National as an example, the Western Australian minister could agree to assign regulation in Western Australia of Pacific National to the Independent Transport Safety and Reliability Regulator in New South Wales. However, Western Australia could retain the ability to assist the Independent Transport Safety and Reliability Regulator in enforcing Pacific National compliance through investigation and inspection in the event of accidents in Western Australia, or simply providing advice and expertise. In effect the Independent Transport Safety and Reliability Regulator would be the national regulator for Pacific National.

¹⁰ Mutual recognition involves each jurisdiction recognising regulations created and administered by other jurisdictions, even where such regulations vary from their own rules and regulations. No additional testing is required for registration, licensing or certification. Conditions attached to registration in one jurisdiction automatically apply to registration in another jurisdiction. Thus, the mutual recognition model states that a product or service that conforms to the regulatory requirements of one jurisdiction shall be accepted by all other parties to the mutual recognition agreement. In this case, the automatic acceptance of the accreditation from another jurisdiction as of right and without additional conditions for entry.

| Suggestion (submitter) | Summary Assessment |
|---|---|
| <p>The proposal for state-based regulation similar to the Competent Authorities Panel model relied upon in the regulation of dangerous goods is presented as a viable option... (T)he national panel could consider accreditation, but not be responsible for the regulation of general duties. Under this option, accreditation and associated variations to accreditation would essentially be done nationally with the states being responsible for enforcement and compliance of general duties and accredited conditions. Perhaps the regulatory impact statement could explore how this might work in more detail. (New South Wales Government)</p> | <p>This proposal may form the basis of a viable mechanism for national regulation, include a limited national regulator.</p> |
| <p>Adoption of the Canadian model (Western Australia Department of Planning and Infrastructure, Office of Rail Safety)</p> | <p>There are essentially three models of harmonisation exemplified by the provincial regulatory regimes: the consultation model, (Saskatchewan and Quebec) the incorporation by reference model (Manitoba, British Columbia, New Brunswick and Nova Scotia) and the delegation model (Ontario). Ontario is the province most compatible with the federal regulatory regime.</p> <p>A recent review of these arrangements concluded:</p> <p><i>“(I)t is this area where further work is needed to achieve optimal harmonization: there are not necessarily gaps in safety regulation as much as there is ambiguity as to what applies in a given instance. The problem is compounded by not knowing what exemptions and amendments to rules apply in a particular case: with the exception of Ontario regulated railways, only a federally regulated railway can apply for exemptions or revisions to rules incorporated by reference under the RSA. Presumably, the relevant provincial railway legislation can allow for these, at the cost however, of yet another layer of jurisdiction added to the rule-formulating process. SMS poses another problem in that while SMS regulations will apply either through incorporation by reference or through the provinces own SMS requirements, there is no provision in any of the federal-provincial inspection/ enforcement agreements for SMS audits.”¹¹</i></p> <p>There would seem to be few benefits to be obtained from the introduction of these arrangements into the Australian rail safety system given the above conclusion, putting aside the relative costs and benefits of such a policy choice.</p> |
| <p>Adoption of the European regulatory model (Western Australia Department of Planning and Infrastructure, Office of Rail Safety)</p> | <p>Analysis of the environment prior to EC directive 2004 concluded that:</p> <p><i>“Where traction crosses an international border, the norm is “levelling-up”. Each regime requires all of its conditions to be met, in addition to the conditions required by the neighbouring regime.”</i></p> <p>After the Directive the House of Lords was advised¹² (amongst many other criticisms of the arrangements in Europe post 2004) that:-</p> <p><i>“There is (a) problem of cross-acceptance of standards between different countries. There is only one MoU in place - between two adjacent a national safety authorities (France and Germany) and only five crossings where cross-acceptance is even partly in place.</i></p> <p><i>(Any operator) wishing to operate across several member states will face high costs and delays if he wishes to use one locomotive and driver for the complete journey. Incumbents do not want to make it any easier for new entrants to cross frontiers because it will reduce their own competitiveness still further. Sadly, it also reduces the volumes of freight carried efficiently by rail and affects its growth prospects”.</i></p> <p>This strongly suggests that the directive as implemented would form a questionable basis for the further development of the rail safety regulatory framework in Australia.</p> |

¹¹ Executive Summary - The Governance of Railway Safety in Canada: A Report to the Railway Safety Act Review Advisory Panel November 9, 2007 Legislative and Institutional Framework, Deana Silverstone.

¹² House of Lords European Committee Inquiry into the Recast of the First Railway Package Response from Rail Freight Group, February 2009.

APPENDIX 2: INVESTIGATION

Table 3. Investigation arrangements in Australia and overseas

| | State-based Investigation | | National Investigation | International Comparison | | | | |
|----------------------------|--|--|---|---|--|--|--|---|
| | Office of Transport Safety Investigations (OTSI) ¹³ | Chief Investigator, Transport and Marine Safety Investigations (OCI) ¹⁴ | Australian Transport Safety Bureau (ATSB) ¹⁵ | United Kingdom ¹⁶ | United States | | Canada ¹⁷ | European Union ¹⁸ |
| | | | | | Federal Railroad Administration (FRA) ¹⁹ | National Transport Safety Bureau (NTSB) ²⁰ | | |
| Reason for creation | To investigate any safety occurrence affecting the safe operation of freight or passenger trains, or the railway infrastructure within New South Wales. | To investigate public transport safety matters and marine safety matters and to report the results of investigations to the Minister for Public Transport and/or the Minister for Roads and Ports. | To improve transport safety through, among other things, independent investigations of transport accidents and incidents and the making of safety action statements and recommendations that draw on the results of those investigations. | The formation of an organisation to independently investigate railway accidents with the aim of improving safety was recommended in Lord Cullen's inquiry report on the Ladbroke Grove rail accident in 1999. Furthermore, the establishment of the Rail Accident Investigation Branch (RAIB) fulfils the UK's duty to provide an independent rail accident investigation body under the European Railway Safety Directive. | To determine the root cause and identify any contributing factors so that the railroad, FRA or other parties can implement proper remedial action to prevent similar future occurrences. | To determine the probable cause of transportation accidents (typically the most serious or catastrophic events involving loss of life) and to formulate safety recommendations to improve transportation safety. | To advance transportation safety through the investigation of occurrences in the marine, pipeline, rail and air modes of transportation. | To establish a more competitive and safer railway system which covers the entire European Community market instead of confining itself mainly to national markets. |
| Objectives | To identify why accidents or safety incidents occur and to make recommendations to prevent recurrence. | Improving public transport and marine safety by independently investigating public transport and marine safety matters. | The Australian Transport Safety Bureau's objective is safe transport. Its mission is to maintain and improve transport safety and public confidence through excellence in: <ul style="list-style-type: none"> independent investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; and Fostering safety awareness, knowledge and action. | To improve the safety of the railways, and to prevent further accidents from occurring. | To foster a safe railroad environment nationwide. | To improve safety in the nation's transportation system. | The objective of the Transportation Safety Board (TSB) is to conduct independent safety investigations and communicate risks in the transportation system. | Directive 2004/49/EC of the European Parliament aims to create a safer integrated European rail system over its Member States. |
| Governance | Independent Statutory Authority with Chief Investigator and no Board. The Chief Investigator is not subject to the direction or control of the Minister for Transport, though the Minister may give a written direction to him/her to investigate a transport safety matter. | Independent Statutory Body with Chief Investigator and no Board. The Chief Investigator is not subject to the direction or control of the Minister for Transport, though the Minister may direct him/her to investigate a transport safety matter. | The Australian Transport Safety Bureau is an operationally independent body within the Australian Government Department of Infrastructure, Transport, Regional Development and Local Government. | The RAIB forms part of the Department for Transport, but is functionally independent. | The FRA is one of ten agencies within the U.S. Department of Transportation concerned with intermodal transportation, | The NTSB is an independent federal investigatory agency, with a five member board. Board Members are nominated by the President and confirmed by the Senate to serve five year terms. | The TSB is an independent agency, separate from other government agencies and departments, with a 5 member board. | Each Member State maintains jurisdiction over their investigatory practices. However, in accordance with the objective Member States are subject to the Directives' definition of common rules for safety investigations. |

¹³ <http://www.otsi.nsw.gov.au/rail/>¹⁴ <http://www.transport.vic.gov.au/DOI/Internet/Home.nsf/AllDocs/C3A5724671F0163DCA2573A1001C867C?OpenDocument>¹⁵ <http://www.atsb.gov.au>¹⁶ <http://www.raib.gov.uk/home/index.cfm>¹⁷ <http://www.tsb.gc.ca/en/index.asp>¹⁸ <http://europa.eu/scadplus/leg/en/lvb/l24201a.htm>¹⁹ <http://www.fra.dot.gov/us/home>²⁰ <http://www.nts.gov/>

APPENDIX 3: DETAILED INFORMATION RELATING TO THE QUANTITATIVE COST BENEFIT ANALYSIS

1.1 Summary of assumptions

Further information regarding the assumptions below can be found in the relevant sections following; however it is useful to outline the rationale behind the assumptions that have been made in the cost benefit analysis. This summary will outline and explain how the NTC arrived at its assumptions and the methodology used.

1.1.1 7 year dataset for safety data

The NTC has based its regressions upon a seven year dataset from the Australian Transport Safety Bureau. The data set relied upon in this analysis is the best available consistent data. During the extensive interview process with key industry, union, government and regulatory stakeholders Booz and Company and the NTC sought concurrence that this data set was accepted by the industry. This consultation revealed broad general acceptance of the use of these figures. During the course of the data collection process a wide range of sources, including the Australian Transport Safety Bureau, were asked to provide information. Despite these measures the data set used was the most complete information available.

It is acknowledged that seven years in a relatively short period for the ten year forecast, but the “best available data” principle was relied upon when deciding to use this information.

1.1.2 Safety improvement under option 4, a national rail safety regulator

The figure of 0.48% was initially chosen as the safety improvement factor based on the qualitative analysis undertaken. The rationale supporting this premium was the subject of much discussion between Booz and Company and the NTC to ensure it was the appropriate factor and was related to the qualitative analysis. The qualitative analysis found that substantial benefits would be realised under a single regulator that would not be delivered under any state-based model.

These benefits are considered to cover greater areas than administrative benefits.

Some of the additional benefits are:

1. an increase in “outward” facing resources, leading to higher levels of compliance, enforcement and safety promotion activities;
2. a consistency in resourcing dedication to rail safety in a manner that is based on risks. A national perspective would be applied reducing inter state variability in levels of resourcing; and
3. industry having the capacity to improve performance, through dedicating resources that currently manage the duplicated compliance burden of multiple regulators to focus on safety performance rather than administrative compliance.

It is noted that the qualitative analysis also identifies potential risks in transition to a single national regulator which could impact the assumption made regarding the safety improvement factor. However, provided the transitional and governance arrangements are addressed appropriately it is NTC and Booz and Company’s analysis that these risks would

not be realised under a single regulator. On the other hand the inherent risks of a state-based regulatory model— with duplication, variance in regulatory resourcing and procedures and a failure to reflect the operational reality of the rail industry—cannot be appropriately mitigated through good governance arrangements.

NTC and Booz and Company revised the safety improvement approach for the final draft regulatory impact statement, examining how different levels of safety improvement, represented here by reductions in the accidents and incidents on which national safety data is collected, influence the net present value for this option.

Evaluating the potential safety improvements from a national regulator begins with the base case (status quo). In the base case, there are 261 safety incidents per year. NTC and Booz and Company explore the possibilities arising from a national regulator reducing accidents and incidents by up to 10 per annum.

Figure 1 demonstrates the safety benefits of decreasing incidents from between one and ten incidents per year. As with the status quo projections, the safety improvement under each improvement scenario is extended over a ten year valuation horizon.

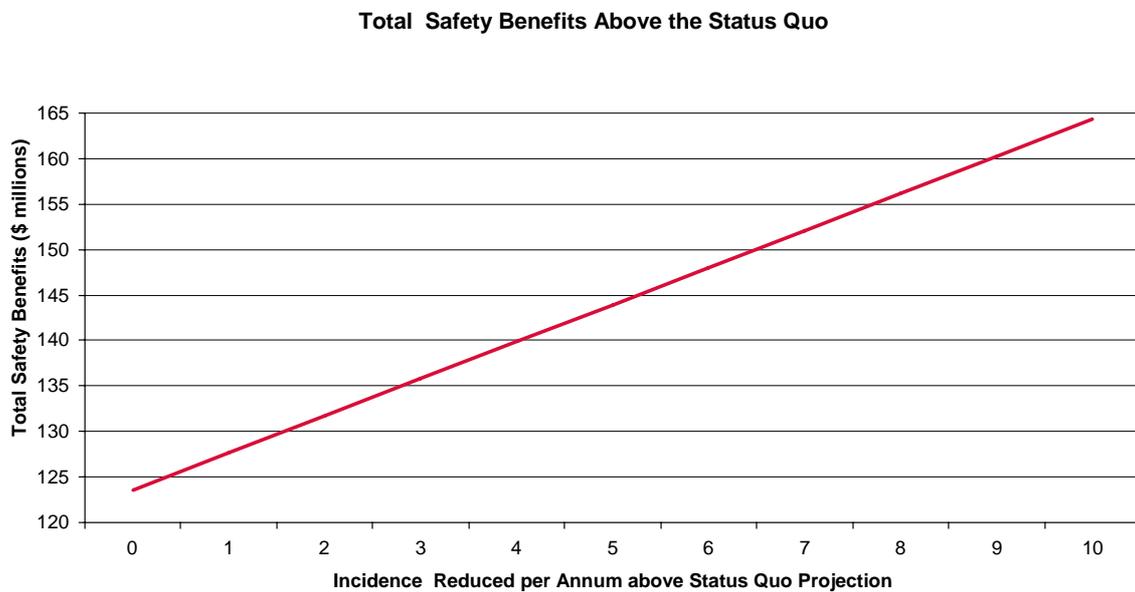


Figure 1. Benefits (\$) of safety improvement over status quo

The table above shows the total safety benefit for each additional incident reduced over the ten year period. The calculation which shows the benefits from reducing an additional incident is shown in Table 5.

NPV against Status Quo

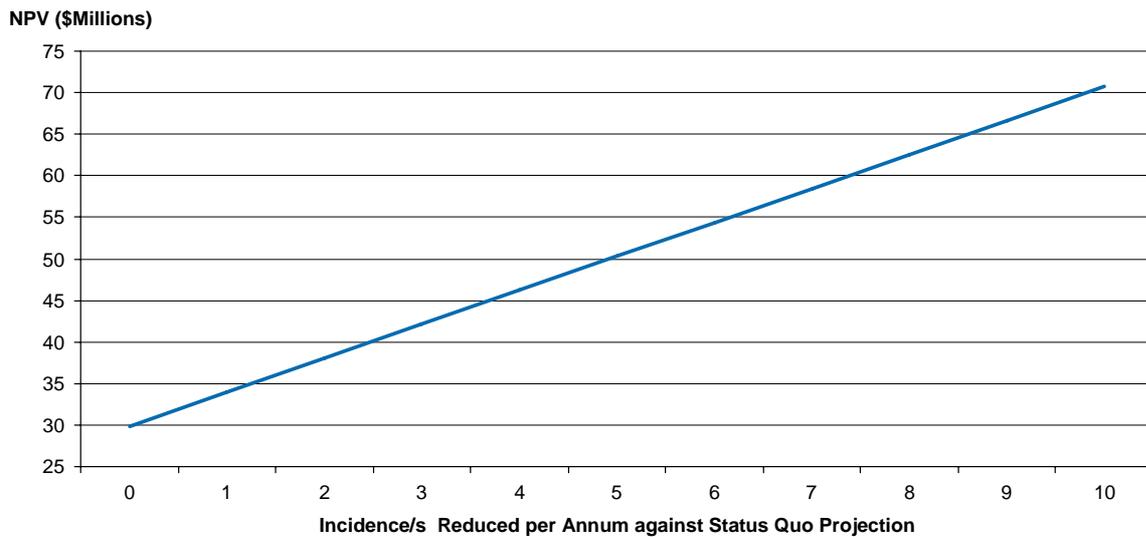


Figure 2. Net present value of safety benefits over status quo

The table above shows the net present value of safety benefits above the status quo for each additional incident reduced per annum. The calculation which shows the benefits from reducing an additional incident is shown in Table 5.

1.1.3 1.77% growth rate of track

The growth rate of track in the future was assumed to be twice the current growth rate of track of 0.88%. This assumption is based upon data from the report *Twice the Task – A review of Australia’s freight transport task*.

1.1.4 80% reduction in compliance costs (single national regulator)

The costs figure of 80% for the reduction in compliance costs under the single national regulator is a conservative estimate. Industry estimates would support a claim of a 100% reduction in these compliance costs and potentially higher, depending on the nature of the regulator.

The costs figure is not higher than 80% as it is a conservative assumption and it is still assumed that some costs will be encountered, especially for operators whose regulatory environment includes different environments. For example, a passenger operator who runs a metropolitan service, and also a long haul interstate passenger service, will need to satisfy a regulator in regard to both operating environments – including that they address the different risks that present in each environment. This can be argued as a duplicated process, even if it is undertaken by multiple staff from the same regulator. The 80% represents the NTC’s best conservative estimate of the reduction in compliance costs that would result from a single national regulator.

1.1.5 50% reduction in compliance costs (enhanced state-based option)

The figure of 50% for the enhanced state-based option is assessed as higher than the single regulator due to the different processes that are naturally undertaken by different organisations. These processes represent a compliance/administration burden that will continue to be borne by operators under the enhanced state-based option. Reduction in compliance costs results from mutual recognition as well as elimination of some processes

which currently represent a compliance/administration burden. The 50% reduction is the best estimate of these savings from the NTC and falls within the 5%-75% range cited in the Synergies Economic Consulting report.

1.1.6 Single national investigator setup costs

The analysis performed by Booz and Company on the rail safety investigator was a difficult process due to the lack of available data and the existence of 3 investigators—the ATSB and the New South Wales and Victorian State Based Regulators. This difficulty was compounded by both the state investigators being responsible for multi-modal transport safety investigations. Further to this the existing processes in other states do fund investigations, but in an ad hoc, responsive manner.

In general, the costs for investigators are comprised of staff salary (and on costs) from data provided by the three current investigators, for those staff committed to the safety regulation function. Additionally, office general administration overheads and training costs are factored into the yearly costs and are assumed to be 200% based on the data provided by the investigators. A full time equivalent growth rate of 0.88% is also assumed in line with the full time equivalent growth rate assumption made for regulator full time equivalent growth under the status quo.

1.2 Explanation of setup costs

1.2.1 Start-up costs of enhanced state-based regulator

The NTC has assumed start up costs of an enhanced state-based regulator at \$5 million. This includes the cost of a full time equivalent and overheads; however any estimate of the start up costs of such an enhanced state-based regulator will be subject to uncertainty due to the difficulty in estimating such costs. The NTC considers \$5 million a conservative figure for the set up costs.

1.2.2 Start-up costs of single national regulator

A cost of \$38 million has been factored in as the initial expenditure needed to set up a national regulator and get it operational. This number is based on rough estimates of the costs involved in the setup at inception of the New South Wales Independent Transport Safety and Reliability Regulator (ITSRR). This estimate was roughly \$5.5 million and covered:

- project team (eight people for nine months);
- office fit-out;
- recruitment, including selected executive search, advertising, agency short listing;
- initial induction and skills training;
- information technology data base (initial build only);
- records database;
- legal advice;
- legal advice for industrial changes; and

- strategic communication with industry.

Costs for the “transmission” of existing staff and their employment conditions would also be included in the transition to a single national rail safety regulator, as would costs associated with legislative changes.

Given the Independent Transport Safety and Reliability Regulator is the most resourced, and has the largest regulatory staff, it will be used as a model for each other jurisdiction for setup only. Applying this methodology equates to approximately \$38 million in nationwide setup costs. The single national investigator setup is assumed at approximately \$10 million.

1.3 Explanation of costs of regulation

1.3.1 Elimination of inter-jurisdictional costs of compliance

It is assumed that a certain portion of the inter-jurisdictional costs of compliance outlined in the Synergies Economic Consulting report is able to be eliminated. Under the enhanced state-based regulation option, this cost elimination is set at 50%. Figure 3 shows the effect on the net present value of the enhanced state-based option of varying this cost elimination assumption.

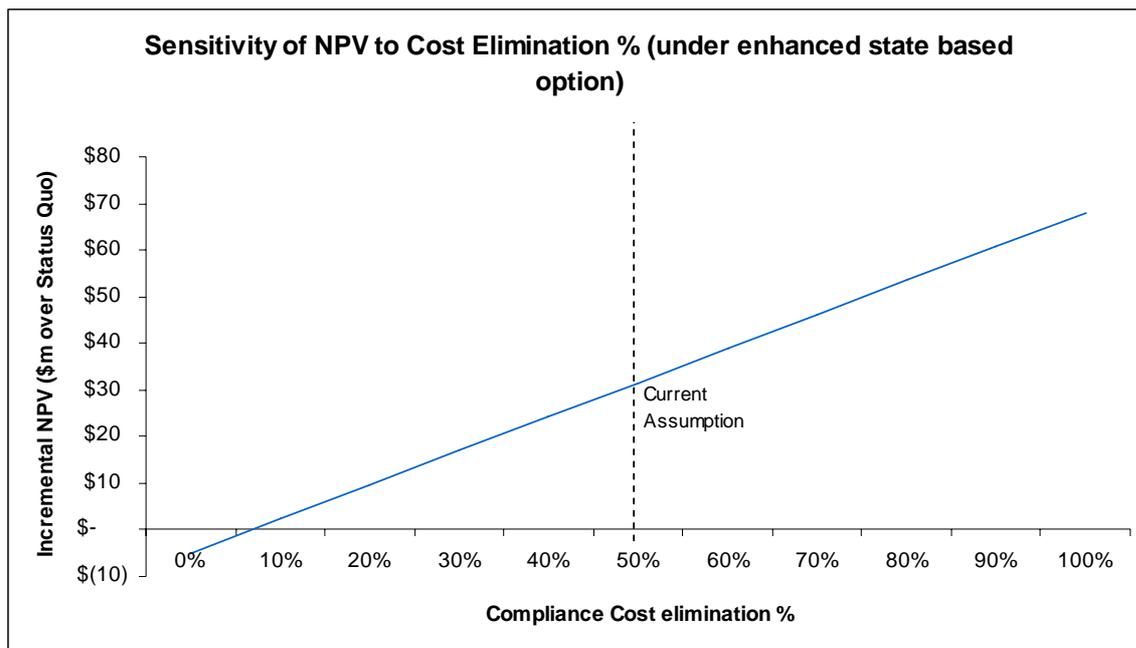


Figure 3. Net present value of the enhanced state-based regulation option under varied inter jurisdictional compliance cost elimination percentages

In a similar fashion, under the single national regulator option, it is assumed that 80% of inter jurisdictional costs of compliance can be eliminated. Figure 4 shows the effect on the net present value of the single national regulator option of varying this cost elimination assumption.

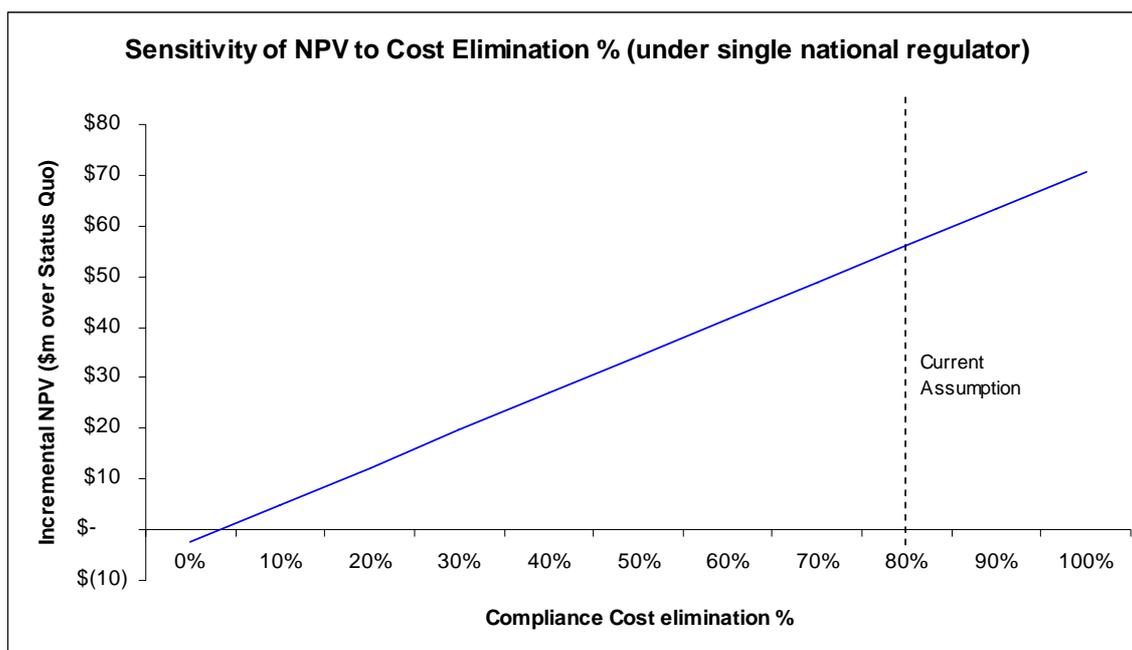


Figure 4. Sensitivity of net present value to compliance cost elimination %

As can be seen from both the above figures, the greater the proportion of costs eliminated, the greater the net present values. In a general sense, for every 10% of assumed compliance cost savings, there is a positive net present value benefit of approximately \$7million.

1.4 Explanation of cost recovery and full time equivalent estimates:

1.4.1 Cost recovery

The setting of cost recovery targets is an important policy issue that needs to be addressed during any process of changing a regulation system; however this task is beyond the scope of this analysis. Figure 5 below shows that the industry cost recovery break even point under the single national regulator is 68%. Given the appropriate recovery rate for a single national regulator remains to be determined; the model has been built based on a cost recovery assumption of 100% under the single national regulator setup. Important to note is that varying the cost recovery percentage has no effect on the overall net present value of the single national rail regulator option. This is due to the costs of administering rail regulation being offset by accreditation fees and revenue received from industry. For example, under a 100% recovery, regulation administration is offset by the exact amount of accreditation fees received from industry. Figure 5 (below) illustrates the costs transfer between regulators and industry under different cost recovery assumptions.

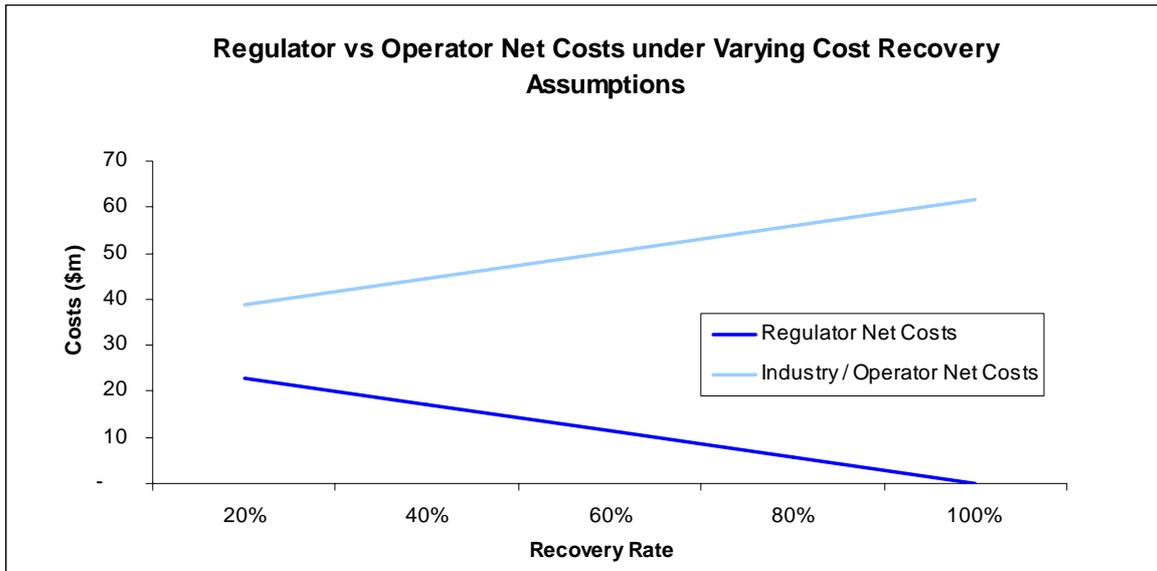


Figure 5. Regulator vs. operator costs of regulation (for first forecast year)

Whilst the overall net present value does not change as a result of the recovery rate assumption having no effect on net costs/benefits, there is a change in who bears the overall costs of regulation through the effect on the accreditation fees paid by operators. As was indicated above, Figure 6 shows that even taking into account the reduction in inter-jurisdictional costs of compliance that a single national model would bring industry, the overall costs borne by industry will actually be greater than the costs borne under the status quo at recovery rates of over approximately 68%.

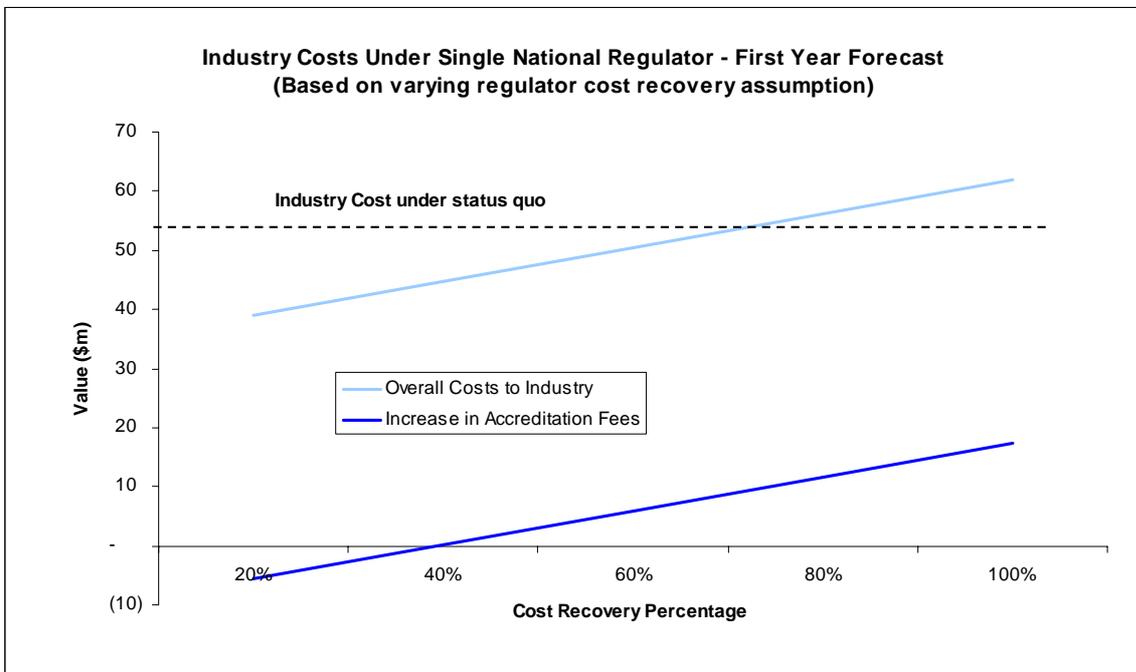


Figure 6. Industry costs and accreditation fees under varying cost recovery assumptions

In saying this, it is important to note that, as was discussed earlier, the single national regulator model would benefit industry in a number of ways (e.g. improved efficiency) which are difficult to quantify for the purposes of this analysis. As such, we would expect

that even at cost recovery rates of 100%, the overall benefits to industry of the single national regulator model would be highly likely to significantly outweigh the costs observed under the status quo.

1.5 Number of full time equivalents employed under a single national regulator

The total number of full time equivalents employed under a single national regulator, as previously discussed, has been assumed to be equal to the total number of current rail regulatory staff. Figure 7 shows the effect on the net present value of the single national regulator option of varying this resourcing assumption. In general, for every 5 additional staff members assumed, there is an approximate \$6million negative impact on the net present value of the single national regulator.

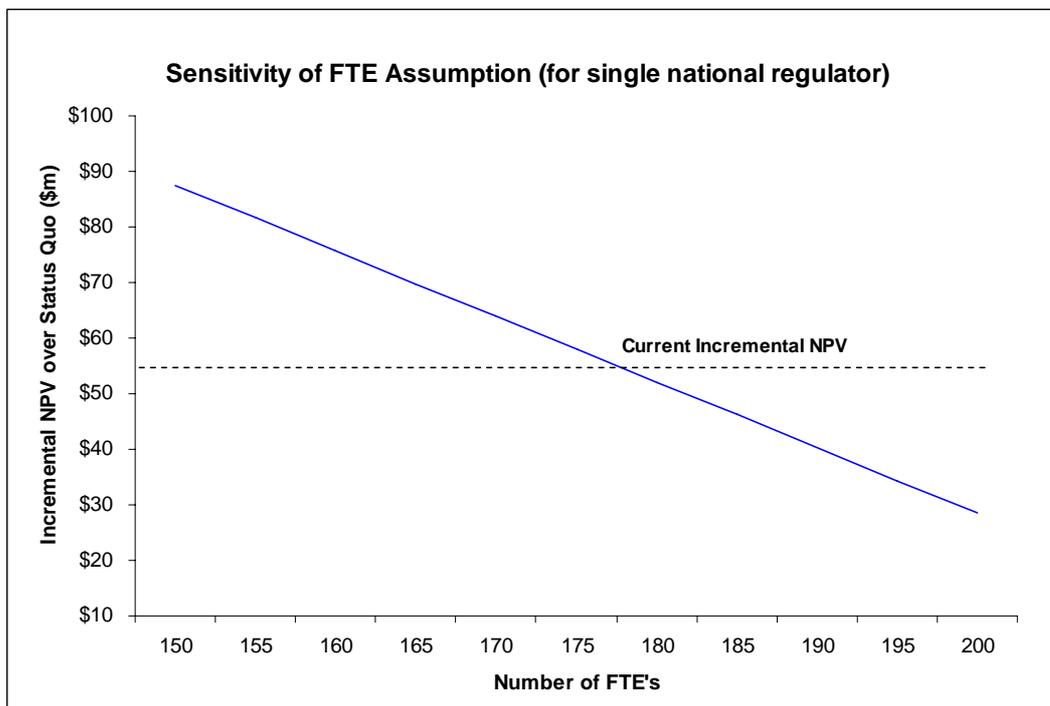


Figure 7. Net present value of the single national regulator option under varied full time equivalent assumptions

1.6 Full time equivalent growth rates

The historical growth rate in track km travelled over 2001-2008 equates to an approximate combined annual growth rate of 0.88%. Given the strong correlation ($r > 0.9$) that was observed between full time equivalent per jurisdiction and track activity per jurisdiction (measured in million train kilometres travelled), the full time equivalent growth rate is set at two times the historical growth rate (1.77% pa) in line with predicted growth in track activity for both the status quo and enhanced state-based options. The consultation process and expected growth in the rail freight task suggests that applying the historical growth rate moving forward would understate train activity over the forecast horizon, thus a factor of two has been used.

Under the single national regulator option, the full time equivalent growth rate has been set at 0.88% pa. This is due to the expectation that strong human resource related efficiencies will be achieved under this model, including better allocation and utilisation of available

resources. Additionally, further efficiencies in back room functions and shared services will inherently be achieved under this option moving forward, as a direct consequence of the single national regulator functioning as one organisation.

Figure 8 below shows the net present value effects of a variation in the growth rate assumptions. In general, smaller the growth rate differential between the single national regulator and the two other options, the lower the incremental net present value difference of the single national regulator relative to those options. At the same full time equivalent growth rate for all options (1.77%), the net present value of the single national regulator reduces by approximately \$9 million relative to both other options.

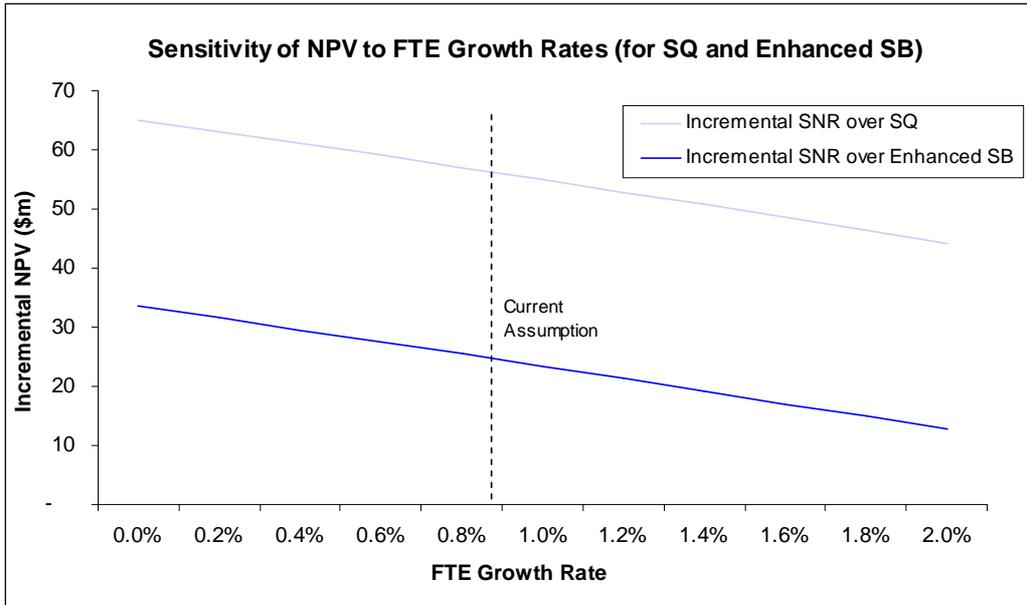


Figure 8. Net present value sensitivity to varied full time equivalent growth rates

1.7 Explanation of safety benefits

Table 4. Incidents used in quantitative analysis

| Yr # | Period | Running line derailment | Running line collision | Collision with rolling stock | Running line collision with person | Running line collisions with road vehicle | Level crossing collisions with person | Road vehicle collisions | Incidents | Total train km | Incidents per million track kilometres |
|------|---------|-------------------------|------------------------|------------------------------|------------------------------------|---|---------------------------------------|-------------------------|-----------|----------------|--|
| 1 | 2001/02 | 221 | 15 | 9 | 76 | 7 | 13 | 87 | 428 | 177.67 | 2.41 |
| 2 | 2002/03 | 218 | 17 | 5 | 53 | 11 | 11 | 73 | 388 | 175.21 | 2.21 |
| 3 | 2003/04 | 160 | 13 | 7 | 53 | 19 | 14 | 92 | 358 | 178.59 | 2.00 |
| 4 | 2004/05 | 167 | 13 | 13 | 54 | 20 | 8 | 72 | 347 | 182.90 | 1.90 |
| 5 | 2005/06 | 123 | 11 | 17 | 50 | 14 | 7 | 70 | 292 | 180.14 | 1.62 |
| 6 | 2006/07 | 133 | 16 | 7 | 41 | 16 | 9 | 74 | 296 | 180.83 | 1.64 |
| 7 | 2007/08 | 149 | 20 | 10 | 40 | 13 | 9 | 56 | 297 | 187.29 | 1.59 |

Sourced from ATSB Rail Safety Occurrence Data to 30th June 2008

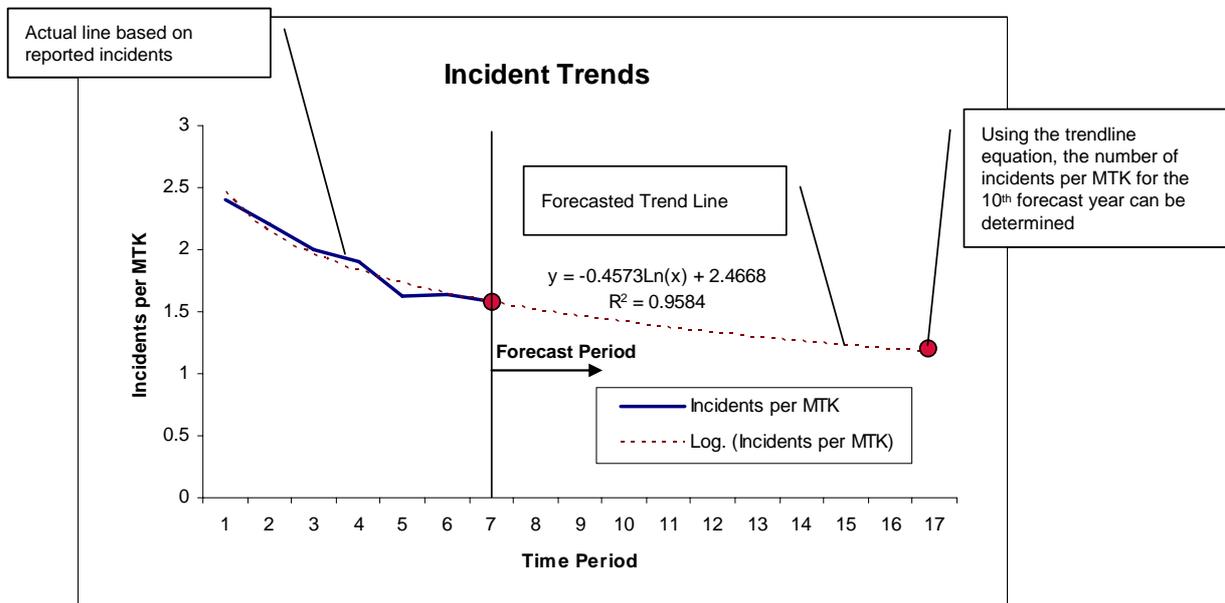
1.7.1 Derivation of the current safety improvement profile

Booz and Company plotted the incidents per million train kilometres for the last seven years based on the below table.

Following this, Booz and Company fitted a logarithmic trend line to the incidents per million train kilometres data for the last seven years.

Booz and Company then forecasted this trend line forward ten years, allowing Booz and Company to calculate the predicted incidents per million train kilometres for the tenth forecast year (year 17).

Figure 9. Derivation of the current safety improvement: incident trends



Booz and Company then applied two times the historical compounded annual growth rate (of approx 1.77%) in million train kilometres over the last seven years forward to predict the forecast million train kilometres in year 17 (2017/18). The consultation process and expected growth in the rail freight task suggests that applying the historical growth rate moving forward would understate train activity over the forecast horizon, thus a factor of two has been used. Booz and Company multiplied it by two due to the expected doubling of the freight task and greater rail mode share expectation moving forward (Twice the Task – A Review of Australia’s Freight Transport Tasks, 2006).

Booz and Company multiplied the forecast million train kilometres in year 17 by the year 17 incidents per million train kilometres to derive the actual number of incidents in year 17.

Forecast MTK (Yr 17) x Incidents per MTK (Yr 17) = Incidents in Yr 17

Knowing the incidents in year seven – the last year of available data (year seven = 2007/2008), and having calculated the incidents expected to prevail in the final forecast year (year 17), a compounded annual decline rate is calculated over the ten year forecast horizon. This is equal to -1.27%, and is the current safety improvement profile. This corresponds to a current reduction of 4 accidents per annum.

1.7.2 Calculation of safety benefits: methodology and tables

The cost of rail safety incidents in 1999 was divided by the number of rail safety incidents in 1999 (both pieces of data are sourced from BTRE Report 108: Rail Accident Costs in Australia (1999)) to give the cost per rail safety incident in 1999.

The Dec 1999 and Jun 2008 CPI figures were then used to adjust the cost per rail safety incident in 1999 to 2008 dollars.

Table 7. Costs and benefits summary

| | Status Quo | Enhanced state-based | Single National Regulator (low) | Single National Regulator (Medium) | Single National Regulator (High) |
|---|----------------------|----------------------|---------------------------------|------------------------------------|----------------------------------|
| Costs | | | | | |
| Setup costs | \$0 | \$5,000,000 | \$38,000,000 | \$38,000,000 | \$38,000,000 |
| Costs of regulating (regulators) | \$217,867,897 | \$217,867,897 | \$208,466,374 | \$208,466,374 | \$208,466,374 |
| Costs of regulatory compliance (Operators/Industry) | \$291,386,892 | \$254,834,507 | \$232,903,076 | \$232,903,076 | \$232,903,076 |
| Total Costs | \$509,254,789 | \$477,702,404 | \$479,369,450 | \$479,369,450 | \$479,369,450 |
| Benefits | | | | | |
| Safety benefits | \$608,828,715 | \$608,828,715 | \$614,955,835 | \$631,294,820 | \$645,591,433 |
| Total benefits | \$608,828,715 | \$608,828,715 | \$614,955,835 | \$631,294,820 | \$645,591,433 |
| Net present value | \$99,573,926 | \$131,126,311 | \$135,586,385 | \$151,925,370 | \$166,221,983 |
| Incremental NPV | | \$31,552,385 | \$36,012,459 | \$52,351,444 | \$66,648,057 |

Table 8. Regulator costs and benefits summary (over ten year horizon)

| | Initial Expenditure | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------------------|---------------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Status Quo | | | | | | | | | | | |
| Costs | | | | | | | | | | | |
| Regulator Costs | | 27,369,046 | 27,552,058 | 27,736,294 | 27,921,762 | 28,108,470 | 28,296,426 | 28,485,640 | 28,676,118 | 28,867,871 | 29,060,905 |
| Industry Costs | | 52,638,713 | 52,713,283 | 52,788,351 | 52,863,922 | 52,939,998 | 53,016,583 | 53,093,679 | 53,171,292 | 53,249,423 | 53,328,077 |
| Net Costs | | 80,007,759 | 80,265,341 | 80,524,645 | 80,785,684 | 81,048,468 | 81,313,009 | 81,579,319 | 81,847,410 | 82,117,293 | 82,388,981 |
| Benefits | | | | | | | | | | | |
| Safety Benefits | | 71,933,123 | 75,250,064 | 78,522,907 | 81,752,239 | 84,938,639 | 88,082,676 | 91,184,915 | 94,245,911 | 97,266,213 | 100,246,361 |
| Accreditation Fees Received | | 11,151,775 | 11,226,345 | 11,301,413 | 11,376,984 | 11,453,060 | 11,529,645 | 11,606,741 | 11,684,354 | 11,762,485 | 11,841,139 |
| Total Benefits | | 83,084,898 | 86,476,408 | 89,824,320 | 93,129,223 | 96,391,698 | 99,612,321 | 102,791,657 | 105,930,265 | 109,028,698 | 112,087,499 |
| Net Benefits / (Costs) | 0 | 3,077,139 | 6,211,067 | 9,299,675 | 12,343,539 | 15,343,231 | 18,299,312 | 21,212,338 | 24,082,855 | 26,911,404 | 29,698,518 |
| NPV | | \$105,403,725 | | | | | | | | | |
| Discount Rate | | 7% | | | | | | | | | |
| Enhanced State Based | | | | | | | | | | | |
| Costs | | | | | | | | | | | |
| Regulator Costs | | 27,369,046 | 27,552,058 | 27,736,294 | 27,921,762 | 28,108,470 | 28,296,426 | 28,485,640 | 28,676,118 | 28,867,871 | 29,060,905 |
| Industry Costs | | 47,434,475 | 47,509,045 | 47,584,114 | 47,659,685 | 47,735,761 | 47,812,345 | 47,889,442 | 47,967,054 | 48,045,186 | 48,123,839 |
| Net Costs | | 74,803,522 | 75,061,104 | 75,320,408 | 75,581,447 | 75,844,231 | 76,108,772 | 76,375,082 | 76,643,173 | 76,913,056 | 77,184,744 |
| Benefits | | | | | | | | | | | |
| Safety Benefits | | 71,933,123 | 75,250,064 | 78,522,907 | 81,752,239 | 84,938,639 | 88,082,676 | 91,184,915 | 94,245,911 | 97,266,213 | 100,246,361 |
| Accreditation Fees Received | | 11,151,775 | 11,226,345 | 11,301,413 | 11,376,984 | 11,453,060 | 11,529,645 | 11,606,741 | 11,684,354 | 11,762,485 | 11,841,139 |
| Total Benefits | | 83,084,898 | 86,476,408 | 89,824,320 | 93,129,223 | 96,391,698 | 99,612,321 | 102,791,657 | 105,930,265 | 109,028,698 | 112,087,499 |
| Net Benefits / (Costs) | 0 | 8,281,376 | 11,415,305 | 14,503,912 | 17,547,776 | 20,547,468 | 23,503,549 | 26,416,575 | 29,287,093 | 32,115,642 | 34,902,755 |
| NPV | | \$141,956,110 | | | | | | | | | |
| Discount Rate | | 7% | | | | | | | | | |
| Single National Regulator | | | | | | | | | | | |
| Costs | | | | | | | | | | | |
| Regulator Costs | 38,000,000 | 25,573,767 | 25,744,775 | 25,916,926 | 26,090,228 | 26,264,688 | 26,440,316 | 26,617,118 | 26,795,102 | 26,974,276 | 27,154,648 |
| Industry Costs | | 58,733,926 | 58,904,933 | 59,077,084 | 59,250,386 | 59,424,847 | 59,600,474 | 59,777,276 | 59,955,260 | 60,134,434 | 60,314,807 |
| Net Costs | 38,000,000 | 84,307,693 | 84,649,708 | 84,994,010 | 85,340,614 | 85,689,535 | 86,040,790 | 86,394,394 | 86,750,362 | 87,108,710 | 87,469,455 |
| Benefits | | | | | | | | | | | |
| Safety Benefits | | 73,197,410 | 77,738,700 | 82,196,908 | 86,573,556 | 90,870,135 | 95,088,109 | 99,228,918 | 103,293,972 | 107,284,658 | 111,202,336 |
| Accreditation Fees Received | | 25,573,767 | 25,744,775 | 25,916,926 | 26,090,228 | 26,264,688 | 26,440,316 | 26,617,118 | 26,795,102 | 26,974,276 | 27,154,648 |
| Total Benefits | | 98,771,177 | 103,483,474 | 108,113,834 | 112,663,784 | 117,134,823 | 121,528,425 | 125,846,036 | 130,089,074 | 134,258,934 | 138,356,984 |
| Net Benefits / (Costs) | (38,000,000) | 14,463,484 | 18,833,766 | 23,119,824 | 27,323,170 | 31,445,288 | 35,487,635 | 39,451,642 | 43,338,712 | 47,150,224 | 50,887,529 |
| NPV | | \$179,059,022 | | | | | | | | | |
| Discount Rate | | 7% | | | | | | | | | |

Table 9. Investigator costs summary (over ten year horizon)

| | Initial Expenditure | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------------------------|---------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Status Quo | | | | | | | | | | | |
| Costs | | | | | | | | | | | |
| Investigator Costs | | 2,194,114 | 2,208,785 | 2,223,555 | 2,238,424 | 2,253,392 | 2,268,460 | 2,283,629 | 2,298,899 | 2,314,271 | 2,329,746 |
| NPV | | (\$15,824,030) | | | | | | | | | |
| Discount Rate | | 7% | | | | | | | | | |
| Single National Investigator | | | | | | | | | | | |
| Costs | | | | | | | | | | | |
| Investigator Costs | 10,000,000 | 2,150,522 | 2,164,902 | 2,179,379 | 2,193,952 | 2,208,622 | 2,223,391 | 2,238,258 | 2,253,225 | 2,268,292 | 2,283,460 |
| NPV | | (\$25,509,645) | | | | | | | | | |
| Discount Rate | | 7% | | | | | | | | | |

APPENDIX 4: DATA SOUGHT FROM STAKEHOLDERS

This appendix below provides an outline of the data sought for this impact analysis and how this data was sourced.

The assessment of the costs and benefits of the proposed options is based on assessing the current activity of regulators and investigators and the costs to industry of these activities. Where it was possible stakeholders were asked to identify duplication costs or inefficiencies caused by the current system. Data from the stakeholders was also sought on quantifiable benefits that would accrue to rail safety if a single national system was adopted.

We sought data from five distinct groups:

- government;
- regulators;
- investigators;
- industry organisations; and
- operators.

Each of the identified stakeholder groups have different roles to play in the regulatory environment the data sought from each of these groups varied. The section below outlines the information that was sought from the various stakeholder groups.

1.1 Government

The information sought from government departments related to the overall annual rail safety budget allocation. government departments were asked to further break down between government owned rail operators, rail safety regulator, and within government departments on rail safety policy.

Information was also sought on government policy on rail accreditation fees, how these are currently charged, whether this is a full cost of regulation recovery basis and what the government's view would be on accreditation fees under a single national rail safety regulation and investigation framework. If full cost recovery was not the government's policy, the percentage breakdown of the accreditation fees recovered to the cost of providing the regulation was also requested.

Information was sought on the number of accredited rail operators and track managers in each jurisdiction and the number of staff and average per staff cost of the regulation and rail safety policy functions.

Governments were also asked, where possible, to provide the requested data on an annual basis and, where possible, for figures for last three successive financial years.

1.2 Regulators

The information sought from regulators related to their annual expenditure on rail safety regulation. This information was sought in relation to both costs incurred in regulating and activity data.

Some of the specific information sought from regulators included the number of staff employed, the average cost of full time equivalent staff member, and the organisational structure of the regulator. This input cost data was sought to ensure that wherever possible similar information was considered. This was due to the large differentials between the expenditure on rail safety regulation between the states and concerns identified by some jurisdictions about the cost per staff in other jurisdictions and the differentials between staff salaries and grading.

To ensure that appropriate consideration could be given to options two and three (the enhanced status quo) information was sought on how the staffing, structure and costs of regulation may change once the national model rail safety legislation is introduced. It should be noted that the introduction of the national model bill is a commitment that all governments have made and not all have met.

The data sought on activity of the regulator includes an estimate of the time spent on each of the major regulation activities – accreditation, compliance, investigation and training. The advice of the regulators was sought on whether data could be provided on the number of audits performed by the regulator, the average length of time (and number of staff involved) required for an audit as well as an overview of the accreditation process and an estimate of time taken for the accreditation of a urban passenger operator, a long distance passenger operator, a medium sized freight operator, and a track manager. In requesting this information we were mindful of views expressed by regulators regarding the different nature of audits undertaken (from annual full compliance audits to targeted audits) and the relationship of regulatory activity to the safety systems and operational maturity of operators.

Further information was also sought on the number of accredited rail operators and track managers, the number of staff, and average per staff cost of the regulation and rail safety policy functions within regulators.

Where possible the regulators were asked to provide this data on an annual basis for the last three successive years.

1.3 Investigators

The data sought from investigators related to their current annual expenditure on rail safety investigations. Specifically, investigators were asked for information on their number of staff and organisational structure, the average full time equivalent staff cost, the average cost per investigation undertaken, as well as the number of investigations undertaken per year. In the jurisdictions where there was not a specific investigator, information was sought relating to expenditure on investigations from regulators (both internally and through independent third parties) as part of their expenditure on rail safety regulation.

In requesting this information it was recognised that there are different levels of investigation undertaken. In order to gain a more detailed understanding of these types of investigation and the operations of the investigators, the states were asked for an explanation of the types of investigation and the average cost of each category of investigation.

An example of how this information was sought follows. The investigators were asked to clarify whether systemic investigations were undertaken in line with a statutory provision, whether accident investigations under a statutory provision were undertaken internally, or whether direct operators were directed to undertake investigations and provide reports to the investigators for their review and assessments of completed recommendations. Information was sought on the costs, or where this wasn't possible, for estimates, in each of the categories of investigation.

Where possible, the requested data were sought on an annual basis for the last three successive years.

1.4 Operators

The data sought from operators related to the business costs of complying with regulation and accreditation requirements. One focus of this is variations in the cost of complying with regulation and accreditation requirements to operators who are accredited in multiple jurisdictions. This information was sought to identify, where possible, the costs associated with different regulatory approaches and to assess whether the nature of the regulator, the various states rail system, or the operator could be seen to influence the costs of regulation.

To this end operators were asked to provide any information available to them on duplicated costs and functions to their business caused by multiple jurisdiction operations and having to comply with different regulatory requirements in each of these jurisdictions. To ensure the best information available is considered, operators were asked for as much detail as was available to them on these costs, including personnel, average full time equivalent costs, percentage of time spent on complying with regulation and accreditation requirements.

Information was also sought from operators on whether the costs of accreditation varies between jurisdictions, the nature of any variations in these charges and for their advice on whether these charges reflect the nature of their business or variations in policy/regulatory strategy between the jurisdictions.

To support our focus on activity and outputs, operators were asked for information on whether the operational costs of compliance with regulators requirements varies between jurisdictions (including the number of audits performed on their business [annual, six monthly, 24 monthly or otherwise] and an estimate of the costs to their business of these audits including personnel time in preparation and compliance).

Operators were also asked for data on whether they could quantify the savings that would flow to their business if there was single national rail safety regulation framework. This information was sought on whether the savings forecast would be achieved in comparison to the current costs incurred, or whether the expenditure could focus outward to operational safety performance rather than inward to regulatory compliance if a single national regulator was operating.

Other information that was sought, where available, related to current risk assessment processes, and whether these require variation and tailoring to meet the requirements of regulators. Advice as to whether the organisations risk profile, and regulatory compliance costs were likely to change once the national model rail safety legislation is enacted and whether this change could be quantified was also sought. The operator's perspective on the key drivers of economic performance improvement was also sought.

Where possible, the requested data was collected/available through annual figures for last three successive years.

1.5 Industry

The information sought from the industry related both to the current costs and potential saving to industry that would flow from a single national rail safety regulation and investigation framework. The Australasian Railway Association was asked for their views on whether there was economic data held in relation to the costs and benefits of the single national regulation and investigation framework.

To ensure that we gained as good an understanding on the case the Australasian Railway Association was putting forward in support of a single national rail safety regulator a series of detailed questions were put to the Australasian Railway Association. In their response the Australasian Railway Association provided a detailed submission and was generous with their offer of further assistance and assistance on obtaining information from the industry.

The information sought relates to whether there are data – reports, research, analysis – that provide an argument around the economic benefits (in terms of safety – number of incidents, activity – improved standards of operation, etc) that would flow from a single national regulation and investigation framework. The advice of the Australasian Railway Association on where this information may be found was also sought.

The data the analysis was designed to focus on from the industry were the approximate annual cost of meeting regulatory requirements for the rail industry including how this could be broken down by jurisdictions, what their understanding of the variation in spending between jurisdictions was, whether any variation between jurisdiction was based on the nature of the industry in that jurisdiction or the difference in regulatory requirements and the operation of the regulator.

To support the analysis of these data, information was sought on the number of staff in this industry whose primary role is to ensure compliance with accreditation standards and regulatory requirements amongst rail operators and track managers. To further inform the understanding of the industry from an operational perspective, information was requested regarding where staff were located, both physically and in the corporate structure, whether these staff work solely on safety and whether the duplication of functions occurs due to that nature of the operations of the companies or as a response to regulatory requirements.

As part of the quantitative analysis of the financial as well as the economic costs of rail safety regulation the industry was also asked to provide any data available on the likely cost savings to industry that would be achieved if there was a single national rail safety regulator. If possible a breakdown of these benefits by operator was sought.

Also, due to the importance of the qualitative arguments relating to the benefits that may be derived from a single national rail safety regulation framework (and a single national investigator) the industry was asked to clarify the benefits sought by the rail industry of a national rail safety regulator (other than costs).

Some of the other specific information sought from the industry related to: variations in access and accreditation fees between the jurisdictions; the principles sought from access and accreditation fees currently; and the Australasian Railway Association's view on appropriate for fee schedules under a single national regulator.

To ensure that the discussions remained focused on the task at hand the Australasian Railway Association's advice was requested on the essential principles a single national rail safety regulator should embody, bearing in mind the regulator would be implementing the national model rail safety bill in a co-regulatory manner.

Consistent with the other data gathering requests it was asked that, where possible, the requested data could be provided on an annual basis and for the last three successive years.

APPENDIX 5: GOVERNANCE AND TRANSITION ISSUES CONSIDERED IN ESTABLISHING NATIONAL SAFETY REGULATOR FOR OFFSHORE OIL AND GAS OPERATIONS

[Excerpted from http://www.nopsa.gov.au/downloads/Final_Communique_Sept02.pdf]

Recommendation

It is recommended that the Ministerial Council:

1. note that reviews of Australia's offshore safety regulatory regime have called for improvements;
2. note the work conducted by the Steering Committee working groups in response to the Terms of Reference agreed by the Standing Committee of Officials; namely on institutional form, legislative improvement and technical improvement;
3. endorse the recommendations of the Standing Committee of Officials namely:
 - i. That safety of offshore petroleum activities in Commonwealth and State/NT coastal waters should be regulated by a single national authority.
 - ii. That this authority be formed under legislation so that:
 - it is an independent statutory authority with a board, accountable to Commonwealth and State/NT Ministers either jointly and/or separately as individual jurisdictions require;
 - decisions on Board composition and membership, and the initial chief executive officer to the authority are undertaken by all participating governments;
 - Ministers' responsibilities are to be met by statutory requirement for their review of the Authority's performance.
 - iii. That the authority is set up so that it may, if jurisdictions wish to provide it with appropriate regulatory powers, undertake safety regulatory activities in other areas of State/NT jurisdiction.
 - iv. Consideration be given to including environment regulation [as required under the Commonwealth and State/NT P(SL)A] if agreeable to jurisdictions, and if this does not delay the commencement of the safety authority, and to progress this the Council give a direction to the Steering Committee to develop a process and a timetable to establish how this will be done. The Steering Committee to provide a report by 20 December 2002.
 - v. That effective and efficient coordination is established between the safety authority and other regulatory agencies.
 - vi. That the legislative Drafting Instructions to support the above be developed by the Steering Committee for Ministerial Council approval by end June 2003.
 - vii. That the authority's operations are fully funded on a cost recovery basis by an industry safety fee.

- viii. That a new fees agreement be developed by the Commonwealth and States/NT ensuring the amount DAs receive in revised industry fees, once the safety regulation function is transferred to the safety authority, is no less than they received during 2001-02 and determined on the basis of cost recovery principles.
 - ix. That an appropriate transitional plan which maintains the integrity of the current regime is implemented after agreement by all jurisdictions which minimises adverse impacts on staff, industry and regulatory responsibilities and liabilities to the DAs. The Commonwealth/States/NT agree to jointly take responsibility for managing the transition and any costs incurred by the States/NT on a cost sharing basis.
 - x. That the recommended priorities for improving the existing legislation and technical aspects of safety regulation as provided in the Working Group Reports be implemented as soon as practicable in parallel with the development of the statutory authority.
 - xi. That SCO provide six monthly reports to Ministerial Council on progress on implementing the technical and legislative improvements, and on the development of the statutory authority;
4. endorse the recommendations proposed by the Working Groups, including the proposed process for establishing the single national offshore safety authority by the end of 2004;
 5. endorse the formation of the national safety authority as a statutory authority under new provisions of the P(SL)A; and
 6. request the Standing Committee of Officials to provide a report to Ministerial Council by 15 October 2002 so that Council can decide, out of session, on the residual issue of whether the legal entity of the joint statutory authority should be established under Commonwealth legislation or under each of the Commonwealth/States/NT legislation.