Decision Regulation Impact Statement for National Harmonisation of Work Health and Safety Regulations and Codes of Practice

7 November 2011

safe work australia

ISBN978-0-642-33275-2 [PDF]

ISBN 978-0-642-33276-9 [RTF]

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Prepared with the assistance of Deloitte Access Economics for Safe Work Australia.

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Glossary

ABS	Australian Bureau of Statistics
ACCI	Australian Chamber of Commerce and Industry
ACT	Australian Capital Territory
ACTU	Australian Council of Trade Unions
AI GROUP	Australian Industry Group
APVMA	Australian Pesticides and Veterinary Medicines Authority
ASCC	Australian Safety and Compensation Council
BCR	Benefit cost ratios
CBA	Cost benefit analysis
COAG	Council of Australian Governments
CTH	Commonwealth
DALY	Disability adjusted life year
DFD	Department of Finance and Deregulation
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
HSR	Health and safety representative
HWSA	Heads of Workplace Safety Authorities
IGA	Intergovernmental Agreement for Regulatory Reform and Operational Reform in Occupational Health and Safety
LSIG	Licensing Standard Implementation Group
MHF	Major hazard facilities
MSDS	Material safety data sheet
NCIS	National Coronial Information System
NDS	National Data Set
NOHSC	National Occupational Health and Safety Commission
NPV	Net present value
NSW	New South Wales
NT	Northern Territory
OASCC	Office of the Australian Safety and

	Compensation Council
OBPR	Office of Best Practice Regulation
OHS	Occupational health and safety
PCB	Polychlorinated biphenyls
PCBU	Person conducting a business or undertaking
PPE	Personal protective equipment
QLD	Queensland
RCD	Residual current devices
RIS	Regulation Impact Statement
RTO	Registered training organisation
SA	South Australia
SDS	Safety data sheet
SIG-OHS	Strategic Issues Group for occupational health and safety
SME	Small and medium enterprise
TAG	Temporary Advisory Group
TAS	Tasmania
UK	United Kingdom
VET	Vocational education and training
VIC	Victoria
VSLY	Value of a statistical life year
WA	Western Australia
WHS	Work health and safety
WRIS	Work-related injury survey
WRMC	Workplace Relations Ministers' Council

Executive Summary

Why national harmonisation of work health and safety laws?

The harmonisation of work health and safety legislation is part of the Council of Australian Governments (COAG) National Reform Agenda. COAG agreed through an *Intergovernmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* (IGA) that work health and safety harmonisation would be achieved through national uniformity of the current work health and safety legislative framework in Australia. The IGA included a commitment to implement the new harmonised framework by 1 January 2012.

The IGA states that the fundamental objective of work health and safety reform is to produce the optimal model for a national approach to work health and safety regulation and operation which will:

- enable the development of uniform, equitable and effective safety standards and protections for all Australian workers
- address the compliance and regulatory burdens for employers with operations in more than one jurisdiction
- create efficiencies for governments in the provision of work health and safety regulatory and support services, and
- achieve significant and continual reductions in the incidence of death, injury and disease in the workplace.

The harmonisation of work health and safety legislation is part of the COAG National Reform Agenda aimed at reducing regulatory burdens and creating a seamless national economy. These reforms aim to deliver more consistent regulation across jurisdictions and to reduce excessive compliance costs on business. They also aim to reduce restrictions on competition and distortions in the allocation of resources in the economy. The harmonisation of work health and safety legislation is intended to contribute to:

- creating a seamless national economy through reducing costs incurred by business in complying with unnecessary and inconsistent regulation across jurisdictions
- enhancing Australia's longer-term growth and improving workforce participation and overall labour mobility
- expanding Australia's productive capacity over the medium term through competition reform and enabling stronger economic growth
- improving compliance for multi-state businesses
- assisting the development of future work health and safety regulations and Codes of Practice as knowledge regarding practices improves
- the smoother transition of goods and equipment between jurisdictions, and
- the transfer of processes between jurisdictions.

Work health and safety harmonisation has four components:

- harmonisation of principal work health and safety Acts
- harmonisation of work health and safety regulations
- development and adoption of Codes of Practice, and
- nationally consistent compliance and enforcement policies.

The objectives of harmonising work health and safety regulations are as follows:

- **Reducing compliance costs for business**. For multi-state businesses, nationally consistent Acts should equate to lower compliance costs. For single-state businesses, the outcome is not clear.
- **Improving efficiency for regulatory agencies**. Rather than having 10 regimes being reviewed every five years, there should effectively only be one national regime reviewed every five years.
- **Improving safety outcomes**. The reduction of red tape and greater certainty for duty holders should allow businesses to focus more on health and safety improvements rather than on mere compliance. Regulatory efficiencies should also allow more scope for regulators to actively improve safety in workplaces. The model Work Health and Safety (WHS) Act applies to a broader range of modern employment relationships and aims to protect all types of workers from hazards and risks arising from work.

Model WHS Regulations and Codes of Practice assist with the harmonisation of work health and safety legislation. The model WHS Regulations support the model WHS Act by setting out mandatory obligations on specific matters. These regulations are written in terms of processes or outcomes that persons conducting a business or undertaking (PCBU) must follow or achieve to meet their general duties under the Act in relation to these matters. The work health and safety Codes of Practice provide practical guidance to support the model WHS Act and model WHS Regulations and have evidentiary status. Non-compliance with Codes of Practice does not in the first instance constitute a breach of the work health and safety legislation.

The process to harmonise work health and safety laws

The first step in this process was the development of a model WHS Act. In December 2009, the Workplace Relations Ministers' Council (WRMC) agreed to the model WHS Act. This was accompanied by a Decision Regulation Impact Statement (RIS).

The Decision RIS for the model WHS Act evaluated options and recommended the adoption of the model WHS Act.

In general the findings in this Decision RIS are consistent with the findings of the Decision RIS for the model WHS Act, which indicated that:

- in terms of reducing compliance costs for business, the model WHS Act could reduce compliance costs for business and have benefits of around $179 million per annum

- while dealing with multiple work health and safety regimes does impose significant costs on a number of businesses, only a small proportion of businesses are affected
- the costs to multi-state businesses of introducing the model WHS Act were unlikely to be greater than the costs of ongoing changes under disparate jurisdictional regimes were the model WHS Act not to be introduced
- for single-state businesses, most jurisdiction-specific changes were considered cost neutral or cost saving in aggregate but that individual businesses may experience significant cost increases
- for small businesses, it was considered that having the same set of harmonised laws would provide less complexity and confusion but again some individual businesses may face significant cost increases
- costs to government are not likely to be substantial as jurisdictions are continually improving their training material, compliance and reporting requirements and that benefits to government were likely to be more significant in the long term, and
- the reduction of red tape and greater certainty for duty holders should allow business to focus more proactively on health and safety improvements rather than compliance. There would also be more scope for regulators to actively improve safety in workplaces.

The subsequent development of model WHS Regulations and Codes of Practice is an important element of the harmonised regulatory framework and will assist PCBUs to manage risks and fulfil their primary duty of care under the model WHS Act.

This Decision RIS focuses on the model WHS Regulations and first stage Codes of Practice package that will support the model WHS Act. It informs business, governments and workers about the model WHS Regulations and Codes of Practice, and the potential impacts of the anticipated changes. A further analysis of the actual impacts will be conducted in 2015.

This Decision RIS provides an assessment of the impacts of adopting the model WHS Regulations and Codes of Practice (Option 2) relative to retaining the status quo (Option 1).

Consultation

Significant consultation was undertaken during the development of the model WHS Regulations and first stage Codes of Practice.

Five Safe Work Australia Members' meetings involving representatives of government, employer and employee organisations were held to progress the harmonisation of the work health and safety framework in Australia. Twenty-seven Strategic Issues Group for Occupational Health and Safety (SIG-OHS) meetings were held and consultative forums with Australian Chamber of Commerce and Industry (ACCI), the Australian Industry Group (Ai Group), the Australian Council of Trade Unions (ACTU) and their members and affiliates were also undertaken. The release of the Consultation RIS provided an opportunity for consideration of 1343 public submissions as well as feedback from focus groups in all states and territories and an online survey.

This Decision RIS details all the subject areas that are included in the package of model WHS Regulations and first stage Codes of Practice. It also analyses the key issues raised during public consultation.

Safe Work Australia considered all the issues raised during public consultation and has responded by making revisions to the draft model WHS Regulations and, where appropriate, the accompanying Codes of Practice.

Key matters raised in the Consultation RIS have been actioned as follows:

- noise – audiometric testing was added to the model WHS Regulations and is required where the noise level exceeds the noise standard and requires workers to frequently wear hearing protection
- falls – keeping records of administrative controls used for heights over two metres has been removed
- abrasive blasting – specific regulations have been removed and requirements placed in a Code of Practice
- electricity – residual current devices (RCD) requirements have been amended and a 12 month transition period will apply as appropriate. Retrofitting RCDs will not be mandatory except in hostile operating environments. RCDs may also be permanent or portable
- diving – mandating of AS/NZS2299.1 for high risk diving work, including construction diving
- plant item registration – removal of annual notification and replacement with a registration process now required every five years
- construction – principal contractor duties threshold was increased to $250 000
- construction – five-day excavation notification to the regulator was removed
- hazardous chemicals – amended to only require classification to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), and
- major hazard facilities (MHF) – streamlined registration and licensing requirements to reduce the administrative burden.

The revised package of model WHS Regulations and Codes of Practice was then analysed for its impact on single and multi-state firms, workers, government and society.

The model WHS Regulations will reduce differences across jurisdictions at the legislative level. In most cases the model WHS Regulations do not significantly depart from the general structure and content of existing regulations because many of the regulations were based on National Standards and National Codes of Practice. The model WHS Regulations consolidate existing elements in a more consistent manner.

During consultations, substantial benefits of harmonisation were seen to be granted to businesses that operate across multiple jurisdictions. Employers were concerned that the complexity of interactions between the model WHS Act, model WHS Regulations and Codes of Practice could give rise to apparent or actual inconsistencies. Employers were also concerned that while these three levels of paper governance were being harmonised, perceived differences in approach to compliance and enforcement between jurisdictions may undermine this progress. There was also concern that some

regulations are too prescriptive rather than providing a framework, which may create a focus on paper compliance and diminish the flexibility to develop what is best for any particular workplace.

While feedback during consultations suggests that implementation of the model WHS Regulations has some risks, this is not a reason to avoid moving forward.

The primary method for assessing the impacts of harmonisation has been qualitative in nature, largely based on consultations and feedback from various stakeholders including regulators, business (small and large) and a large number of submissions.

While monetary values of impacts are estimated and an appropriate sensitivity analysis is undertaken, these results should be treated with some caution given the uncertainties associated with estimating changes in work health and safety benefits. Greater weight should be given to the general direction that the estimates suggest is the likely outcome from these reforms. The main costs and benefits are discussed below.

The impact of having national harmonised work health and safety laws

From an international perspective, Australia's work-related fatality rates are above some of the best performing countries. In recent years, Australia's incidence rates have generally decreased at a greater rate than the incidence rates of the best performing countries. More importantly, the trend in lower incidence rates is evident across all jurisdictions in Australia. Nevertheless, differences in incidence rates remain between jurisdictions and industries and Australia aspires to even better work health and safety outcomes.

As a small and open economy, there is a need for the most efficient work health and safety regulation to be considered and implemented at the national level. Nationally, the benefits will be realised by changes that maximise health and safety outcomes while delivering good business practices and community outcomes, better regulation and increased productivity.

Existing jurisdictional work health and safety regulations are broadly similar in design and intent and may have a broadly similar impact on business and the wider community across jurisdictions. It is often difficult to identify the jurisdictional regulations that could maximise work health and safety outcomes across all jurisdictions while at the same time minimise compliance and implementation costs. These similarities drive down the overall net benefit as transitional costs are not as easily offset, at least in the short term, given the current performance of Australian jurisdictions.

Given the similarities of the existing jurisdictional regulatory approaches, this is primarily a harmonisation exercise. It is expected to deliver lower compliance costs, especially for businesses that operate across multiple jurisdictions, and minimise regulators' costs while maintaining high standards of work health and safety. Harmonisation of work health and safety regulations is estimated to provide an overall economy-wide net benefit. Within this overall result there will be costs and benefits associated with a number of the proposed changes and the distribution of these will differ across businesses, jurisdictions and sectors.

An example where a proposed model WHS regulation reflects existing jurisdictional regulatory approaches is the proposed hazardous atmospheres regulation. It is expected that there will be no significant impact of the proposed regulation on business practices as it is consistent with existing requirements in regulations and Codes of Practice in all jurisdictions. There may be improvement in certainty for businesses operating in multiple jurisdictions, which is likely to have compliance cost benefits due to their size.

There may be transitional costs of compliance with new regulations for businesses. For example the model WHS Regulations for RCDs propose the requirement for RCDs to be installed in hostile operating environments. As this is not the current practice in Victoria, Tasmania and the ACT, this has the potential to be an additional requirement for businesses operating in these jurisdictions. It should be noted that some businesses may already have RCDs operating on their premises and therefore not incur additional costs.

While there will be a need for adjustment as a result of the new laws, the expected aggregate benefits in terms of lower administrative requirements, regulatory duplication, improved efficiency and improved work health and safety outcomes are greater than the costs of implementing the model WHS Regulations.

Some proposed regulations for some jurisdictions propose new requirements. For example, the model WHS Regulations for asbestos will provide, for the first time in Australia, a consistent framework for the management of asbestos materials in workplaces, the removal of asbestos, and the licensing and competencies for asbestos removalists and assessors. These reforms deliver substantial benefits in the long run in terms of reduced risk and exposure to asbestos in the workplace and consequent improved health outcomes. The long-term benefits of averting asbestos-related diseases are not costed in this RIS analysis.

While there will be one-off implementation costs, the quantitative analysis undertaken at the national level for adopting the model WHS Regulations indicates net benefits (i.e. after implementation costs) of around $250 million per annum to the Australian economy over each of the next 10 years. This estimate does not include expected productivity benefits. While noting the difficulties in estimating the productivity benefit, a reasonable conclusion would be that the reforms will provide a positive and meaningful productivity benefit. Specific figures were excluded from the quantitative analysis, largely due to the difficulties in providing a sufficiently robust estimate. Based on a review of the analysis in this RIS, productivity improvements in the order of $1.5 billion to $2 billion per annum over the next 10 years are considered likely.

Multi-state businesses are expected to benefit from harmonisation by approximately $80 million per annum. They will gain both compliance costs savings and expected work health and safety outcomes over the next decade. While these businesses face initial adjustment costs, the compliance and safety benefits are expected to be considerably greater and this is before productivity benefits are even considered.

It is expected that single-state firms and small businesses will face a net cost of $3.27 per worker per annum (or about $27 million per annum). This is clearly outweighed by the net benefit to society of $21.48 per worker per annum (or about $250 million per annum), before any productivity gains are taken into account.

Workers are not expected to face any initial adjustment costs as a result of the adoption of the model WHS Regulations and, like businesses, are expected to benefit from improved work health and safety outcomes.

Government regulators, and society in general, will face initial adjustment costs but the ongoing benefits, largely as a result of expected lower costs associated with workplace injury and illness, are likely to offset these costs. Overall, the expected aggregate benefits in terms of lower administrative burden, reduced regulatory duplication, improved efficiency, and improved work and safety outcomes are greater than the considerable costs of implementing the model WHS Regulations.

Some submissions expressed concerns about the application of the model WHS Regulations to not for profit organisations. Organisations that have both volunteers and paid employees, however will not be classified as 'volunteer associations'. Volunteers in these organisations will need to be afforded the same work health and safety rights and responsibilities as paid employees. While many of these organisations currently provide work health and safety duties of care to volunteers as part of their duty of care to their paid employees, under the reform these organisations will need to specifically address these concerns for volunteers. Some not for profit organisations will face additional compliance requirements.

The preferred option

Option 2 – adoption of the work health and safety reforms – is the preferred option for this Decision RIS because:

- it achieves the objectives of work health and safety laws harmonisation as determined by COAG
- the safety benefits of harmonisation exceed the compliance costs, and
- the long-term return to the national economy significantly exceeds the one-off cost of implementation of the new laws without taking into account the expected productivity benefits of the reforms.

1 Introduction

In July 2008, COAG formally committed to the harmonisation of work health and safety legislation by signing an IGA.

The IGA outlines the commitment of the Commonwealth, states and territories to work together to develop a nationally consistent harmonised framework for work health and safety laws. These laws would take the form of a model WHS Act, model WHS Regulations and model Codes of Practice. In signing this agreement each jurisdiction committed to implementing the new harmonised framework by 1 January 2012.

The IGA also provided for the establishment of a new independent body to progress the development of the model work health and safety legislation. The WRMC endorsed the creation of Safe Work Australia on 3 April 2009.

Safe Work Australia was formally established on 1 July 2009. It was given a primary focus to progress the harmonisation of model work health and safety laws in partnership with the Commonwealth, states and territories, employer and worker representatives, who are all members of Safe Work Australia.

Safe Work Australia has overseen the development and implementation of the model legislation which includes the model WHS Act, model WHS Regulations and Codes of Practice.

On 11 December 2009 WRMC endorsed the model WHS Act subject to some technical and drafting revisions. This included endorsement of a Decision RIS that concluded that the model WHS Act could have net benefits of around $179 million per annum.

The development of model WHS Regulations and Codes of Practice in support of the model WHS Act is an important element of the regulatory framework. In many cases the regulations provide greater specificity of the factors to be controlled to enable duty holders to manage risks and fulfil their primary duties.

On 2 December 2010 Safe Work Australia Members agreed to release an exposure draft of the model WHS Regulations and first stage Codes of Practice for public comment for a period of four months from 7 December 2010 to 4 April 2011. The exposure draft was accompanied by a discussion paper. A further package of Codes of Practice will be made available for public comment later in 2011.

On 10 January 2011 Safe Work Australia released a Consultation RIS for the National Harmonisation of Work Health and Safety Regulations and Codes of Practice for public comment. This document was prepared by Access Economics on behalf of Safe Work Australia. A total of 1343 submissions were received during the public comment period on the draft model WHS Regulations and Codes of Practice and the development of the Consultation RIS. Submissions received from individuals totalled 836, while 507 were received from organisations.

Safe Work Australia reviewed all the public submissions received. The information gathered during this process was considered in making further amendments to the

package of model WHS Regulations and Codes of Practice and to develop this Decision RIS.

This Decision RIS has been prepared in accordance with the *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies* (COAG 2007).

1.1 Regulation Impact Statement process

WRMC is required by COAG to conduct a regulatory impact analysis for agreements or decisions of a regulatory nature. The development of a COAG RIS is a two-stage process involving the preparation of a Consultation RIS and a Decision RIS.

The purpose of a Consultation RIS is to advise the regulatory options for consideration and gather information to inform the cost benefit analysis (CBA) to be undertaken in the Decision RIS.

A Decision RIS uses the information gathered during the public comment phase that is both qualitative and quantitative to develop a CBA that assesses the costs and impacts associated with the proposed regulatory changes. It makes conclusions as to whether regulations are necessary and if so, what the most effective regulatory approach might be.

1.2 Purpose of this Decision Regulation Impact Statement

This Decision RIS provides a detailed analysis of the proposed regulatory changes to the work health and safety legislative framework in Australia as a result of the proposed introduction of model WHS Regulations and first stage Codes of Practice in support of the model WHS Act. It takes into account the submissions received in the public consultation undertaken and assesses the overall costs and impact on Australian governments, industry and the community in implementing harmonised model WHS Regulations and first stage Codes of Practice in support of the model WHS Act. This Decision RIS is intended to complement the process that was completed for the model WHS Act and is not intended to cover those matters already covered by the Decision RIS for the model WHS Act.

Many of the provisions that are addressed in the model WHS Regulations or Codes of Practice have previously been the subject of agreement through policy arrangements under the Australian Safety and Compensation Council (ASCC) or the National Occupational Health and Safety Commission (NOHSC). This includes National Standards and Codes of Practice for which RIS processes have been undertaken. It is not proposed to revisit those issues nor the policy decisions for which a RIS has previously been completed.

Codes of Practice are developed to provide practical guidance in support of the model work health and safety legislation on how to implement provisions that are contained within the model WHS Act or model WHS Regulations.

Codes of Practice are not mandatory and if the PCBU can find an equivalent means of providing the same level of health and safety as provided for in the Code of Practice then that is an acceptable course of action. Codes of Practice do, however, have evidentiary status in court and are subject to the RIS process.

1.3 Report structure

The remainder of this Decision RIS is structured as follows:

- Chapter 1 provides an explanation of key decisions leading up to development of the model WHS Regulations and Codes of Practice, the process and purpose of the Decision RIS.
- Chapter 2 outlines the problem that the harmonisation of work health and safety legislation and regulation is seeking to address and provides an overview of current work health and safety legislation.
- Chapter 3 describes the objectives of the work health and safety reforms and outlines the current process of harmonising work health and safety regulations and Codes of Practice, the inconsistencies that exist under the current system and how the harmonisation process aims to address these.
- Chapter 4 presents the options on which the Decision RIS is based in the context of the model WHS Act.
- Chapter 5 provides information on the public consultation process.
- Chapter 6 details the key changes made in the model WHS Regulations package, the key issues raised during public comment and Safe Work Australia's response, and analysis of the impacts at the firm and jurisdiction level.
- Chapter 7 provides a national impact analysis of the proposed changes based on a qualitative assessment, public consultations and a survey undertaken by Deloitte Access Economics.
- Chapter 8 outlines the implementation process for the model WHS Regulations.
- Chapter 9 sets out the review provisions planned for evaluation of the implementation of the model WHS Regulations and Codes of Practice.
- Chapter 10 concludes and provides the recommended option.
- Appendices A, B, C, D, E and F:
    - Appendix A outlines Australia's work health and safety performance and trends in workplace injury and incidence rates in Australia.
    - Appendix B outlines the history of work health and safety harmonisation in Australia.
    - Appendix C reviews the relevant literature and in particular the RIS processes that have been undertaken related to the model WHS Regulations and Codes of Practice.
    - Appendix D provides a copy of the survey distributed to over 4500 firms and a summary of results.

- Appendix E provides sensitivity analysis of the national impacts discussed in Chapter 7.
- Appendix F contains the bibliography.

2 Statement of the problem

2.1 Background

All Australian work health and safety legislation is based on the same set of principles known as the Robens model. This model was adopted in the 1970s in a period of widespread reform following recommendations made by the Robens Committee in the UK (Lord Robens 1972). With the adoption of the Robens model Australian work health and safety laws changed in focus from detailed, prescriptive standards to a more self-regulatory and performance-based approach.

While similar in intent, there are differences in how the Commonwealth and each state and territory has interpreted these recommendations. Considerable variances in content continues to exist between jurisdictions, particularly in regard to duties of care, consultation and risk control mechanisms, record keeping, reporting, compliance regimes and penalties.

Over the last 20 years there has been significant work undertaken at the national level to make the application of work health and safety regulations more consistent by developing National Standards and National Codes of Practice. However there has not been a binding obligation on jurisdictions to adopt these National Standards and Codes of Practice. Adoption of National Standards has been inconsistent and some jurisdictions have reworked the clauses and definitions of a National Standard to align with their respective work health and safety legislation.

Although competitive federalism can drive innovation in regulation, differences across jurisdictions can impose costs to businesses operating in multiple work health and safety environments. Multiple regulatory regimes are a cost to government due to duplication and inefficiencies in the provision of policy and regulatory and support services. As Australia is a small and open economy, there is a need for the most efficient work and safety regulation to be considered and implemented at the national level. The need for the Australian economy to remain internationally competitive means that reform should be realised in a least cost manner. Nationally, the benefits will be realised by regulation that maximises health and safety outcomes while delivering good business practices and increased productivity.

In response, Australian governments through COAG have committed to harmonising work health and safety laws through the development of a model WHS Act, model WHS Regulations and model Codes of Practice and a policy dealing with compliance and enforcement of the model legislation.

2.2 Overview of current work health and safety arrangements

The Commonwealth, states and territories currently have responsibility for making and enforcing their own work health and safety legislation.

Jurisdictions have taken a broadly similar approach to regulating for safer workplaces, including:

- a principal work health and safety Act codifying common law duties of care
- detailed regulations and Codes of Practice, and
- a system of education, inspection, advice, compliance activities and where appropriate, prosecution.

With nine different jurisdictions, there are multiple laws relating to health and safety in the workplace. These include 10 specific work health and safety statutes comprising six state Acts, two territory Acts and two Commonwealth Acts including Seacare and over 50 legislative instruments applying to other activities.

Australia's work-related fatality rates are among the best performing countries. Australia's incident rates over recent years have generally decreased at a greater rate than other best performing countries. Appendix A outlines Australia's work health and safety performance.

In addition, there are differing regulatory bodies and structures, inspectorate regimes and legislative content. Multiple work health and safety regimes increase the costs borne by governments, while economies of scale and scope may be achieved through shared production of work health and safety policy across the jurisdictions (Quigley 2003).

Other issues associated with multiple work health and safety regimes include the following:

- inconsistent safety standards across jurisdictions lead to confusion and complexity which have negative impacts on the safety of workers
- inconsistent safety standards across jurisdictions cause confusion, complexity and duplication for some businesses
- inconsistent record keeping, notification and reporting requirements across jurisdictions for identical safety hazards lead to complexity and considerable administrative burdens
- similar breaches in different jurisdictions are subject to different enforcement activities and significantly different penalties
- incentive for industry to move to jurisdictions with less stringent or costly regulation
- competition between jurisdictions to attract business by reducing the levels of safety (Johnstone 2008), and
- disincentive for businesses to participate in multiple markets across jurisdictions resulting in reduced competition.

2.3 Current process of harmonising work health and safety legislation

At its meeting on 1 February 2008 WRMC agreed that the use of model legislation is the most effective way to achieve harmonisation of work health and safety laws. Ministers supported the Australian Government's intention to initiate a review to inform the development of model legislation and agreed to settle the terms of reference for the review.

On 4 April 2008 the Minister for Employment and Workplace Relations announced a national review by an advisory panel that would report to WRMC on the optimal structure and content of model work health and safety legislation that was capable of being adopted in all jurisdictions.

In July 2008 the Australian Government committed to working with all states and territories to harmonise work health and safety legislation by 1 January 2012. The ASCC was replaced with a new independent body, Safe Work Australia.

In October 2008 the first report of the *National Review into Model Occupational Health and Safety Laws* (the National Review) was released and made recommendations on:

- the duties of care including the identification of duty holders and the scope and limits of duties, and
- the nature and structure of offences including defences.

In January 2009 the second report was released and made recommendations on:

- scope and coverage including definitions
- workplace-based consultation, participation and representation provisions including the appointment, powers and functions of health and safety representatives and committees
- enforcement and compliance including the role and powers of work health and safety inspectors and the application of enforcement tools including Codes of Practice
- regulation-making powers and administrative processes including mechanisms for improving cross-jurisdictional co-operation and dispute resolution
- permits and licensing arrangements for those engaged in high risk work and the use of certain plant and hazardous substances
- the role of work health and safety regulatory agencies in providing education, advice and assistance to duty holders, and
- other matters the national review panel identified as being important to work health and safety that should be addressed in the model WHS Act.

The two reports from the National Review can be found at www.nationalohsreview.gov.au.

A history of workplace health and safety harmonisation in Australia is at Appendix B.

2.4 Regulatory inconsistencies under current arrangements

The current inconsistencies between jurisdictions in work health and safety legislation have led to significant problems that are summarised below.

Multi-state employers and red tape

The most prominently reported cost of the current arrangements arises from the issue of red tape. This is the cost to employers who operate in more than one jurisdiction in complying with more than one jurisdiction's work health and safety legislation. Red tape and system duplication requires an increased effort to meet the differing requirements of jurisdictions to meet essentially the same work health and safety outcomes. The processes are necessary to support the work health and safety framework in each jurisdiction but at the risk of shifting an employer's focus from improving safety in the workplace to dealing with paperwork.

Although multi-state businesses make up less than one per cent of all businesses in Australia, they are generally larger firms and account for nearly 29 per cent of employment.

The Regulation Taskforce (2006) (the Taskforce) found the most visible costs to business from over-regulation are generally the paperwork burden and related compliance costs which derives from:

- providing management and staff time to fill in forms and assist with administrative requirements, including audits
- recruiting and training additional staff to meet compliance burdens
- purchasing and maintaining reporting and information technology systems
- obtaining advice from external sources, including accountants and lawyers, to assist with compliance, and
- obtaining licences and/or attending courses to meet regulatory requirements.

Evidence provided to the Taskforce (2006 p9) indicated that these costs can be significant. For example:

- the NSW State Chamber of Commerce submission stated that the average business in NSW spends up to 400 hours per year complying with regulations or meeting its legal obligations. This is the equivalent of nearly $10 000, and
- QBE Insurance Group estimated that it spends $60 million per year on compliance matters.

The Taskforce identified work health and safety as a cross-jurisdictional regulation hot spot requiring urgent attention.

Many submissions to the Productivity Commission (2004) *Inquiry into Workers' Compensation and Occupational Health and Safety Frameworks* reported that the cost for multi-state employers of complying with multiple arrangements can be considerable and may amount to millions of dollars per year. Although most employers were not able

to give precise estimates of the costs faced, a few provided estimates relating to particular costs.

Government and taxpayers

Through payments to Commonwealth, state and territory government revenue funds, taxpayers contribute to the development, implementation and review of work health and safety legislation. This process is currently duplicated in each jurisdiction using different schedules and creating an environment of constant change.

Community costs

The Taskforce noted in its report (2006 p15) that where 'regulation increases business costs, these are often passed on to consumers in the form of higher prices for goods and services. Some regulations may also unnecessarily restrict consumer choice'. Regulation that increases business costs or restricts business opportunities may jeopardise not only the profits of owners but also the job security and wages of their workers. For Australians to continue to obtain the benefits of an internationally competitive economy, it is imperative that the Australian regulatory environment is in line with best international practice.

Reduced mobility of the workforce

The necessity to be trained and certified as competent for some types of work under separate arrangements in each jurisdiction limits workforce mobility. The Taskforce (2006 p41) noted that:

> *The ability of Australian businesses to attract skilled workers and the mobility of skilled workers across Australian jurisdictions underpins a well-functioning labour market and productivity growth. A common theme across a range of submissions was the way various occupational licensing regimes effectively undermine these requirements. The two key areas of regulation are those governing Australia's national training system and occupation licensing regimes.*

Inequity

Different safety standards across jurisdictions create inequities for employers and employees. For example some states require physical fall protection for workers who work at heights of two metres, others at three metres, and others do not specify a height at all (leaving it to employers to assess the risk in each situation).

Confusion, errors and distraction

The Productivity Commission (2004 p21) reported that the need to focus on complying with differences between jurisdictions is seen as a distraction for management, away from focussing on developing a company-wide culture of preventing injury and illness. It quoted a submission from Pacific National that 'rather than being proactive and developing better prevention and implementation strategies, internal safety management safety staff must spend time training and researching jurisdictional differences'.

Examples of regulatory inconsistencies

Regulatory inconsistencies across jurisdictions result in additional burdens imposed under current work health and safety regulations. Some practical benefits of harmonised work health and safety regulations are outlined below.

- A registration regime imposes a prohibition on the use of some plant until certain legal requirements have been met. This involves an information transfer between the applicant and the regulator and, in most cases, the imposition of a cost in the form of registration fees. The significance of this interaction is amplified where the duty holder is faced with different requirements in different jurisdictions. The model WHS Regulations and Codes of Practice have the potential to significantly simplify these differing processes.
- All jurisdictions currently require asbestos removalists to have undertaken training in order to be issued with a licence. The mandatory training for licensed asbestos removalists varies across the jurisdictions, with approaches varying from competency-based vocational education and training (VET) to regulator approved private sector developed courses. With no nationally recognised training for asbestos removal or mutual recognition of asbestos removal licences, when businesses are operating across borders, applications must be made with each regulator. Development of nationally endorsed units of competency for asbestos removal workers, asbestos removal supervisors and licence applicants would reduce burden on businesses operating close to state and territory borders by increasing both workforce mobility and flexibility and the ability for businesses to operate either side of the border. It would also enable the same standard of competency to be enforced across Australia.

2.5 Australia's international work health and safety performance

From an international perspective Australia's work-related fatality rates are better than some of the best performing countries (see Appendix A). While the gap between Australia and the better performing countries has reduced since 1999-2001, Australia did not meet its aspirational goal of having the lowest levels of work-related traumatic fatalities in the world by 2009.

The *National OHS Strategy 2002-2012* endorsed by WRMC set targets towards achieving a national vision of Australian workplaces free from death, injury and disease. While Australia did not meet its target of 40 per cent reduction in incidence of work-related injury by 2012, as set out in the first triennial review of the *National OHS Strategy 2002-2012,* it did meet its goal of a 20 per cent reduction in fatalities by 30 June 2012.

A less than optimal occupational health and safety environment can severely reduce a country's or state's living standards. More basically, it is a human right that a person should be able to be safe and healthy in the place where they work.

3 Objectives of harmonisation of work health and safety reform

The IGA states that the fundamental objective of work health and safety reform is to produce the optimal model for a national approach to work health and safety regulation and operation which will:

- enable the development of uniform, equitable and effective safety standards and protections for all Australian workers
- address the compliance and regulatory burdens for employers with operations in more than one jurisdiction
- create efficiencies for governments in the provision of work health and safety regulatory and support services, and
- achieve significant and continual reductions in the incidence of death, injury and disease in the workplace.

The harmonisation of work health and safety legislation is part of the COAG National Reform Agenda aimed at reducing regulatory burdens and creating a seamless national economy. These reforms aim to deliver more consistent regulation across jurisdictions and to reduce excessive compliance costs on business. They also aim to reduce restrictions on competition and distortions in the allocation of resources in the economy. The harmonisation of work health and safety legislation is intended to contribute to:

- creating a seamless national economy through reducing costs incurred by business in complying with unnecessary and inconsistent regulation across jurisdictions
- enhancing Australia's longer-term growth and improving workforce participation and overall labour mobility
- expanding Australia's productive capacity over the medium term through competition reform and enabling stronger economic growth
- improving compliance for multi-state jurisdictions
- assisting the development of future work health and safety regulations and Codes of Practice as knowledge regarding practices improves
- the smoother transition of goods and equipment between jurisdictions, and
- the transfer of processes between jurisdictions.

Work health and safety harmonisation has four components:

- harmonisation of principal work health and safety Acts
- harmonisation of work health and safety regulations
- development and adoption of Codes of Practice, and

- nationally consistent compliance and enforcement policies.

The objectives of harmonising work health and safety regulations are as follows:

- ***Reducing compliance costs for business.*** For multi-state organisations, nationally consistent Acts should equate to lower compliance costs. For single-state businesses, the outcome is not clear.
- ***Improving efficiency for regulatory agencies.*** Rather than having 10 regimes being reviewed every five years there should effectively only be one national regime reviewed every five years.
- ***Improving safety outcomes.*** The reduction of red tape and greater certainty for duty holders should allow businesses to focus more on health and safety improvements rather than on mere compliance. Regulatory efficiencies should also allow greater scope for regulators to actively improve safety in workplaces. The model WHS Act applies to a broader range of modern employment relationships and aims to protect all types of workers from hazards and risks arising from work.

Model WHS Regulations and Codes of Practice assist with the harmonisation of work health and safety legislation. The model WHS Regulations support the model WHS Act by setting out mandatory obligations on specific matters. These regulations are written in terms of processes or outcomes that PCBUs must follow or achieve to meet their general duties under the Act in relation to these matters. The work health and safety Codes of Practice provide practical guidance to support the model WHS Act and model WHS Regulations and have evidentiary status. Non-compliance with Codes of Practice does not in the first instance constitute a breach of the work health and safety legislation.

4 Options for model WHS Regulations and Codes of Practice

This chapter presents the options on which this Decision RIS is based in the context of model WHS Regulations and Codes of Practice that support the model WHS Act.

- Option 1 is the retention of the status quo of non-harmonised legislation and non-harmonised regulation, and
- Option 2 is the adoption of WRMC endorsed model WHS Regulations and Codes of Practice by all jurisdictions, implemented by 1 January 2012.

In December 2009 WRMC agreed to the model WHS Act while allowing for technical revisions. A RIS process was undertaken as part of the development of the model WHS Act.

This Decision RIS focuses on the draft model WHS Regulations and Codes of Practice package to support the model WHS Act.

This RIS process also identified a number of alternatives for those matters initially identified as resulting in considerable change and/or significant impact. These matters included RCDs, construction excavation including notification, plant registration, major hazard facilities licensing issues, and asbestos management and removal including assessor licensing and removalist requirements. The analysis for each option took into account all the submissions received and subsequent agreement by Safe Work Australia to amend the model WHS Regulations and Codes of Practice package. Chapter 6 provides detailed discussion of the various model WHS Regulations and Codes of Practice, including the impacts of the final regulatory changes. Chapter 7 provides the overall quantitative impact of harmonisation.

The analysis also identifies incremental changes. These incremental costs and benefits are defined as those costs or benefits considered to be unique to Option 2. This Decision RIS does not reconsider costs and benefits already imposed by the model WHS Act like the removal of reversed onus of proof. New and additional requirements imposed by model WHS Regulations and Codes of Practice are instead discussed.

For example while all jurisdictions already have legislation pertaining to the licensing of asbestos removalists (except the Commonwealth which defers to state and territory legislation), standardisation across Australia regarding national competency-based training units will result in training courses being revised by registered training organisations (RTOs).

Similarly, where an existing National Standard or Code of Practice and associated RIS (see Appendix C) have previously been agreed and used as the policy basis for model WHS Regulations, it is the incremental change and impact beyond that previously assessed which will be considered as part of Option 2.

Option 2 consolidates existing elements of Commonwealth, state and territory work health and safety regulations and Codes of Practice in a consistent manner.

Implementation of Option 2 has implications for governments, businesses and workers. This is mostly a harmonisation process, but in some areas reforms are incorporated. The benefits mostly reflect gains associated with businesses operating cross-jurisdictionally.

5 Consultation

5.1 Stakeholder consultation

Extensive consultation was undertaken during the drafting of the model WHS Regulations and Codes of Practice in developing the Consultation RIS and for this Decision RIS. This has included the establishment of Temporary Advisory Groups (TAGs) for the following subject areas:

- licensing
- confined spaces
- major hazard facilities
- chemicals
- electricity
- plant
- asbestos
- general workplaces
- construction, and
- manual tasks.

The role of these groups was to provide advice and assistance to Safe Work Australia in the decision-making process. These groups are tripartite and include subject-specific technical experts. Approximately thirty TAG meetings were undertaken to clarify policy issues impacting on the development of model WHS Regulations and Codes of Practice.

Five Safe Work Australia Members' meetings and 27 SIG-OHS meetings have been held to oversee the development of the model WHS Regulations and Codes of Practice.

Work health and safety authorities, the Australian Chamber of Commerce and Industry (ACCI), Australian Industry Group (Ai Group) and Australian Council of Trade Unions (ACTU) were asked to provide comment on the methodology for the Consultation RIS prior to its development.

Preliminary consultation was undertaken with unions, industry and jurisdictional representatives during the development of the Consultation RIS that accompanies the package of draft model WHS Regulations and Codes of Practice and the Public Discussion Paper that was published for public comment in December 2010 for a four-month period.

A total of 1343 submissions were received during the public comment period. Of these, 725 submissions related to both policy and RIS concerns and 618 were policy only.

5.2 Focus groups

Focus groups were held in each jurisdiction during the public comment period. The issues raised during the focus group discussions have also been incorporated into Chapter 6 under the specific subject areas. Safe Work Australia's responses to these comments are also addressed in the specific subject areas in Chapter 6. A summary of the key issues raised by participants is provided below.

Participation and work groups

The main concern raised by employers during focus group discussions on this issue was increased numbers of health and safety representatives (HSRs). For unions, there was concern over HSRs now having to request training. Unions were also concerned that HSRs would have less protection from liability which may lead to a shortage of volunteers.

General workplace management

The remote and isolated work provisions were a concern to employers in states with large distances and sparse populations. Some participants thought they may need to provide workers with satellite phones. The Commonwealth was concerned that the definition of workplace may extend to accommodation provided to workers. This could invoke privacy issues and could conflict with existing Commonwealth law.

Hazardous work

Hazardous manual tasks regulations and Codes of Practice were unpopular with employers for being too broad in coverage and with unions for not requiring enough risk assessments.

Employers in states that have a two metre rule for requiring fall protection questioned its removal. Employers saw it as clear and easy to understand. Unions felt that the simple requirement to document the use of administrative controls over two metres would not be very effective.

There was general support for RCDs, although participants were concerned about the lack of a transition period for retrofitting RCDs.

Plant and structure

There was little support for the requirement for annual renewal of plant registration. Employers saw it as an unnecessary cost and unions saw no offsetting safety benefit. The ACT currently has no plant registration at all so the implementation of some plant registration was seen as beneficial.

Construction

Building industry representatives considered that the $200 000 threshold for requiring a principal contractor was too low because this is considerably below the cost of building the average house.

The requirement to give five days notification for excavations over 1.5 metres deep was not supported by employers, particularly in the building industry. The notification requirement was also not supported by regulators, who considered they would not have the resources to respond to a significant increase in notifications and could be held liable if they didn't. This requirement was popular with unions who said it had improved safety in Victoria. This requirement is modelled on Victorian regulations but building sites are currently exempt in Victoria.

Asbestos

The new asbestos regulations were generally well received. Unions considered that "shonky" operators could divide removal jobs up into small lots (<10m2) in order to avoid compliance. Employers in states and territories with large distances and sparse populations were worried about the availability of licensed assessors. The ACT was concerned that standards under the harmonised regulations will be lower than those currently applying in the ACT.

Major hazard facilities

Apart from claims from the WA regulator that the new model WHS Regulations for MHFs could lead to a five-fold increase in the number of sites so classified in WA, this was not a major issue during consultations.

Other matters

There were a number of concerns raised about potential reductions in safety under the model WHS Regulations. This included concern about the potential for serious incidents if the adjustment to compulsory permanent RCDs in every workplace was poorly managed.

Complaints about the complexity of the regulations and the length of the model WHS Codes of Practice were voiced by participants at most of the focus group meetings, particularly by unions. Some participants from larger companies thought the regulations were better written than some of the other legislation they have to deal with. Other comments were that the language of the Codes of Practice is easy to read.

Most industry participants did not think that the reduced requirements for undertaking and documenting risk assessments would lead to substantial administrative savings. This is because they believe that continuing to carry out these procedures is their best defence when an incident occurs. Conversely, unions claimed that once employers no longer had risk assessments mandated in work health and safety legislation they would stop doing them and that safety would suffer as a consequence.

Estimated compliance costs of individual regulations

Table 5.1 provides ongoing compliance costs estimated by regulators and stakeholders. A considerable number of changes were suggested by participants during focus group discussions and in submissions. Views expressed at the focus groups and in the submissions were similar. The focus groups tended to be jurisdiction-specific and submissions focussed on the national level. Some suggested changes from "0" to "2" by participants were incorporated as changes from "0" to "1" instead. All suggested changes have been recorded in Chapter 7.

Table 5.1: Estimated compliance costs, after public consultations

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
General Workplace Management									
General Working Environment:					1				1
Entry , Exit and Movement									1
Work areas and space	1	1	1	1	1	1	1	1	1
Floors and Surfaces									1
Lighting									1
Ventilation					1				1
Heat and Cold									1
Essential Services				1	1		1		1
Facilities	1				1				1
Remote and Isolated Work	1		2	1	1				1
Hazardous atmospheres		1			1				1
Personal Protective Equipment									1
First Aid							1		1
Emergency Plans	1	2	2				1		1
***Representation and Participation**									
*Health and Safety Reps/Work Groups	2		1		1		1		1
*Issues Resolution			2	1	1		2		1
*Consultation	1		1	2	1				
Hazardous Work									
Noise	1	1			2				1
Hazardous manual tasks	2		1	1					
Confined Spaces	1	2							1
Falls	1		2	2	2	1	1	1	1
High risk work - licensing				0					
Electrical safety and energised work	1	1			1	1		1	1
Electricity - RCDs	2	2		1		2	2	2	2
Diving work	2	1		1	2		2		1

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
Plant and Structures									
Plant	2		1	1	2		1	1	
Scaffolding						1			
Amusement devices	1	1	1		1	1	1	1	1
Plant registration		2			2			1	1
Construction									
Construction – General	1	1	1	1	1	1	1		1
Construction – High Risk					1				
Construction – Excavation Notification	2		2		2	2			2
Construction – Induction				2		0			1
Hazardous Chemicals									
Chemicals – General			2	2	2				1
Chemicals – Labelling	2			1	2				1
Chemicals – Safety Data Sheets					2				1
Lead	2		1	1	1				1
Asbestos									
Asbestos removal and management			2		2		2		2
Asbestos removalist licensing	1	1	1	1	2	2	1	1	2
Licensed asbestos assessor	2	2	2	2	2	2	2	2	2
Certified SMS for Class A removal licence	2		2		2		2	2	2
Major Hazard Facilities (MHF)									
MHF	2	1	1	2	2	1	2		1
MHF – licensing			1	2	1		2		1

Note: numbers in red have changed since the Consultation RIS estimates.

5.3 Surveys

As part of the public comment process, Deloitte Access Economics sent a web-based survey to firms across industries, jurisdictions and a range of small, medium and large companies.

The survey included a section asking businesses that trade across borders about the perceived benefits of dealing with one set of regulations. A copy of the survey is included in Appendix D.

5.4 Public submissions

This section provides a summary of the views expressed in the 1343 submissions received during the public comment process in regard to policy and/or the Consultation RIS. The key issues raised in public submissions regarding particular regulations are provided in Chapter 6.

The move towards harmonised work health and safety legislation was generally welcomed as reducing inconsistencies, duplication and compliance costs. The submissions also highlighted various specific concerns relevant to particular industries. A common theme was that the overly prescriptive nature of some regulations would not benefit safety outcomes.

5.4.1 Employers and major employer associations

Substantial benefits of harmonisation were seen to be conferred on businesses that operate across multiple jurisdictions. Employers were concerned that the complexity of interactions between the model WHS Act, model WHS Regulations and Codes of Practice can give rise to apparent or actual inconsistencies. This complexity may not be a problem for large businesses but could be a significant issue for small businesses. They were also concerned that while these three levels of paper governance were being harmonised, perceived differences in approach to compliance and enforcement between inspectorates may undermine this progress. There is concern that some regulations are too prescriptive, rather than providing a framework which may create a focus on paper compliance, and diminish the flexibility to develop what is best for any particular workplace. There is also a concern that administrative provisions including notifications and plant registration may add to the regulatory burden.

5.4.2 Unions

Unions are concerned that the harmonisation process is focused on cutting cost to businesses rather than ensuring that work health and safety legislation is providing the best standards across Australia. Unions feel there is a societal cost that has not been taken into consideration in these regulations as they feel that self-regulation would ensure only the employer's cost would be taken into consideration by employers when applying these regulations. Employers may take advantage of the broad usage of the term 'so far as reasonably practicable' allowing a self-interested interpretation.

Unions are also concerned that the regulations are too complex for the average work health and safety representative, which limits their application in the workplace. The hierarchy of control for risk management is not consistent across regulations and the lack of risk assessments may jeopardise safety. Other concerns include inconsistency with penalties and confusion with the wording of whom the regulation applies to in some circumstances.

5.4.3 Governments

Governments have primarily utilised their involvement in Safe Work Australia's consultation process to put forward their views. Some governments also used the public consultation process to provide comments which are summarised below.

Governments expressed concern about a possible diminishing of safety standards in comparison to their own existing rules in certain areas. Some governments may also keep existing laws under a different head of power, like the treatment of asbestos in the ACT.

Some governments did not have regulation for areas covered by the model WHS Regulations or equivalent requirements and may find an increase in regulatory burden. There was concern that the increased quantity of regulation relating to the application of specific practices rather than focusing on general duties reduces flexibility. There was also concern over the wording of the regulations and that they are difficult to follow and interpret and not suited to those in the workplace. Some felt that the complexity impact of these regulations on small business has not been adequately addressed. Notification requirements were seen to increase costs for the regulator in some areas including plant registration. Some governments were expressly concerned over the compulsory retrofitting of RCDs and lack of any transition period. WA is considering whether to adopt all of the harmonised regulations and Codes of Practice.

6 Public comment and the model WHS Regulations and Codes of Practice package

Current Commonwealth, state and territory work health and safety laws are based on the Robens model. The model WHS Act is also based on that model, although the manner in which these principles were implemented through regulations has not been consistent and has varied over time.

A number of reviews and RIS processes related to work health and safety have been undertaken in the past and used as the policy basis for national standards. These reviews and documents have been produced by Commonwealth, state and territory agencies and independent organisations and have identified the costs and impacts of introducing various regulations and guidance material relevant to the national work health and safety harmonisation process. Where existing National Standards or Codes of Practice are in place, Safe Work Australia agreed to use these as the basis for harmonisation.

Aspects of these publications relevant to the adoption of national model WHS Regulations and Codes of Practice are summarised in Appendix C. The previous RIS processes outlined in this Appendix have been used by the Commonwealth, states and territories when adopting legislation and are an important part of this Decision RIS process. They provide a baseline for determining additional change and impact that may arise in the course of developing the model WHS Regulations and Codes of Practice. All jurisdictions have previously agreed to the outcomes of previous national RIS processes and these represent the base from which the proposed model WHS Regulations or Codes of Practice have been developed.

The model WHS Act, agreed by WRMC, has already been the subject of a RIS process. Jurisdictions have either adopted the model WHS Act or are currently in the process of doing so. The subsequent model WHS Regulations and Codes of Practice developed in support of the model WHS Act provide the detail for duty holders to meet their responsibilities under the model WHS Act.

Table 6.1 presents ratings of ‘minimal’, ‘some’ and ‘considerable’ change for the anticipated changes as put forward in the Consultation RIS that was published for public comment. The reassessed ratings following public comment were taken into account and changes were made to the model WHS Regulations.

Table 6.1 National ratings of changes anticipated with the introduction of model WHS Regulations

National anticipated change at time of Consultation RIS and public comment	*National anticipated change arising from model WHS Regulations and Codes of Practice*
Minimal change	**Minimal change**
General workplace management	**General workplace management**
General working environment	Review of general work environment
Personal protective equipment	- Work areas and space
First Aid	- Facilities
	Hazardous work
	Hazardous atmospheres & flammable & combustible substances
	Hazardous manual tasks++
	Falling objects
	Falls++
	High risk work – licensing
Plant and structures	**Plant and structures**
Scaffolding	Plant+
	Scaffolding
	Construction
	Excavation notification++
Hazardous chemicals++	**Hazardous chemicals++**
Fire or explosion	Hazardous atmospheres
Safety data sheets+	Safety data sheets+
	Lead+
	Representation and participation
	Issues resolution
	Consultation
	Major hazard facilities (MHF)
	MHF+
	MHF licensing

Some change	Some change
Representation and participation Health and safety reps Issues resolution Consultation	
General Workplace Management Review of general working environment - Work areas and space - Facilities - Remote or isolated Emergency plans	**General workplace management** Remote or isolated Personal protective equipment Emergency plans First aid
Hazardous work Noise+ Hazardous manual tasks++ Confined spaces+ Falls++ High risk work licensing Abrasive blasting Electrical work Diving work	**Hazardous work** Diving work Confined spaces+ Falls++ Electrical work Electrical work – RCDs
Plant and structures Plant+ Amusement devices	**Plant and structures** Plant registration Amusement devices
Construction++ Construction – general High risk construction work Construction induction+	**Construction**++ High risk construction work Demolition work Construction induction+ Lead
Hazardous chemicals Labelling+ Lead+	**Hazardous chemicals** Labelling+
	Asbestos Class B asbestos removalist licensing
	Representation and participation Health and safety reps

Considerable change	Considerable change
Hazardous work	**Hazardous work**
Electrical work – RCDs	Noise+
Plant and structures	
Plant registration	
Construction	
Excavation notification+	
Asbestos	**Asbestos**
Asbestos removalist licensing	Asbestos assessor licensing
Asbestos assessor licensing	Class A asbestos removalist licensing
Major hazard facilities (MHF)	
MHF+	
MHF licensing	

+ Indicates an existing National Standard and/or Code of Practice

++ Indicates that in addition to an existing National Standard and/or Code of Practice, a RIS has previously been undertaken and approved

6.1 Summary of key changes in the model work health and safety regulations package

The following summary identifies key changes that have been made to the model WHS Regulations and Codes of Practice as a result of public comment. These changes are discussed in further detail in each Part in this chapter. Chapter 7 discusses the changes in the context of the overall impact on costs.

Following public comment a number of changes have been proposed to the model WHS Regulations to remove unnecessary duplication and prescription, including:

- inserting generic management of risks principles including a hierarchy of control
- moving regulations which apply more broadly than one chapter or Part to a chapter on general workplace management
- removing annual notification and fees for registration of items of plant and streamlining the registration process
- streamlining the process for developing a safety case and becoming a major hazard facility, and
- redrafting the procedures for the election of HSRs to ensure flexibility.

A number of more significant policy related changes are also proposed as a result of public comment including:

- introducing audiometric testing requirements for exposure to hazardous noise and to detect hearing loss
- inserting upstream duties in the noise and hazardous manual tasks parts
- removing the requirement for documenting the use of administrative control measures for the risk of falls from two metres.
- revising the hazardous chemicals regulations to rely on the Global Harmonised System of Classification and Labelling of Chemicals (GHS) published by the United Nations
- removing the regulations dealing with abrasive blasting and placing the requirements in a Code of Practice
- being silent about the right of a worker to refuse blood lead level monitoring because this is dealt with under industrial and anti-discrimination laws
- introducing new regulations dealing specifically with asbestos-related workers other than removal workers and clarifying requirements relating to naturally occurring asbestos
- giving powers to the regulator to have competency for high risk work licences reassessed where the regulator doubts a worker's competency

- taking a risk-based approach to requiring RCDs and their use in 'hostile operating environments'
- removing the requirement for notification of certain prescribed excavation work and reducing the coverage of the construction regulations to cover work on 'fixed plant', along with increasing the principal contractor duties threshold from $200 000 to $250 000
- realigning the definition of 'confined space' to the relevant Australian Standard by removing the requirement that a space have a restricted means of entry and exit, and
- making a clearer distinction between high risk diving work i.e. construction diving work and other general diving work.

6.2 National analysis of subject areas

The following chapter examines the model WHS Regulations and Codes of Practice that were released for public comment and takes into consideration the information gathered during the public comment process. Details on the actions taken by Safe Work Australia as well as information on the changes made to the model WHS Regulation and Codes of Practice package as a result of the consultation process are included. The impacts of these changes, and where appropriate costs and benefits, are also provided. Where costing information is not available, qualitative information on the impact of introducing these regulations for each jurisdiction has been included.

6.3 Preliminary

In the draft model WHS Regulations this part covered introductory matters, commencement dates and definitions.

Jurisdictions, while broadly having similar definitions within their work health and safety frameworks, do have variations that affect the scope and application of their respective regulations. Public comment was received across a wide range of definitional issues and these are addressed under the specific subject matter areas.

Agreement on common definitions is a significant and important step to achieving national harmonisation with benefits for workers and employers in terms of capacity to work across borders and to achieve a mutually shared understanding of health and safety requirements.

6.4 General risk and workplace management

6.4.1 Managing risks

What is it?

Under the model WHS Act, ensuring work health and safety is done by managing risks at the workplace. This is the key to understanding all of the proposed health and safety duties under the draft model WHS Regulations.

Managing risks means managing health and safety risks in the workplace by:

- so far as is reasonably practicable, eliminating the risks, or
- if that is not reasonably practicable, minimising the risks so far as is reasonably practicable.

What are the current jurisdictional regulations?

All jurisdictions currently provide for the management of work health and safety risks under their principal legislation and also in some cases, regulations and Codes of Practice.

This generally includes provisions for identifying risks, assessing risks in some cases, managing risks and reviewing risk control measures.

For example general principles for managing risks are currently included in:

- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), regulations 1.05, 1.06
- New South Wales—Occupational Health and Safety Regulation 2001 (NSW), regulations 9–12
- Queensland—*Workplace Health and Safety Act 1995* (Qld), section 27A
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), regulation 3.1
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulations 20–21
- Tasmania—Workplace Health and Safety Regulations 1998 (Tas), regulations 17–21
- ACT—*Work Safety Act 2008* (ACT), section 14, and
- Northern Territory—Workplace Health and Safety Regulations (NT), regulations 38–41.

These laws generally apply a general hierarchy of controls to the management of risks in the workplace. This requires duty holders to step through a list of risk control measures, from the most to least effective, and apply the most effective measures or combination of measures so far as is reasonably practicable.

Many of these laws also expressly require risks to be assessed. Even if not expressly required, risk assessment would usually be a key step in the process to determining risk control measures.

Monitoring risk control measures and ensuring that they continue to be effective is a key part of the duty to manage risks at the workplace. This a duty under WHS Acts but is also separately emphasised in some WHS Regulations, for example: Occupational Health and Safety Regulation 2001 (NSW), regulation 12; Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 20; Workplace Health and Safety Regulations 1998 (Tas), regulation 21; Workplace Health and Safety Regulations (NT), regulations 40, 41.

Most jurisdictions also have a Code of Practice covering the management of risks to health and safety in the workplace generally.

The Victorian scheme is different in that it requires risks to be managed generally without expressly mandating risk assessment (except as otherwise provided in relation to specific hazards or activities), and it also tailors hierarchies of controls to address specific hazards. The Victorian scheme also uses guidance material to explain how risks in the workplace should be managed more generally.

Where an express duty to review and revise risk control measures is included under the Victorian laws there is an express power conferred on health and safety representatives to request a review in certain circumstances. There is a corresponding duty on the duty holder to review and as necessary revise the relevant risk control measure if the health and safety representative believes on reasonable grounds that the laws require the risk control measure to be reviewed and the duty holder has failed to properly review the risk control measures or take into account any of the relevant circumstances referred to in the laws in conducting a review of, or revising, the risk control measure.

What is the problem?

While a common approach to regulating managing risks has been taken across the country, differences in wording and guidance materials between the jurisdictions can cause confusion for multi-jurisdictional businesses. There are differences regarding the level of specification in requirements, for example in relation to risk assessment, with Victoria taking a less prescriptive approach. In addition, broadly applied express requirements used in some jurisdictions are difficult to justify in terms of regulatory impact.

Further harmonisation in this area would provide greater certainty about what must be done to manage risks to health and safety in the workplace.

What was proposed?

The draft model WHS Regulations released for public comment included tailored hierarchies of controls to address the specific risk management requirements for workplace hazards covered by the Regulations. This is similar to the approach currently taken under the Victorian laws.

The draft model WHS Regulations for public comment also separately listed the triggers for reviewing and revising the risk control measures that are implemented to manage the relevant risks, including a trigger for health and safety representatives modelled generally on the Victorian provision described above.

The draft model WHS Regulations for public comment did not prescribe general principles for managing risks in the workplace. Instead, the Victorian approach of using a Code of Practice to explain how to manage risks in the workplace was adopted.

The How to Manage Work Health and Safety Risks Code of Practice has been developed as part of the model WHS regulation package to provide practical guidance on:

- responsibilities for managing risks
- hierarchy of control
- how to identify, assess, control and review hazards

- risk management plans, and
- risk management case studies.

Public comment

Throughout the public comment period, strong support was expressed for the inclusion of general risk management principles in the model WHS Regulations such as those that are currently in place in most jurisdictions, in particular from unions, academics, legal and work health and safety practitioners and some industry groups.

The prevailing view is that these kinds of principles should be elevated into the model WHS Regulations rather than being placed in a Code of Practice.

Many submitters also commented that this approach would ensure consistency in the requirements for managing risks across the model WHS Regulations.

Other comments include:

- the proposed power for health and safety representatives to trigger a review and if necessary review of risk control measures has potential for abuse and is not supported (ACCI and others), and
- opposing views were put as to whether the model WHS Regulations should expressly mandate risk assessment across the board.

Final proposal and rationale

General statement about risk management

Consistent with the weight of public comment, it is proposed that a chapter on general risk and workplace management principles be included upfront in the model WHS Regulations, including a general hierarchy of controls. This would apply to the hazards and risks expressly covered by the model WHS Regulations.

Consistent with the approach taken in all jurisdictions apart from Victoria, the chapter would apply to PCBUs who have a duty under the regulations to manage risks to health and safety. It would require duty holders to identify hazards, apply and maintain a hierarchy of risk control measures and, in specified circumstances, review those risk control measures. The ability for a health and safety representative to request a review and revision of a risk control measure which is currently only contained in the Victorian regulations would also be contained within the chapter.

This approach has the benefit of entrenching widely-accepted and used approaches to managing risks in the workplace and is strongly supported by public comment.

This approach also streamlines and simplifies the provisions that deal generally with managing risks, thereby promoting simpler drafting. This in turn is expected to make the proposed WHS Regulations easier to understand and apply. It will also reduce the length of the Regulations.

Except for Victoria the proposed provisions are generally considered to be neutral in terms of regulatory impact because they simply reflect the status quo for most jurisdictions.

There may be an increase in regulatory impact in Victoria as the Victorian work health and safety laws do not currently mandate elements of risk management across the board. This is particularly the case in relation to the proposed general duty to identify hazards at the workplace.

It is noted that the Victorian position is that hierarchies of control that are framed specifically for particular hazards are more likely to be effective than a general approach.

The weight of public comment supports greater consistency through the adoption of a single general hierarchy of controls which can be applied where required. The intention is that more detailed information about controls for specific hazards may be provided for in Codes of Practice and guidance materials to supplement the general controls contained in the WHS Regulations.

General statement about risk management – risk assessments

It is proposed that risk assessment not be mandated generally as part of managing risks but that risk assessment steps only be expressly mandated in relation to a small number of particularly high risk activities.

Some jurisdictions including the Commonwealth, NSW, Queensland, WA, SA, Tasmania and NT may be better off in terms of regulatory impact as the proposed provisions will not mandate risk assessment across the board. Under the model WHS Regulations risk assessment is only proposed to expressly apply in relation to a small number of high risk activities including work in confined spaces, diving work and energised electrical work.

This approach acknowledges that mandating risk assessments is particularly problematic. A regulatory duty to carry out risk assessment means that it must be done in every single case to which the regulation applies. A duty holder who does not perform a risk assessment is in breach of the regulation, regardless of whether adequate risk controls are in place.

Further mandating risk assessment may be a barrier to the implementation of risk controls. For example where hazards and risks are well known and there are universally accepted control measures, duty holders may identify the hazard and implement the appropriate control without doing a risk assessment. In these cases a risk assessment would yield no new knowledge and could delay the implementation of controls.

Evidence from Victorian workplaces suggests that in practice many employers are implementing adequate risk control measures without going through formal documented risk assessment processes in every case: see the Victorian Regulatory Impact Statement for the proposed Occupational Health and Safety Regulations 2007 and proposed Equipment (Public Safety) Regulations 2007 (the Victorian RIS 2007).

The proposed approach ensures that the focus is on the control of risk rather than the processes leading up to it.

Triggers for reviewing and revising risk control measures—health and safety representative request

It is proposed that the 'review and revise' requirements under the draft model WHS Regulations should be consolidated and included as part of the general principles for managing risks covered by the model WHS Regulations.

Consistent with the approach in the draft model WHS Regulations for public comment, this would include a trigger for health and safety representatives to request a review of risk control measures in certain circumstances and would require the duty holder to act accordingly if certain pre-requisites are met.

Some employers have commented that there are insufficient checks and balances in the provisions empowering health and safety representatives to request a review of risk control measures. For the trigger to apply, a health and safety representative must believe on reasonable grounds that the person conducting the business or undertaking has not adequately reviewed the risk control measures. It is also argued that health and safety representatives already have either comparable or in some cases greater powers under the model WHS Act, including the power to direct that unsafe work cease in certain circumstances and the power to issue a provisional improvement notice.

Concerns that these kinds of powers could be abused have been noted and will require ongoing monitoring.

On balance the retention of these provisions is supported as part of the package of health and safety representatives' powers and functions under the model WHS Act and Regulations to promote better health and safety outcomes through effective representation.

Overview of impacts

The proposal to include a general chapter on general risk and workplace management principles be included upfront in the model WHS Regulations, including a general hierarchy of controls, is on the whole expected to be neutral in terms of regulatory impact. This is because the proposal is broadly consistent with the policy position in most jurisdictions except Victoria.

Because the draft model work health and safety laws do not expressly mandate risk assessment across the board, or require documentation of all assessments, a number of jurisdictions that currently prescribe this will benefit in terms of reduced administrative burden. Some quantitative analysis on this may be found in the Victorian Regulatory Impact Statement for the Proposed Occupational Health and Safety Regulations 2007 and Equipment (Public Safety) Regulations 2007, Part 9.2. It estimated that the weighted average cost per risk assessment is $1215 initially, with 10 per cent of this cost incurred per annum on a recurrent basis. It also noted that there are negligible benefits in requiring risk assessments to be undertaken in situations where there are well known and universally accepted risk control measures.

In those jurisdictions where across the board risk assessment and documentation requirements are being removed, some PCBUs may continue to document their risk assessment to demonstrate compliance with the general legislative duty to manage

work health and safety hazards and risks, in which case potential cost savings will not be fully realised.

General duty to identify hazards to health and safety in the workplace

In Victoria there may be an increase in regulatory impact associated with the proposal to mandate a general duty to identify certain hazards at the workplace. Victorian work health and safety regulations do not currently prescribe a process for identifying and understanding hazards and risks.

In Victoria the regulator publishes a guideline under its Act on 'How WorkSafe applies the law in relation to identifying and understanding hazards and risks'.

The guideline states that:

> *WorkSafe considers that a person who has a duty to ensure health and safety under [the relevant part of the Act] has an obligation to take all reasonable steps to identify and understand the hazards and risks, within the available state of knowledge which relate to the duty.*

Common methods for identifying hazards are described in the Victorian handbook 'Controlling OHS hazards and risks: A handbook for workplaces', Edition No. 1, November 2007.

To some extent, the legislative framework for the model laws already provides for the systematic management of work health and safety hazards and risks: model WHS Act, clauses 17, 18.

Regulatory impacts of hazard identification are not quantified separately from risk control costs in the Victorian Regulatory Impact Statement for proposed Occupational Health and Safety Regulations 2007 and Equipment (Public Safety) Regulations 2007.

Because identifying hazards at the workplace is an important step in managing risks it is difficult to estimate the additional costs that could be attributed to the proposed requirement mandating hazard identification. Notably, the proposed duty will not have an associated record-keeping requirement which means that the duty holder will be able to choose the most cost-effective way of complying with the duty.

Additionally the proposed regulatory duty does not mandate hazard identification generally but only in relation to the hazards expressly covered by the model WHS Regulations.

As the proposed duty is generally understood to be a core part of the process of managing risks at the workplace, its inclusion is strongly supported for clarity. However it is acknowledged that in Victoria this benefit will be balanced against additional cost from reduced flexibility in the proposed regulations.

Health and safety representatives' requests for risk control measures to be reviewed etc.

Safe Work Australia believes that health and safety representatives can make valuable contributions to health and safety in workplaces and, consistent with the model WHS Act, should have a clear role in relation to the proposed review of control duties.

Under the proposed revisions, duty holders would be required to review and as necessary revise a control measure if a health and safety representative for the business or undertaking requests the review and reasonably believes that one of the triggers for review has occurred and the duty holder has not adequately reviewed the control measure in response to the circumstance.

The duty to respond to a request would only apply if:

- there is a relevant health and safety representative for the workplace
- the health and safety representative in raising the issue is representing members of their workgroup established under the model WHS Act
- the health and safety representative holds a reasonable belief that one of the triggers for review has occurred and the duty holder has not adequately reviewed the control measure in response to the circumstance, and
- the risk relates to a hazard that is expressly regulated under the model WHS Regulations.

In Victoria where there is a comparable scheme currently in place, the impact may be considered to be minimal. For other jurisdictions, the regulatory impact should be assessed in light of pre-existing duties under the model WHS Act.

The model WHS Act already confers power on qualified health and safety representatives to:

- require unsafe work to cease in certain circumstances
- issue provisional improvement notices (PINs) to remedy a contravention, prevent a likely contravention or remedy the things or operations causing the contravention or likely contravention.

The model WHS Act also requires duty holders to:

- consult, so far as is reasonably practicable, on work health and safety matters with any health and safety representative for the business or undertaking
- confer with any health and safety representative for the business or undertaking, whenever reasonably requested by the representative, for the purpose of ensuring the health and safety of the workers in the representative's work group.

This means that even without the proposed Regulations, health and safety representatives may already take certain steps to ensure compliance with the model WHS Act, including the duty to ensure that risk control measures adequately control risks to health and safety and are properly reviewed.

The provisions of the WHS Act and WHS Regulations would likely have a business impact where a PCBU has not adequately complied with their general duty to provide a safe workplace, and where there is a difference of opinion between the PCBU and the health and safety representative over safety. There is a small risk that the proposed powers could be abused for non-health and safety reasons, as noted by ACCI, Ai Group and others. If this were to happen it could be disruptive for affected businesses and lead to unnecessary review costs. Most of the time there should be no additional impact.

Safe Work Australia believes that consultative-based options like the one proposed for working through work health and safety issues should be encouraged and supported.

Regulatory impact—summary

Providing a general statement about risk management near the beginning of the model WHS Regulations has the benefit of providing a consistent approach across the regulations, even though the full process is only mandatory for certain hazards.

For most jurisdictions there will be negligible cost impact as the final proposal is consistent with their existing requirements. In the case of Victoria mandating risk assessment is likely to impose some additional costs for employers, particularly through reduced flexibility. The alternative of adopting the Victorian approach nationally would potentially have reduced compliance costs with no reduction in safety. However this option has not been adopted at this stage.

The provision for health and safety representatives to request the review of risk control measures should not impose costs where adequate control measures are applied, as the power is unlikely to be exercised, and any costs should be offset by safety benefits in cases where control measures are inadequate. There is some risk of reviews being requested when control measures are already adequate. In these cases the cost will not be offset by benefits, but this risk should be small and therefore outweighed by the overall benefit of the provision.

6.4.2 General working environment

What is it?

The model WHS Regulations for the General Working Environment make provision for the management of matters common to all workplaces that affect the physical working environment. These include access and egress, work areas and space including movement around the work area, floors and surfaces, lighting, ventilation, heat and cold and essential services. There are also provisions to provide and maintain adequate and accessible facilities for workers including toilets, drinking water, washing facilities and eating facilities.

These provisions support and clarify the model WHS Act duty of a PCBU to ensure so far as is reasonably practicable the provision and maintenance of a work environment without risks to health and safety and the provision of adequate facilities for the welfare of workers, including ensuring access to those facilities.

To meet the general duty under the model WHS Act, workers need to have safe access to and egress from their place of work without risk of injury and have enough space and lighting in work areas to move around and carry out work safely. Floors and surfaces need to be designed, installed and maintained to reduce the risk of slips, trips and falls in the workplace. Workplace facilities are essential for the welfare and personal hygiene of workers. Ventilation needs to ensure general comfort as well as reduce the risk from hazardous substances and processes. Workers' exposure to extremes of heat and cold must also be managed.

What are the current jurisdictional regulations?

Currently all jurisdictions except Victoria and the Commonwealth have regulations dealing with aspects of the general working environment. The Commonwealth and Victoria address these issues in Codes of Practice.

Entry, exit and movement within the workplace

Eight jurisdictions (NSW, Queensland, Victoria, SA, WA, NT, Tasmania and the ACT) currently regulate exit and entry or access and egress. The Commonwealth covers entry and exit requirements in specific regulations such as construction and plant. The National Standard for Construction Work [NOHSC:1016 (2005)] (National Construction Standard) and the National Standard for Plant [NOHSC:1010 (1994)] (National Standard for Plant) each stipulate requirements for providing adequate access and egress.

Work areas and space

Six jurisdictions (NSW, Queensland, SA, WA, NT and the ACT) have regulations covering work areas and space. These all require employers to provide sufficient space to work and to ensure that people can move around the workplace freely and unobstructed. The Queensland and SA regulations are more prescriptive by specifying space per person. Victoria has a compliance Code of Practice on workplace amenities and work environment which includes movement in the workplace.

Floors and surfaces

Five jurisdictions (NSW, SA, WA, NT and the ACT) have requirements within either general or hazard-specific regulations relating to floors and surfaces. The other jurisdictions cover floors and surfaces in Codes of Practice or guidance material i.e. Victoria covers this in its compliance Code of Practice on workplace amenities and work environment; Queensland has guidance material on preventing slips, trips and falls in the workplace; and Tasmania has a checklist on the topic. The Commonwealth has no regulation or Code of Practice in this area.

Lighting

Seven jurisdictions (NSW, Queensland, SA, WA, NT, ACT and the Commonwealth) have requirements for lighting either in their general provisions or in hazard-specific regulations. Victoria covers lighting in a compliance Code of Practice.

Three jurisdictions reference two Australian Standards related to lighting. The *Interior Lighting* series has a number of standards that detail specific requirements for lighting in buildings and workplaces. The *Emergency escape lighting and exit signs for buildings* series of Australian Standards provides guidance on the use of lighting in emergency situations.

Ventilation

Seven jurisdictions (NSW, Victoria, WA, Queensland, NT, SA and the ACT), have regulations for ventilation either in general workplace provisions or in hazard-specific regulations such as mining or confined spaces. Ventilation requirements in buildings used as workplaces are also regulated under building regulations.

Heat and cold

Four jurisdictions (NSW, WA, NT and the ACT) have regulations for working in extreme conditions of heat and cold. NSW and the ACT include the requirements to implement specific control measures.

Essential services

All jurisdictions have provisions covering work in relation to essential services, mostly contained within regulations for specific hazards such as confined spaces (e.g. Victoria, NT and the ACT) or construction. In the case of construction, working near essential services is classed as high risk work (e.g. in Victoria and the Commonwealth). The National Construction Standard provides a definition that sets out work near essential services under requirements for high risk work that could come into contact with services. The *National Standard on Safe Working in Confined Spaces* includes provisions on the isolation of services.

Facilities

Seven jurisdictions (NSW, Queensland, SA, WA, NT, Tasmania and the ACT) have regulations addressing workplace facilities generally. The Commonwealth regulations refer to the provision of amenities and facilities in construction regulations and legislates facilities generally under its work health and safety Act. Victoria has a compliance Code of Practice on workplace amenities and work environment.

SA and Queensland have prescriptive requirements in relation to facilities including specifying the ratio of toilets required per number of employees.

What is the problem?

Where jurisdictions regulate the above matters, the regulations achieve the same outcome. However the approach is inconsistent in that two jurisdictions address these matters in Codes of Practice rather than regulations and there are also variations in the level of detail, for example prescribing the type of facilities needed versus a risk-based approach. These variations are likely to increase uncertainty and compliance costs for multi-jurisdictional businesses.

The prescriptive requirements adopted in SA and Queensland reduce the flexibility afforded to businesses operating in those jurisdictions to provide for the welfare of their workers in the most cost-effective, mutually satisfactory manner. While the prescriptive approach provides compliance certainty, this benefit is unlikely to offset the costs. The variation in approach from other jurisdictions can also increase uncertainty and compliance costs for multi-jurisdictional businesses.

What was proposed?

The draft model WHS Regulations on general working environment matters that were released for public comment placed these common requirements for general working environment together. These provisions required PCBUs to ensure that the working environment is without risks to health and safety through:

- the unobstructed movement of persons at the workplace, including entry, exit and movement around work areas

- the design, installation and maintenance of floors and other surfaces
- the provision of adequate lighting and ventilation
- protecting workers from extremes of heat and cold, and
- ensuring essential services do not pose a risk to workers.

The draft regulations also required the PCBU to ensure, so far as is reasonably practicable, the provision and maintenance of adequate facilities for the welfare of workers, including toilets, drinking water, hand washing and eating facilities. These provisions do not prescribe the type of facilities but rely on a risk-based approach by requiring PCBUs to consider relevant matters including:

- the nature of work being carried out
- the nature of hazards
- the size, location and nature of the workplace, and
- the number and composition of the workers at the workplace.

These regulations recognised that there are many different workplaces, including temporary workplaces and those in remote areas. They provide flexibility for PCBUs to determine the types of facilities they need to suit their circumstances and meet their duty of care under the model WHS Act.

The draft Code of Practice *Managing the Work Environment and Facilities* provided guidance on the working environment and facilities at the workplace and included details on:

- providing a safe and healthy physical work environment including lighting, workspace and ventilation
- the types of facilities that should be provided for the welfare of workers, including toilets, drinking water, dining areas, change rooms and personal storage
- managing the risks of remote and isolated work, and
- preparing emergency plans.

Public comment

Limited comment was provided on the proposed draft regulations. The most significant concerns were that:

- the provisions duplicate the primary duty in the model WHS Act and therefore serve no additional benefit to the overall objective of the legislation
- the provisions fail to recognise the diversity of workplaces, and
- the matters could be more effectively dealt with in a Code of Practice rather than regulation.

Final proposal and rationale

In response to public comment, Safe Work Australia considered the issue of duplication and agreed that there is value in clarifying what a PCBU must do as a minimum to meet their general duty under the model WHS Act. The proposed regulations are not

prescriptive and are qualified by what is 'reasonably practicable' which accommodates various circumstances, including small and large businesses, temporary and mobile workplaces, and situations where facilities are already provided by other duty holders.

On this basis Safe Work Australia agreed that no changes be made to the consultation draft general working environment regulations.

The model Code of Practice on *Managing the Work Environment and Facilities* provides further guidance to support the regulations.

Overview of impacts

The provisions relating to work environment are risk-focused and qualified by what is reasonably practicable in the circumstances, and impose obligations that are no more than the basic safety precautions that a compliant employer in each jurisdiction already has in place.

On this basis the overall impact will be minimal. The risk focus approach will allow greater flexibility for duty holders in Queensland and SA than their current more prescriptive approach. This will potentially provide benefits for employers in those jurisdictions, over current arrangements, as they may be able to comply with their duties in a more cost-effective way without harming worker welfare and safety.

In addition, businesses working in buildings that meet the *National Construction Code of Australia* under building laws will already comply with the minimum standards for safe entry and exits, space, ventilation, floor surfaces, lighting and sanitary facilities.

Entry, exit and movement within the workplace

It is anticipated that there will be no new impact of a harmonised approach. Current requirements for exit and entry are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

Work areas and space

It is anticipated that there will be no new cost impacts of a harmonised approach. Current general jurisdiction requirements for work areas and space are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

There may be some savings for businesses in Queensland and SA regarding workspace because the model WHS Regulations are not as prescriptive as the current regulations in those two states. For example in SA a business must currently provide a minimum of 3 square metres of working space if the work is carried out at a desk (other than a desk situated in a cashier's booth or compartment) and the distance from the floor to a ceiling of a room where a person works on a regular basis must be at least 2.4 metres.

The model provisions are outcome focussed and therefore provide greater flexibility in compliance.

Floors and surfaces

It is anticipated that there will be no new impact of a harmonised approach. Current requirements for floors and surfaces are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

Lighting

It is anticipated that there will be no new impact of a harmonised approach. Current requirements for lighting under work health and safety regulations or building regulations are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

Ventilation

It is anticipated that there will be no new impact of a harmonised approach. Current requirements for ventilation under work health and safety regulations or building regulations are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

Heat and cold

It is anticipated that there will be no new impact of a harmonised approach. Current requirements to address the risks of working in extremes of heat or cold are consistent with what is proposed, which merely clarifies a requirement that already exists under an employer's general duty to provide a safe workplace.

Essential services

It is anticipated that there will be no new impact of a harmonised approach. Current requirements to address the risks of working in or near essential services are consistent with what is proposed.

Facilities

It is anticipated that there will be no new impact of a harmonised approach as all jurisdictions require the provision and maintenance of facilities for the welfare of employees under their principal Act. Most jurisdictions also have supporting regulations, while Victoria has a Compliance Code of Practice on workplace amenities and work environment.

There may be some savings for businesses in Queensland and SA regarding facilities because the model WHS Regulations are not as prescriptive as the current regulations in those two states and instead provide greater flexibility in compliance. For example a business in SA must currently provide reasonable access to at least one toilet per 15 employees (or portion of 15 employees) at work at any particular time. Under the proposed model WHS Regulations an employer in SA should not be faced with the additional cost of installing additional facilities for, say, a small temporary increase in employees.

Summary of Impacts

Overall, the impact of introducing these regulations is insignificant, except in Queensland and SA where the impact is expected to be positive. The regulations are outcome focussed and cover the existing minimum requirements for health and safety in all workplaces.

The benefits are that the regulations provide clarity and certainty for businesses about what is required to meet their duty of care, with further practical guidance contained in the *Managing the Work Environment and Facilities* Code of Practice.

6.4.3 First aid

What is it?

First aid regulations cover the immediate treatment or care of a person who is injured or who becomes ill at a workplace. The objective of the regulations is to reduce the impact of illness and injury on affected people in the workplace and increase survival outcomes for serious injuries by ensuring that every workplace has adequate first aid facilities, equipment and trained personnel to deal with injuries and illness effectively.

These provisions support and clarify the model WHS Act duty of a PCBU to ensure, so far as is reasonably practicable, the provision of adequate facilities for the welfare of workers, including ensuring access to those facilities. Facilities include toilets, hand washing facilities and first aid facilities.

What are the current jurisdictional regulations?

All jurisdictions require employers as part of their general duty to provide adequate facilities for the welfare of their employees. Six jurisdictions (NSW, Queensland, WA, SA, NT and the ACT) support these duties with requirements for first aid in their regulations.

Specifically, NSW has prescriptive requirements that require trained first aid personnel if the workplace has more than 25 employees. It also requires that a first aid room be available if the workplace has more than 200 employees (or more than 100 if it is a construction site). The NSW regulations also prescribe the contents of a first aid kit.

By contrast, the NT regulations provide very general requirements for the provision of first aid that provide that the duty holder shall provide and maintain first aid equipment and first aid amenities for use by a worker at the workplace, having regard to a number of factors including the location of, the number of workers at and the type of work performed at the workplace. The regulations also require that, where practicable, a trained first aid officer be present at a workplace at all times when work is being carried out. All first aid equipment and amenities provided must be readily accessible and available for use, and the location shall be identified by signs.

Like the NT, the Queensland regulations take a more general approach to the provision of first aid by requiring that the relevant person who is an employer must ensure that first aid equipment is reasonably accessible to each of the relevant person's workers, that the first aid is appropriate and adequate for the relevant work and is reasonably accessible. In addition to the requirements in the NT's regulations, Queensland also

requires that the relevant person who is an employer must ensure that the first aid equipment is maintained in a hygienic, safe and serviceable condition. Queensland has specific regulations in relation to first aid specific industries, including the construction industry and rural industry work. For the construction industry, there is the requirement that first aid be 'appropriate and adequate for the construction work' to accommodate potential injuries within construction work. The additional regulation in relation to first aid for rural work provides that, if practicable, a person with first aid training be available to treat an injury suffered by the worker in performing the work.

The ACT regulations require an adequate number of people trained in first aid at the workplace and the provision of a first aid room, health centre or other arrangements at the workplace to treat sick or injured persons.

SA also regulates first aid in their regulations, providing that first aid facilities are prescribed as facilities that must be provided by an employer for the welfare of his or her employees. SA does not provide descriptive requirements in the regulation but rather relies on the Code of Practice.

The Commonwealth includes first aid requirements in the principal work health and safety Act as part of the general duty of care. The Commonwealth also have a Code of Practice relating to first aid.

Tasmania and Victoria do not regulate first aid within their regulations, however do have substantial guidance material on the provision of first aid. Victoria has a compliance Code of Practice for *First Aid in the Workplace* that provides guidance on how to meet the duty to provide adequate facilities for the welfare of employees under the work health and safety Act. It provides duty holders an option to follow a prescriptive approach where the Code of Practice outlines the number and contents of first aid kits and the number of trained first aiders for various circumstances or a risk-based approach. It recognises that a prescriptive approach is often useful for small to medium-sized businesses, while large workplaces with sufficient expertise or those with complex hazards may benefit from a risk-based approach. Tasmania has similar guidance material on first aid in the workplace.

In addition to the jurisdictions regulating first aid in their regulations, most jurisdictions have Codes of Practice on first aid that vary in the guidance provided to employers, for example on the contents of first aid kits, first aid rooms, the numbers of trained first aiders and the type of training recommended.

All of the jurisdictions are similar in that they prescribe a duty to provide access to first aid that is adequate and suitable for the workplace, and that the first aid must be readily accessible by workers. NSW is more prescriptive in what is required in a first aid kit, and Queensland sets out requirements for specific workplaces.

What is the problem?

The requirements relating to the provision of first aid across the jurisdictions are inconsistent. There are variations in the level of detail including prescribing the type of facilities needed versus a risk-based approach, where first aid requirements are based on the size and location of the workplace, type of work, type of hazards and the number of staff at a workplace. The guidance provided in Codes of Practice across jurisdictions does not contain the same information.

It is not possible to provide the cost of provision of first aid under the current arrangements as the cost is dependent upon a range of variables, including the jurisdiction where the work is being carried out, the workplace and industry, and the number of employees. However for example major suppliers of first aid kits currently design and sell first aid kits according to the various workplace health and safety requirements in each jurisdiction. One national supplier has updated its range of first aid kits to meet the contents prescribed in the SA Code of Practice. These kits range in price from $71 for a 'small workplace' kit to $206 for a 'standard workplace' kit. In NSW, a basic workplace kit will cost approximately $200 and $240 for a large industrial kit.

What was proposed?

The Consultation RIS and discussion paper

This part of the draft model WHS Regulations required PCBUs to:

- provide first aid equipment and facilities and ensure workers have access to them, and
- ensure an adequate number of workers are trained to administer first aid.

In considering how to comply with these provisions, a PCBU must consider all relevant matters including:

- the nature of work being carried out
- the nature of hazards at the workplace
- the size, location and nature of the workplace, and
- the number and composition of the workers at the workplace.

A model Code of Practice is being developed to provide guidance on:

- the types of equipment and facilities that should be provided for various workplaces
- contents of first aid kits
- first aid policies and procedures, and
- training requirements for first aid personnel.

Public comment, final proposal and rationale

Limited comment was provided on the proposed draft regulations. The most significant concerns were that:

- due to the diversity of workplaces, the first aid requirements could be more effectively dealt with in a Code of Practice rather than regulation, and
- the provisions requiring an adequate number of workers to be trained in first aid would be too onerous and add training costs for businesses.

In response to public comment, Safe Work Australia considered that there is value in retaining regulations for first aid to clarify what a PCBU must do as a minimum to meet their general duty under the model WHS Act. No change was made to the regulations. A Code of Practice to provide guidance on these regulations will also be developed.

The proposed regulations adopt a risk-based approach and accommodate various circumstances, including small and large businesses, temporary and mobile workplaces, and situations where first aid facilities are already provided by other duty holders.

Where a business does not have its own facilities or its own workers trained in first aid, the regulations require that the workers have access *to* facilities and other persons who have been trained in first aid. This means that not every business will have costs associated with training a worker if they can negotiate access to someone who is trained. The costs of training and facilities could also be shared by businesses who share the same workplace.

Overview of impacts

Under the proposed changes, businesses operating across jurisdictions will no longer have to comply with different requirements. It is also anticipated that there will be savings for suppliers of first aid equipment as they will not need to cater for the different requirements regarding first aid in each jurisdiction. This may reduce the cost of such equipment.

The most significant compliance impact will be on businesses in NSW, with the impact depending on the size of a business. A business in NSW with more than 25 employees will potentially receive benefits as they will face less prescriptive requirements. However businesses in NSW with 25 or less employees will face more burdensome requirements, as they will no longer be exempt from first aid requirements. The vast majority of businesses have 25 or less employees.

Similarly, small not for profit organisations in NSW will also potentially face increased compliance burdens, while larger not for profit organisations in the state will have increased flexibility to meet their first aid requirements. However in other jurisdictions, there will only be minor changes expected for small businesses and not for profit organisations, as these organisations are currently required to meet first aid requirements under existing laws and generally have flexibility in their compliance.

In regard to the potential impact on a small business in NSW, as an example, a retailer with 10 employees, and without an ability to jointly access first aid facilities, would be required to purchase a kit under the proposed changes at a cost of between $70 and $200. In regard to the requirements regarding first aid officers, the effect would be similar to the current arrangements under the Victorian Code of Practice, which effectively requires that there be one first aid officer for every 10 to 50 employees. The cost of an eight-hour basic first aid course is approximately $100. A business, particularly a small service sector business, would also need to replace workers undertaking training, which can be considered a cost of around $200 to cover 8 hours.

Industry support requirements for first aid as long as they are flexible and take into account the diversity of workplaces. Concern has been expressed that the regulations will require every workplace regardless of size (even mobile workplaces) to have trained first aiders and provide facilities on site. However this is not necessarily correct as the regulations provide flexibility by only requiring ‘access’ to facilities and to trained first aiders. Consequently, in some instances workers’ access to first aid could be achieved by businesses sharing facilities. For example businesses collocated in a shopping mall could share first aid facilities.

A model Code of Practice for First Aid in the Workplace will provide additional guidance on how to comply with the regulations.

Benefits of first aid assistance include an ability for injured or at-risk workers to receive immediate attention and care for low risk injuries, preventing possible infection or increase in severity due to a lack of attention and/or sterilisation of wounds. There are also possible life saving benefits as assistance can be provided prior to the arrival of qualified medical assistance. The additional cost for small businesses in NSW can be compared to the fact that ensuring proper treatment or care of a person who is injured or who becomes ill at a workplace can potentially save a life and reduce the impact of illness and injury.

The overall benefits are that the regulations provide clarity and certainty for businesses about what is required to meet their duty of care, with further practical guidance contained in the First Aid Code of Practice. The regulations will also ensure the same standard of protection is provided to workers across Australia, which provides additional certainty to workers, particularly those who will work in different jurisdictions over their career.

6.4.4 Emergency plans

What is it?

Major incidents at workplaces are a risk of injury and death to workers and other people that may be present in or around a workplace. Without an effective and practiced emergency plan, evacuation of affected people may be chaotic thus increasing the risk of injury. Without designated responsible people to coordinate the emergency response, containment of fires or spills may be undertaken in an unsafe manner and increase the risk of injury or exposure.

The model WHS Regulations for emergency plans require a PCBU to ensure that an emergency plan is prepared for the workplace.

Emergency plans and procedures for the workplace take into account the various hazards and risks found at a workplace and the types of incidents that may occur.

What are the current jurisdictional regulations?

Six jurisdictions (WA, NSW, SA, Tasmania, NT and the ACT) have general emergency management provisions. These regulations all require that arrangements, procedures or plans are put in place for the safe and rapid evacuation of persons at the workplace in the event of an emergency.

The NT regulations require that the evacuation procedure be practised at reasonable intervals and that a record is kept of the practices. The WA regulations require that an evacuation procedure be followed in the event of fire or other emergency and that it be practised at reasonable intervals.

The ACT, NSW and SA regulations require one or more persons to be appointed and trained to oversee evacuation and, where appropriate, in the use of first-attack fire fighting equipment.

All jurisdictions have some provisions requiring emergency procedures within specific regulations on high risk activities including confined space work, hazardous chemicals, construction, mining and major hazard facilities.

In Victoria an emergency plan is required under its compliance Code of Practice. In the Commonwealth an emergency plan is not specifically required except for the construction section, and in Queensland an emergency plan is not required except in regard to the areas of hazardous chemicals, Major Hazard Facilities, construction and falls.

What is the problem?

Currently there is an inconsistent approach across jurisdictions relating to arrangements for emergency management and there are minor differences in the regulations that exist. Variations in jurisdictional regulations reduce the ability of multi-state businesses to develop and implement emergency arrangements that meet all jurisdictional requirements. Harmonisation in this area would provide the same protections for workers across all jurisdictions and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

The draft model WHS Regulations released for public comment for emergency plans required PCBUs to ensure that:

- an emergency plan is prepared that includes emergency procedures including effective response to an emergency, evacuation procedures, notification of emergency services at the earliest opportunity, medical treatment and assistance, and effective communication for coordinating the emergency response
- emergency procedures are tested, including the frequency of testing, and
- workers are trained in the implementation of the plan.

The emergency plan includes emergency procedures that will facilitate an effective and rapid response to emergencies including fire and explosion, hazardous chemical release, natural disasters, medical emergencies, violence or robbery.

When preparing the emergency plan, a PCBU would be required to consider all relevant matters including:

- the nature of work being carried out
- the nature of hazards at the workplace
- the size, location and nature of the workplace, and
- the number and composition of the workers at the workplace.

Guidance on these requirements was included in the draft Code of Practice *Managing the Work Environment and Facilities* that was also released for public comment.

Public comment, final proposal and rationale

The key concerns raised in submissions related to:

- the frequency of testing of emergency plans

- emergency plans, and whether they could be dealt with more effectively in a Code of Practice rather than regulation, and
- the need for clarification of responsibilities for duty holders where there are multiple PCBUs.

The model WHS Regulations require that the emergency plan include the testing of emergency procedures but does not specify how frequently the testing must be carried out. This is something that the PCBU will decide based on the types of hazards and risks at the workplace. A business that stores a large amount of hazardous chemicals in an urban area would be expected to test procedures more frequently than a business that operates in an administrative office environment.

The concerns in relation to the frequency of testing were made in response to the draft Code of Practice which recommended that evacuation practice drills should be carried out every six months. The Code of Practice has subsequently been amended to recommend that evacuation practice drills should be carried out every 12 months.

The Code of Practice also addresses the concern regarding who has responsibility for preparing an emergency plan where there are multiple PCBUs. It explains that the preparation of an emergency plan for a workplace shared by a number of businesses (e.g. a shopping centre, construction site or multi-tenanted office building) should be co-ordinated by the person with management or control of the workplace (who may be the property manager, principal contractor or landlord) in consultation with all tenants or businesses at the workplace. This means that not every PCBU at the workplace will need to prepare a plan.

Responsibilities for duty holders where there are multiple PCBUs will be clarified in the Code of Practice.

No changes were made to the draft regulations in response to public comment. Safe Work Australia agreed that requiring a PCBU to prepare an emergency plan to enable effective response in an emergency is appropriate for all workplaces.

Overview of impacts

The Victorian regulator has noted its concerns with the proposed requirement for businesses to implement an emergency evacuation plan. WorkSafe Victoria stated that:

> *While the level of detail which will be required in the plan along with the requirements to conduct testing of the procedure and provide information, training and assessment to workers will not necessarily have much impact for large and high risk businesses, it is likely to be a significant burden for small businesses.*
>
> *While it is difficult to ascertain a number of how many small businesses have existing emergency plans, it is WorkSafe's view that the number would be relatively low given this is not a mandatory requirement under the 2007 OHS Regulations. From 1 January 2010 to 1 January 2011 there were 2614 hits on the 'Emergency management – developing a plan for a small organisation' link on WorkSafe's website.*

Australian Bureau of Statistics (ABS) data from June 2007 to June 2009 estimated approximately 210 000 Victorian businesses as of June 2009. It is unclear whether this provides the full scope of home-based businesses. It is estimated that approximately 90 per cent (or 189 000) of these would be small businesses. It is assumed that approximately only 10-20 per cent of small businesses would currently have an emergency plan.

WorkSafe notes that while the requirement is not likely to have a major financial cost to businesses, the duty to test emergency procedures may have some impact if applied during trading hours (e.g. a retail business in a shopping mall).

There are also likely to be some impacts for businesses operating in Queensland and the Commonwealth. In Queensland an emergency plan is not specifically required except for in the construction sector, but businesses in other sectors will face additional requirements. In the Commonwealth there will also be impacts on businesses, except in areas of hazardous chemicals, Major Hazard Facilities, construction and falls, where an emergency plan is currently required.

A fee for service provider advised that, based on an organisation being over two floors with 100 people, the initial set up would be about $2000 and the annual costs would be $1500. This is consistent with figures provided by Tasmania that has estimated the costs to be $400–$2000 depending on reviews and practice evacuations. It could be reasonably expected that these costs would mean a higher impact for smaller businesses relative to larger businesses. However it may also be expected that smaller businesses may require less complex emergency plans, which would be simpler and less costly to prepare.

The regulations allow for businesses that are co-located to have a single plan that can apply to all of them, which may result in savings because resources can be shared and not every business will have to spend time preparing an emergency plan.

Overall, the benefits in increased safety and from harmonisation between jurisdictions are likely to outweigh the costs. Nevertheless, there is expected to be some significant costs. Victorian businesses will face more prescriptive compliance requirements, with small businesses likely to be particularly affected. The overall costs of reform would likely be less by moving towards a Code of Practice, but this has not been chosen at this stage.

6.4.5 Personal protective equipment (PPE)

What is it?

Personal protective equipment (PPE) is any clothing, equipment or substance designed to protect a person from risks of injury or illness.

PPE can include:

- hearing protective devices, such as ear muffs and ear plugs
- respirators
- eye and face protection, such as goggles
- safety helmets and sun hats

- gloves and safety boots , and
- clothing, like high visibility vests or life jackets.

PPE is used to control risks from a wide range of hazards. For some high risk activities or situations where specific regulations exist the use of PPE is critical to control risks and inclusion of regulatory provisions for PPE in those hazard areas is required. For other work activities, more general PPE provisions are needed in the regulations to mandate the use of PPE to control risks.

An extensive body of information relating to standards for the manufacture, selection, use and maintenance of PPE is provided by Australian Standards and by manufacturers and suppliers of PPE.

What are the current jurisdictional regulations?

All jurisdictions currently have provisions relating to the selection of control measures to be used for a particular risk. This is based on a hierarchical approach from the most effective controls to the least effective controls. PPE is regarded as the least effective control but there are circumstances where the use of PPE is the only reasonably practicable means of control for a particular circumstance.

All jurisdictions currently regulate the use of PPE to control risks. This is generally where it is the control measure selected or specified. Guidance on the selection, maintenance and use of specific PPE in regulations, Codes of Practice and guidance material is also provided.

Queensland, Victoria, Tasmania, SA, WA and NT do not have any express requirements that the employer is required to pay for PPE.

What is the problem?

The problem is one of consistency of structure of the regulatory frameworks as the detail relating to the selection, use and maintenance of PPE is spread differently across the regulations, Codes of Practice and guidance material in each jurisdiction. Additionally, there is inconsistency between jurisdictions on whether or not the relevant regulations specify that the employer is required to pay for a worker’s PPE.

What was proposed?

The proposed regulations covering PPE set out requirements for the PCBU to provide the PPE where it is selected as a control measure to minimise or eliminate risks in accordance with the hierarchy of controls. The Regulations require the PCBU who directs the work being undertaken to provide the worker with the PPE (at no cost to the worker), to ensure that the PPE is selected to minimise the risk, having regard to the work, the hazards, the fit and the comfort for the worker using the PPE. The Regulations further provide requirements for the PCBU to ensure the PPE is adequately maintained and is worn by the worker, and that training information and instruction in its correct use is provided to the worker.

Where PPE is a selected control measure, the PCBU must ensure the PPE is worn. Workers have a duty to wear the equipment provided and must not intentionally misuse

or damage the PPE. Other persons at a workplace that may be required to wear PPE (e.g. visitors to a noisy area in a factory) also have a duty to wear equipment provided.

The proposed regulations also contain specific proposals relating to the use of air supplied respiratory equipment and requirements for signs.

Further details relating to specific types of PPE for use with specific hazards and risks will be covered in a Code of Practice relevant to those hazards and risks.

The Consultation RIS and discussion paper

The issues paper accompanying the draft model regulations requested comment on whether it is preferable to specify generic standards for air supplied respiratory equipment in these Regulations or specify these kinds of standards elsewhere, such as in a Code of Practice. The latter approach would allow requirements to be tailored to particular circumstances or industries.

Public comment, final proposal and rationale

Location in regulatory framework of PPE provisions

- Unions and worker submissions strongly supported the inclusion of the proposed PPE provisions in regulation.
- Comments from employers favoured placing the PPE provisions into guidance material.

As PPE is often used as a final control option where it is not reasonably practicable to use other control methods, it is important that there be provisions at a regulatory level for PPE. Safe Work Australia agreed to move the detailed provisions in the proposal relating to air supplied respiratory equipment into relevant Codes of Practice. This is consistent with the approach taken for other types of PPE, where the detail around the selection, use and maintenance is contained at Code of Practice level and can be tailored to be specific to the hazards and risks it is addressing

Worker responsibility

- Employer groups sought a greater responsibility being placed on workers to wear PPE that was provided.

The proposed model WHS Regulations now include duties on workers to wear the PPE that is provided and not to intentionally misuse or damage the equipment.

Overview of impacts

The comprehensive requirements for workers to wear PPE are maintained. There will be an impact from the specific requirement that the employer must pay for a workers PPE, which will be new for businesses in Queensland, Victoria, Tasmania, SA, WA and NT, where this could be negotiated and in some cases formalised in wage agreements. In these jurisdictions where workers were purchasing their own PPE this cost will now be transferred to their employer. During consultation Safe Work Australia was unable to determine to what extent industry were already paying for their workers' PPE. Applying consistency with the principle that operates in relation to other control measures, which

are implemented and paid for by the 'employer', PPE as a control measure should also be provided and paid for by the 'employer'.

6.4.6 Remote or isolated work

What is it?

Remote or isolated work is work that is carried out anywhere a person is unable to get assistance from other persons because of the location, time or nature of the work being undertaken. Assistance includes rescue, medical or emergency assistance. Working in remote or isolated circumstances increases the risk of any job if workers are unable to call for emergency assistance.

There are 25 deaths in the National Coroners' Information System from 2000–2008 where remoteness, isolation or where the person was working alone was a significant contributing factor to the person's death. A number of Coronial reports have recommended mandating a reliable communication system to ensure a person has access to emergency assistance as soon as possible.

This regulation requires the implementation of measures that include effective communication with workers undertaking work in remote or isolated circumstances.

What are the current jurisdictional regulations?

Four jurisdictions (SA, WA, Tasmania and the ACT) have regulations for remote or isolated work. These regulations are similarly drafted and focus on the requirement to have a system for ensuring regular contact or communication with a person at a remote or isolated workplace.

Although five jurisdictions (Victoria, NSW, Queensland, NT and the Commonwealth) do not have general regulations for remote or isolated work, they nevertheless have general duties of care and risk management provisions within their current work health and safety requirements. Some jurisdictions have similar requirements for particular types of workplaces e.g. Victoria requires constant communication with workers in mines.

SA, ACT and Tasmania apply the regulation when a person works alone:

- in an area that is remote from others or isolated from the assistance of others because of the time, location or nature of the work
- in a situation that involves the operation or maintenance of hazardous plant, or the handling of a hazardous substance, and
- in work that is dangerous for a person to perform alone.

Western Australia applies the regulation where an employee is isolated from other persons because of time, location or the nature of the work.

Each jurisdiction requires that there is a system or procedure in place that ensures that there is regular contact with workers in remote or isolated locations and that these workers are able to call for help in the event of an emergency. WA requires that workers are trained in the procedure, SA requires that the system is provided and

maintained, and Tasmania requires that the procedure minimise the risks to the worker's health and safety.

Despite some minor differences in the wording and drafting, the intent and scope of the regulations are the same.

What is the problem?

The risks of remote and isolated work are not regulated consistently across Australia, which creates uncertainty for businesses working across borders and different safety standards for workers.

What was proposed?

The draft model WHS Regulations for remote or isolated work released for public comment applied if it was not reasonably practicable to eliminate risks to health and safety associated with remote and isolated work. The draft regulation required a PCBU to implement measures that include effective communication with the worker.

'Remote or isolated work', in relation to a worker, was defined as work that is isolated from the assistance of other persons (other than workers carrying out work with the worker) because of location (including a distant location), time or the nature of the work.

The issues paper released for public comment raised the question as to whether the proposed regulation adequately addresses the risks associated with remote or isolated work.

Guidance on these requirements was included in the draft Code of Practice *Managing the Work Environment and Facilities* that was also released for public comment.

Public comment

The key concerns raised in submissions were that:

- the definition of remote or isolated work should not capture workers who work alone in an urban setting
- the level of prescription is not necessary and could be more effectively dealt with in a Code of Practice or guidance material, and
- in jurisdictions with large distances and sparse populations, there may be a need to provide workers with satellite phones to enable effective communication.

More generally, concerns were raised about the lack of general requirements for hazard identification and risk assessment in the regulations as a whole.

Final proposal and rationale

In response to the concern about the definition, a worker may be isolated in an urban area and at risk because of particular circumstances e.g. an all-night service station attendant working alone is at greater risk of exposure to violence. It is appropriate that the regulations apply to these workers as well as to those working in remote areas.

The regulations were amended to reflect the addition of general risk management provisions after public comment. The regulations require a PCBU to manage risks associated with remote or isolated work. In minimising the risks the PCBU must provide a system of work that includes effective communication with the worker carrying out remote or isolated work. These amendments recognise that there are other ways of controlling the risks of remote or isolated work, apart from effective communication.

This means that the PCBU must control the risks so far as is reasonably practicable, not only by implementing effective communication systems (which may include telephone, radio or satellite communication systems) but also considering control measures such as a buddy system, call-in system or security system.

The changes made to the draft that was released for public comment were minor and drafting changes were made to make the regulation simpler to understand. The requirement to manage risks is already required under the model WHS Act. The requirement to use a communication method as a specific control measure was a requirement that did not change. There is no impact to businesses from the changes between the draft released for public comment and the final draft.

The Code of Practice on *Managing the Work Environment and Facilities* provides guidance on how to assess and control the risks of remote and isolated work.

Control measures identified in the Code of Practice

Buddy system – some jobs present such a high level of risk that workers should not work alone, for example jobs where violence has occurred.

Workplace layout and design – workplaces and their surrounds can be designed to reduce the likelihood of violence, for example by installing physical barriers, monitored CCTV and enhancing visibility.

Communication systems – the type of system you choose will depend on the distance from the base and the environment in which your worker will be located or through which he or she will be travelling. Expert advice and local knowledge may be needed to assist with the selection of an effective communication system.

If a worker is working alone in a workplace that has a telephone, communication via the telephone is adequate, provided the worker is able to reach the telephone in an emergency. In situations where a telephone is not available, you should choose a method of communication that will allow a worker to call for help in the event of an emergency at any time, for example:

Personal security systems, being wireless and portable, are suitable for people moving around or checking otherwise deserted workplaces. Some personal security systems include a non-movement sensor that will automatically activate an alarm transmission if the transmitter or transceiver has not moved within a certain time.

Radio communication systems enable communication between two mobile users in different vehicles or from a mobile vehicle and a fixed station. These systems are dependent upon a number of factors such as frequency, power and distance from or between broadcasters.

Satellite communication systems enable communication with workers in geographically remote locations. Satellite phones allow voice transmission during transit, but their operation can be affected by damage to aerials, failure of vehicle power supplies, or vehicle damage.

Distress beacons should be provided where life-threatening emergencies may occur to pinpoint location and to indicate by activation of the beacon that an emergency exists. Distress beacons include Emergency Position Indication Radio Beacons (EPIRB) used in ships and boats, Emergency Locator Transmitters (ELT) used in aircraft and Personal Locator Beacons (PLB) for personal use.

Mobile phones cannot be relied upon as an effective means of communication in many locations. Coverage in the area where the worker will work should be confirmed before work commences. Geographical features may impede the use of mobile phones, especially at the edge of the coverage area, and different models have different capabilities in terms of effective range from the base station. Consult your provider if there is any doubt about the capability of a particular phone to sustain a signal for the entire period the worker is alone. If any gaps in coverage are likely, you should consider other methods of communication. It is important that batteries are kept charged and a spare is available.

Movement records – knowing where workers are expected to be can assist in controlling the risks, for example call-in systems with supervisors or colleagues.

Training, information and instruction – workers need training to prepare them for working alone and, where relevant, in remote locations, for example training in dealing with potentially violent clients, using communications systems, administering first aid, obtaining emergency assistance driving off-road vehicles or bush survival.

The amended regulation is more aligned with the risk-based approach taken with regulating other hazards under the model WHS Regulations. It clarifies that the general duty of care to provide a safe working environment includes those that are remote and isolated.

Overview of impacts

The specific requirement in the regulations to provide effective communication may impact businesses in Queensland, Victoria, NSW, NT and those operating under Commonwealth jurisdiction, as this would be a new requirement. These regulations may also impact not for profit organisations that require workers to work alone in the community.

The cost may involve no more than purchasing a mobile phone for the worker. However in areas where there is no network coverage a satellite phone may be needed. Satellite phones can be purchased from around $900. For irregular use, it may be more cost-effective to hire a satellite phone. Where such communications systems are put in place, duty holders will also need to ensure that someone is available to receive a call during the period that a person is working in an isolated or remote area.

The regulations do not prescribe the type of communication system, therefore allowing a business to choose from a wide range of technologies that are available in the marketplace to suit their needs.

It is expected that businesses in jurisdictions that do not specifically regulate remote and isolated work that routinely carry out work in remote areas will already have systems in place including telephones, radios, satellite communication systems, disaster beacons or mobile phones to communicate with their workers as part of their general duty to ensure health and safety.

In certain industries it is common to have two-way radios or mobile phones. Certain industries such as telecommunications companies and gas pipelines, have GPS tracking on vehicles and emergency procedures back at main base.

For many businesses in the desert regions in SA, WA, Queensland and NT mobile phone coverage is not available and generally transport industries use an estimated arrival time. Local emergency services have to be called out to undertake searches, often for several days.

There is extra cost for communication systems such as GPS trackers, personal emergency distress beacons (EPERBs) which send signals straight to Canberra, or Royal Flying Doctor Service (RFDS) radios. RFDS systems are approximately $2,500–$3000 per year plus the cost of the radio. GPS vehicle systems with monitoring are approximately the same. EPERBs are cheaper; however the cost of activating emergency planes, helicopters and personnel will be in the vicinity of thousands, borne by the public.

The benefit of specifically requiring effective communication to a worker in a remote or isolated situation is that it can result in saving lives and avoiding injuries. This is supported by Coronial reports, for example in a case where an engineer died after a fall in an area of a large workplace that was infrequently visited and was therefore not found soon enough to access emergency assistance. The Coroner concluded that it is unlikely the engineer would have died if he had been provided with a means of communication to someone else at the workplace.

6.4.7 Hazardous atmospheres and storage of flammable or combustible substances

What is it?

An atmosphere is hazardous if:

- the atmosphere does not have a safe oxygen level
- the concentration of oxygen in the atmosphere increases the fire risk
- the concentration of flammable gas, vapour, mist, or fumes exceeds 5 per cent of the lower explosive limit for the gas, vapour, mist or fumes
- a hazardous chemical in the form of a combustible dust is present in a quantity and form that would result in a hazardous area.

Workers exposed to an oxygen deficient atmosphere can sustain significant injuries or death. For other hazardous atmospheres there is a significant risk of fire or explosion which can result in injury to or death of workers or significant property damage.

An ignition source in a hazardous atmosphere, such as a flammable gas, could result in fire or explosion. Ignition sources in workplaces could include hot surfaces, electrical

equipment, internal combustion engines and spark-producing equipment including grinding wheels and static electricity. The accumulation of flammable or combustible materials can also become an ignition source and result in fire or explosion.

Hazardous chemicals stored in workplaces constitute a hazard to workers, visitors and the general public. An analysis of the National Data Set for Compensation-based Statistics (NDS) identified two fatalities and 150 injuries to workers due to fire, flame and smoke in
2007–2008.

What are the current jurisdictional regulations?

Current jurisdictional regulations and Codes of Practice covering storage and handling of workplace dangerous goods are consistent with the proposed approach in the model WHS Regulations and the approach used in the National Standard for the Storage and Handling of Workplace Dangerous Goods [NOHSC:1015(2001)] (Dangerous Goods National Standard).

Victoria, Queensland and ACT have specific provisions relating to the reduction in quantities of dangerous goods as a risk control measure in their regulations. NSW and the Commonwealth provide similar regulatory controls through their dangerous goods Codes of Practice while Tasmania and NT both refer to the Dangerous Goods National Standard. WA provides separate guidance on managing these risks which describes quantity reduction as one means of compliance. SA and Tasmania both reference AS 1940 – Storage and Handling of Flammable and Combustible Liquids. AS 1940 provides detailed information on controlling risks for flammable and combustible liquid storage and handling including reduction in quantities, eliminating risks from hazardous atmospheres and controlling ignition sources. In the references above to Victoria, Queensland, WA and SA this issue is addressed under their dangerous goods requirements.

Victoria, NSW, Queensland, ACT, Commonwealth and WA all have provisions in their regulations for controlling hazardous atmospheres and ignition sources that are consistent with the Dangerous Goods National Standard and the proposed model WHS Regulations. South Australia refers to AS 1940, NT references the Dangerous Goods National Standard and Tasmania refers to the Dangerous Goods National Standard.

What is the problem?

While the underlying requirements for managing risks from accumulated quantities of flammable and combustible materials, managing risks from hazardous atmospheres and control of ignition sources are consistent across the jurisdictions, the above analysis shows that the approach taken to achieve compliance is not consistent. Some jurisdictions provide requirements in regulations, some in Codes of Practice or guidance and some by reference to Australian Standards. A consistent approach used in all jurisdictions would see greater certainty for businesses operating in multiple jurisdictions.

What is proposed?

The draft model WHS Regulations released for public comment defined a hazardous atmosphere and required the PCBU to eliminate or minimise the risks to health and safety associated with hazardous atmospheres at the workplace specifically by not

introducing or allowing the introduction of an ignition source into a hazardous atmosphere.

The draft model WHS Regulation also required a PCBU to ensure flammable and combustible substances are kept at the lowest practicable quantity. This regulation applies not only to hazardous chemicals but to all combustible materials.

These provisions were covered as part of the hazardous chemicals chapter in the draft regulations. The Consultation RIS did not seek specific comment on these issues.

Public comment, final proposal and rationale

No concerns were raised during public comment period regarding these provisions.

Although no policy changes to these regulations were made as a result of public comment, the provisions were relocated from the hazardous chemicals chapter to the general risk and workplace management chapter because they apply more broadly and not just in relation to hazardous chemicals.

The model regulations for hazardous atmospheres have also been aligned with the risk-based approach taken with regulating other hazards under the model WHS Regulations by requiring the PCBU to manage risks to health and safety associated with a hazardous atmosphere and ignition sources in a hazardous atmosphere.

Overview of impacts

Given the proposed regulations are consistent with existing requirements in regulations and Codes of Practice in the jurisdictions there will be no significant impact of the regulation on business practices. However there may be improvement in certainty for businesses operating in multiple jurisdictions, which could have small compliance cost benefits.

6.4.8 Falling objects

What is it?

Objects including equipment, materials, tools and debris that can fall or be emitted sideways or upwards are typical examples of falling objects at workplaces.

Other examples include tools falling off a working platform, rock and soil falling into a trench, falling bricks deflected off the side of a building and concrete pre-cast panels falling over.

There were 110 fatalities resulting from being hit by falling objects during the six years from 2001–02 to 2007–08, with the largest proportion of these being across Construction, Agriculture, Forestry and Fishing, and Manufacturing.

The highest incidence of fatalities occurred in Agriculture, Forestry and Fishing, with more than seven times the overall incidence rate for being hit by falling objects for all industries.

What are the current jurisdictional regulations?

All jurisdictions currently require the risks from falling objects that are reasonably likely to cause injury to a person to be managed by, so far as is reasonably practicable, eliminating the risk or if that is not reasonably practicable, by minimising the risk so far as is reasonably practicable.

Hazards posed by falling objects are commonly dealt with in Codes of Practice made under the work health and safety laws or guidance material rather than regulation.

For example safe systems of work may be required to prevent or minimise the risk of a falling object by:

- providing barriers, for example toe boards or mesh guards to prevent items from slipping or being knocked off the edge of a structure
- securing objects to the structure, for example lashing of scaffold boards
- ensuring that there are no loose objects and that any tools are properly secured, and
- creating an exclusion zone, where necessary, beneath areas where work is taking place.

Several jurisdictions currently also have specific regulations to deal with hazards posed by falling objects as follows:

- New South Wales—Occupational Health and Safety Regulations 2001 (NSW), regulations 57, 59 and 253
- Queensland—Workplace Health and Safety Regulation 2008 (Qld), regulations 283–291
- Northern Territory—Workplace Health and Safety Regulations (NT), regulations 116(2), 139(2)
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulations 135(2) and 168(2)
- Victoria—Occupational Health and Safety Regulations 2007 (Vic), regulations 3.5.34 (1)(b) and 3.5.41(2)(b)
- Western Australia—Occupational Safety and Health Regulations 1996, regulations 3.36, 3.72(1)(a), 3.76, 4.57(5), and
- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994, regulations 4.05(2)(e)(f), 4.22(2), 4.22A(4)(a).

The Queensland regulations establish a comprehensive scheme for preventing falling objects for the construction industry.

The New South Wales regulation includes less detailed requirements for specific controls but is broader in scope. It requires duty holders to ensure the risks associated with falling objects are controlled by use of the following measures:

- provision of safe means of raising and lowering plant, materials and debris in the place of work

- provision of a secure physical barrier to prevent objects falling freely from buildings or structures in or in the vicinity of the place of work
- if it is not possible to provide a secure physical barrier, provision of measures to arrest the fall of objects, and
- provision of appropriate personal protective equipment.

Four jurisdictions (Victoria, NSW, WA and NT) have provisions requiring control measures to be implemented to protect persons working in a lift well from falling objects.

Two jurisdictions (Victoria and the Commonwealth) have provisions that require employers to take practical measures to minimise the risk of objects falling on the operator of powered mobile plant, for example use of operator protective devices. The Commonwealth also specifies that the manufacturer must ensure that the mobile plant is designed to minimise the risk of objects falling on the plant operator.

South Australia has regulations about preventing falling objects in relation to plant and amusement structures.

The NT has a regulation about preventing objects falling from formwork in addition to the provision regarding lifts.

The ACT requires certain personal protective and safety equipment to be provided to protect any person that could be struck by an object or other material.

What is the problem?

Differences in current regulatory approaches outlined above are generally considered to be differences in form rather than substance. That is because all jurisdictions require risks of falling objects that are reasonably likely to injure a person to be managed, including those jurisdictions that do not have express regulations to this effect.

Harmonisation in this area would ensure that the same express requirements apply in every jurisdiction, thereby providing greater certainty about what is required.

What was proposed?

The proposed regulations released for public comment required duty holders to, so far as is reasonably practicable, eliminate the risks of falling objects by applying the following prescribed controls (in descending order of priority): provision of safe means of raising and lowering plant, materials and debris; provisions of a secure physical barrier to prevent objects falling freely from one level to another; use of personal protective equipment; administrative controls; other reasonably practicable risk control measures.

The proposed provisions were generally based on the current New South Wales regulation described above. Unlike the New South Wales regulation, however, the proposed provision (regulation 4.4.8) was not limited to objects ‘falling freely from buildings or structures in or in the vicinity of the place of work’. This means that the proposed provisions would have applied across a broad range of industries, not just the construction and related industries.

Unlike the New South Wales regulations, regulation 4.4.8(2) would have also required duty holders to record and provide reasons if only administrative controls were used to control the risks of falling objects from heights over two metres.

Public comment, final proposal and rationale

Scope

- Regulation 4.4.8 is too broad in scope—broader than the current equivalent New South Wales regulation, for example—and does not apply easily to industries other than the construction industry.
- For example the general requirement to control the risk of falling objects would have significant implications for workplaces like supermarkets where there may be a risk of goods falling from shelves.

The inclusion of specific controls around the risk of falling objects is supported to ensure that a consistent approach is taken to regulation in this area.

This means that the submission to limit the scope of the regulation to a particular industry, for example the construction industry, is not supported. The policy intent is to prevent falling objects that are likely to cause injury to any person in or in the vicinity of any workplace, including a construction workplace. Limiting the scope of the regulation in the manner proposed could give rise to the misleading impression that these risks do not need to be controlled in non-construction workplaces. As noted, the scope of the current provisions in all the jurisdictions are already broad in scope, with each requiring that an employer provide adequate protection against the risk of falling objects that are likely to cause injury.

Height threshold

- The scope of the proposed regulation is unclear as there is no reference from an object falling from one level to another or some other criteria, for example height threshold.
- The absence of a height threshold would have industry-wide implications for industries including retail, transport and storage and manufacturing.

It is proposed that the provision be simplified and amended so it applies more intuitively to all kinds of falling objects that can cause injury, not just to falling objects on construction sites, and:

- complements the general risk management principles proposed for the model WHS Regulations, including a general hierarchy of controls to be included upfront in the Regulations
- explains how certain risk control measures should be used as part of a safe system of work, including information about how higher-order risk control measures should be ranked for purposes of the hierarchy of controls.

The intention in proposing these changes is to address concerns that the proposed hierarchy of controls in regulation 4.4.8 has no intuitive application to any industries other than the construction industry.

The proposed amendments will ensure that the regulations apply in relation to kinds of falling objects that are reasonably likely to injure a person including objects falling from heights and even sideways off trucks or pallets.

The proposed amendments will make it clear that the primary requirement is to devise safe systems of work, as required under the model WHS Act, clause 19(3)(c).

In light of the proposed amendment the submission that a height threshold should be included is considered unnecessary and not supported for that reason.

Recording of use of administrative controls to control the risks of falling objects over two metres

- Record-keeping requirements in relation to the use of administrative control to control the risks of falling objects over two metres are strongly opposed (ACCI, Ai Group and others).

Consistent with the weight of public comment, it is proposed that the requirement to record the use of administrative controls to control the risks of falling objects over two metres be omitted on regulatory impact grounds. The proposal to impose this requirement was the cause for much of the concern regarding the broadening of the scope of falling object provisions among industry stakeholders.

Overview of impacts

Duty holders in all jurisdictions will be required to provide adequate protection against the risk of falling objects that are likely to cause injury by implementing a safe system of work.

The proposed requirements are considered to be consistent with the status quo in all jurisdictions, which means that regulatory impact is considered to be neutral for those businesses and undertakings that currently comply with the requirements in their jurisdiction(s).

The requirement to provide a safe system of work repeats the corresponding duty under the model WHS Act, clause 19(3)(c). All jurisdictions currently have an equivalent requirement in their existing legislation.

The regulation goes on to state that a safe system of work includes:

- preventing an object from falling freely, so far as is reasonably practicable, and
- if it is not reasonably practicable to prevent an object from falling freely, providing, so far as is reasonably practicable, a system to arrest the fall of a falling object.

This part of the regulation is consistent with general principles of managing risks (model WHS Act, clause 17), which are proposed to be re-stated as regulatory requirements upfront in the model WHS Regulations.

Victoria has expressed concerns about regulatory impacts in that jurisdiction. Victoria indicates that this regulation may impact a broad range of businesses in that jurisdiction and may result in businesses having to modify storage systems (shelves). However the proposed measures will not impose additional requirements. They essentially require that a PCBU provides adequate protection against the risk of falling

objects that are likely to cause injury by implementing a safe system of work, as required under current jurisdictional provisions. This may require, for example ensuring that shelves are safely stacked. With the decision to not proceed with the proposed requirement that PCBUs record the use of administrative controls to control the risks of falling objects over two metres, which would have been an additional requirement, businesses in all jurisdictions will effectively continue to be required to provide a safe system of work in regard to falling objects.

6.5 Representation and participation

What is it?

The model WHS Act provides for representation and participation through:

- HSRs for 'work groups'
- training for HSRs
- health and safety committees, and
- authorised right of entry for work health and safety purposes (union right of entry).

Options for these were canvassed during the National Review and published in the Second Report, January 2009. The National Review produced the recommendations to the WRMC, which ultimately decided the policy for the model WHS laws. WRMC endorsed the model WHS Act on 11 December 2009.

What are the current jurisdictional regulations?

The proposed regulations relating to representation, participation and issue resolution closely align to requirements contained in the Victorian laws due to the similarity of the Victorian primary legislation with that of the model WHS Act.

The significant changes for other jurisdictions largely relate to the requirements relating to representation, participation and issue resolution contained in the model WHS Act.

All jurisdictions provide for the election of HSRs or equivalent under their principal legislation and also regulations in some cases. No two jurisdictions have the same HSR arrangements as requirements vary in relation to the election process and training requirements. All jurisdictions provide for HSRs to receive training. Queensland, Tasmania, ACT, NT, NSW and Victorian legislation confer powers on union officials to enter workplaces. In WA, right of entry for work health and safety purposes is provided for under industrial relations legislation.

Most jurisdictions have a requirement to resolve work health and safety issues within the workplace; however the processes for doing so differ.

What is the problem?

The model WHS Act leaves the following process-based requirements to be prescribed under regulations:

- negotiations for and determination of work groups
- procedures for election of HSRs

- training for HSRs
- issue resolution
- training requirements for work health and safety entry permit holders
- form of work health and safety entry permits, and
- notice of entry.

While all current work health and safety Acts provide for the election of HSRs, processes for doing this vary across jurisdictions and some include more prescriptive processes. For example it is only in Tasmania that currently a minimum number of 10 employees are required before a process for electing an Employee Safety Representative (HSR equivalent) can be initiated.

Training requirements and approval processes for the training of HSRs and work health and safety entry permit holders currently varies between jurisdictions. NSW currently has no training requirement for authorised union officials. In the ACT, authorised union officials with right of entry complete the same training as HSRs.

The content of training differs largely because of the different legislative provisions in each jurisdiction dealing with representation and participation. The result is that a HSR working for a national company must retrain if they are elected to represent workers in another jurisdiction. A nationally consistent process for approving training of HSRs will enable the recognition of training undertaken by a HSR in another jurisdiction.

What was proposed?

The draft model WHS Regulations released for public comment prescribed:

- the matters to be taken into account in negotiations for and determination of work groups
- procedures for the election of HSRs, including requirements that a PCBU must not delay an election
- procedures for the removal of a HSR by a majority of work group members
- training entitlements for HSRs
- default procedures for issue resolution
- training requirements for work health and safety entry permit holders
- details of work health and safety entry permits and requirements for entry notices consistent with the Fair Work Act 2009 (Cth) (the Fair Work Act) and
- requirements relating to the publishing of a register of work health and safety entry permit holders.

Rather than prescribing the process for how negotiations for determination of work groups must be conducted, the regulations were directed at the most efficient and convenient mechanism to enable worker representation.

This is supported by the *How to Consult on Work Health and Safety* Code of Practice, which provides practical advice on:

- what is effective consultation

- how to consult with your workers
- when to consult, and
- how to consult, cooperate and coordinate activities with other duty holders.

Recognising there is no mandatory role for entry permit holders and that entry permit holders may only exercise limited rights under the model WHS Act, there was no prescription in the draft regulations regarding course duration. The draft regulations prescribed parts of the model WHS Act and Fair Work Act to be included in training. The training provided to entry permit holders would be aimed at assisting them to perform their role in representing workers through the right of entry provisions under the model WHS Act. This can be contrasted with training of an HSR who has been elected to undertake a voluntary role in addition to their daily work. An elected HSR may not have any background or understanding about workplace consultation, issues resolution or work health and safety. The training requirements for HSRs are currently dealt with administratively by most jurisdictions. This enables greater flexibility for providers in the development of courses material which necessarily encompasses a broader range of skills than legislation training.

Public comment, final proposal and rationale

Many of the issues raised in public comment related to the requirements contained in the model WHS Act.

- Concerns were expressed about the length of the proposed five-day training course for HSRs.

The model WHS Act requires HSRs to be trained in order to exercise their powers under the model WHS Act to direct that work stops or to issue a provisional improvement notice.

Currently, HSR training courses are broadly similar in duration and costs across jurisdictions. Courses are generally between four and five days in duration. The cost for a PCBU is between $500 and $1200 for each HSR undertaking initial training.

The proposed HSRs' entitlement to attend an initial five-day training course is supported as necessary to enable them to properly and effectively exercise powers and perform functions.

- Concerns were expressed in public comment that the prescriptive nature of the election process for HSRs interfered on the rights of workers under the model WHS Act to determine the procedure of HSR election and did not provide flexibility for geographically dispersed workplaces.

The level of prescription relating to HSR elections has been reduced and provision made to allow organisations to determine the most efficient and convenient mechanism to enable worker representation.

- Concerns were expressed that the default procedure for resolving disputes did not in fact provide a procedure but rather a list of issues to be taken into account by the parties.

The relevant provision has been revised and re-drafted to provide a step-by-step procedure for issue resolution.

- Some public comment requested the notice requirements for work health and safety entry permits be the same as that in the Fair Work Act.

The provisions in the model WHS Regulations are the same as that in the Fair Work Act with changes as necessary to align with work health and safety requirements.

It is proposed that the model WHS Regulations prescribe procedural matters relating to representation, participation and issue resolution processes under the model WHS Act. However the level of prescription relating to the election of HSRs is reduced and the default procedure for issue resolution is revised to a step-by-step procedure that can be invoked by parties to assist them resolve a health and safety dispute.

Overview of impacts

The Regulatory Impact Statement for the model WHS Act noted that the reforms under the model WHS Act will impose at least some minor changes for all jurisdictions. The requirement under the model WHS Act in relation to the functions, rights and powers of HSRs and the consultation obligations on duty holders to HSRs is different to that of any of the current jurisdictions.

The reforms regarding participation and representation will require material changes in NSW, WA and particularly in Tasmania, which applies a threshold on the requirement to elect an Employee Safety Representative. The ability of a HSR under the model WHS Act to direct that unsafe work cease will be a new provision for five of the nine jurisdictions (NSW, Queensland, WA, Tasmania and ACT). The ability of a worker to cease unsafe work will be a change for five of the nine jurisdictions (NSW, Victoria, Queensland, SA and the Commonwealth).

The model WHS Act will also confer powers on authorised representatives of unions to enter workplaces for work health and safety purposes, which is in line with most jurisdictions but is a significant change for Tasmania, SA and the Commonwealth.

Thresholds

In Tasmania, currently a minimum number of 10 employees are required before a process for electing an Employee Safety Representation (HSR equivalent) can be initiated. This is not the case under the model WHS Act.

NT and the ACT have in recent years removed thresholds from their work health and safety legislation. The RIS prepared for the ACT Work Safety Regulation 2009 considered the then current legislative threshold of 10 employees for the formation of a ‘designated work group’. It worked through several options, concluding that:

> *If small business, at the moment, does not consult there may be costs involved (but arguably – the fewer workers, the easier it is to consult). However, rather than the previously mandated costs, there will be choice as to what the OHS ‘dollar’ is spent on. For those who have developed simple effective consultative arrangements suitable for the workplace, these can continue. Guidance material on how to consult, including example (or template) consultation arrangement for small business, could be developed.*

> *Businesses that currently have consultation and participation arrangements in place would most likely already be complying with the general duty to consult. However, with the removal of the prescriptive participation arrangements, these businesses will be able to review their systems and in collaboration with workers, implement arrangements that better suit their individual needs, or simply preserve the status quo.*

Under the model WHS Act, the setting up of a work group is not mandatory and the model WHS Act allows for alternative consultative arrangements. This is to allow businesses, and in particular small businesses, to develop consultative arrangements that work best for them. It is anticipated that most small businesses would use consultative arrangements based on existing arrangements rather than through work groups and HSRs.

HSR election process

Removing prescription from the proposed election process for HSRs will enable the relevant parties to choose the best and most cost-effective way of conducting elections subject to the minimum requirements under the model WHS Act and model WHS Regulations.

HSR training—duration

In all jurisdictions apart from NSW and Tasmania, all current HSR (or equivalent) courses are five days. The impact on businesses that have HSRs in NSW and Tasmania will be an additional day of training at the cost of approximately $150–$300. HSRs in all jurisdictions apart from NSW are currently entitled to refresher training, generally a year after initial training.

An additional impact for businesses in NSW is the entitlement for an HSR to request a further day of training each year at a cost of approximately $150–$300 per day.

NSW has indicated that there will likely be some initial implementation costs as a consequence of changes to their existing legislation in establishing work groups, procedures for electing HSRs, and new training requirements for HSRs and entry permit holders. Transitional provisions are being developed to minimise this impact.

NSW identifies that the majority of those costs will be associated with providing gap training to transition current work health and safety representatives to HSRs and approving initial training for newly elected HSRs. Approximately 10 000 work health and safety representatives receive four days training in NSW each year. It is proposed that the regulator will develop one or two- day gap training for approved providers to deliver to current work health and safety representatives at a cost of approximately $150–$300 per day for businesses. It is estimated that there will be 2000 to 10 000 new HSRs in the first year of implementation depending on take-up rate.

In Queensland there are differences with existing processes for work groups i.e. the formation of multiple work groups based on diversity of work and each with entitlement to a representative, as well as new training required for HSRs.

There are currently two broad approaches to HSR training under existing legislation. In WA, Queensland and NSW it is provided through the formal vocational education system by Registered Training Organisations (RTOs). In other jurisdictions, each

proposed course and training provider is assessed by the Regulator. The model WHS Act and model WHS Regulations do not restrict training providers to RTOs and because of the voluntary role of a HSR, there is no mandatory course assessment.

WA legislation will be slightly different to that operating in other jurisdictions. The WA Government has indicated it will not be adopting the work health and safety provisions for HSRs to stop work, right of entry and reverse burden of proof in discrimination matters, and the penalties will be lower than other jurisdictions. Given WA will have alternative provisions, HSRs in that state may require a course with variations from the courses available in other jurisdictions.

While the model WHS Act does not include provisions to enable the mutual recognition of courses, a temporary advisory group has been established to develop a national framework for approving HSR training, including administrative arrangements to recognise training and approval of training in other jurisdictions.

Issue resolution

In SA there are changes as a consequence of simplification of their prescriptive procedures to issue resolution and written requirements, and new workplace entry provisions resulting in the need to approve training which accords with the model WHS Regulations.

In NT the introduction of issue resolution procedures and workplace entry permits will result in change. Many of the issues raised are directly related to provisions of the model WHS Act and not as a consequence of the model WHS Regulations. For example regulations for workplace entry provide the details of what is required to be included in training to be eligible to apply for a work health and safety entry permit but the process for obtaining a permit and the powers of work health and safety entry permit holders are contained in the model WHS Act. The model WHS Regulations provide further details as to process but the cost and benefit implications are related to the model WHS Act.

WHS entry permit holders

The regulations do contain specific training requirements for work health and safety entry permit holders. Recognising that entry permit holders have very limited rights that may be exercised under the model WHS Act, there is no prescription about course duration as there is for HSR training. This is consistent with requirements of the Fair Work Act for which a one-day training course is developed and provided by unions to its members for the purpose of gaining an entry permit under the Fair Work Act. A similar national training model is being developed through a temporary advisory group comprising of jurisdictional representatives and stakeholders. Regulators will bear the costs associated with implementing a nationally agreed model for approving training for entry permit holders.

While the model WHS Act does not include provisions to enable the mutual recognition of courses, it is proposed by regulators that mutual recognition of a course that has been approved in another jurisdiction be done administratively. Once a provider has been approved to conduct training in one jurisdiction, that approval and assessment by a regulator can be submitted to another jurisdiction for approval.

Not for Profit Organisations

The measures regarding representation and participation are likely to be of particular impact to those bodies with both volunteers and paid employees in the Commonwealth, NSW, Victoria, WA, SA and Tasmania, which following implementation of the reforms will need to afford their volunteers the same occupational health and safety rights and responsibilities as paid employees—volunteers are already effectively treated as employees in Queensland, NT and ACT. This is discussed further in section 6.12.5.

Conclusion

Overall, the reforms will result in benefits in terms of consistency between jurisdictions, which will be particularly beneficial for multi-jurisdictional firms. The reforms can provide additional ability for workers to participate in work safety issues, which may lead to better safety outcomes, particularly in Tasmania. There will be some less prescriptive requirements, such as in regard to the proposed election process for HSRs. However there will also be costs, particularly for Tasmanian businesses with less than 10 employees who will no longer be exempt from Employee Safety Representation election requirements. There will also be additional costs for businesses in Tasmania and NSW in regard to HSR training requirements.

6.6 Hazardous work

6.6.1 Noise

What is it?

Noise exposure is one of the most widespread hazards in the workplace environment. Exposure to excessive noise at work can lead to damage to hearing. In 2008–2009, occupational noise-induced hearing loss led to more than 4500 compensated workers' compensation claims. This represented 3.4 per cent of all workers' compensation claims and 13 per cent of all occupational disease claims (including musculoskeletal disorders). It amounted to $61 million in workers' compensation payments (Safe Work Australia, National Dataset for Workers' Compensation Statistics, 2009-10 data supply). Research undertaken in WA in the mid-1990s, combined with modelling done for the ASCC in 2005 using the WA data, workers' compensation data and several key assumptions suggests that approximately 12 per cent of the workforce is exposed to dangerous levels of noise.

Exposure to excessive noise also entails largely unrecognised costs to organisations by way of increased worker absenteeism, decreased performance and possible contribution to accidents. As well as the economic cost for employers, noise-induced hearing loss imposes a severe burden on health and social services and the Australian economy as a whole.

To the individual affected, the social handicaps of noise-induced hearing loss are also severe. It is irreversible and leads to communication difficulties, impairment of interpersonal relationships, social isolation and a very real degradation in their quality of life. The family of and others close to the affected person often experience secondary consequences of the condition. Hearing aids may be of benefit in overcoming some of the problems of noise-induced hearing loss, but normal hearing

can never be fully restored. Of those people affected 20 per cent or more also suffer from tinnitus (ringing in the ears), with some cases to a severe degree.

What are the current jurisdictional regulations?

All jurisdictions have regulations based on the National Standard for Occupational Noise 2nd Edition [NOHSC:1007(2000)] that sets noise exposure levels for the workplace. For example:

- South Australia—Occupational Health, Safety and Welfare Regulations 2010, regulations 69–72
- Western Australia—Occupational Safety and Health Regulations 1996 , regulation 3.45–3.47
- Northern Territory—Workplace Health and Safety Regulations, regulation 56
- Tasmania—Workplace Health and Safety Regulations 1998, regulations 107–111
- Victoria—Occupational Health and Safety Regulations 2007, regulation 3.2.1–3.2.14
- New South Wales—Occupational Health and Safety Regulation 2001, regulation 49
- Queensland—Workplace Health and Safety Regulations 2008, regulations 138–139
- ACT—Work Safety Regulations 2009, regulations 110–114, and
- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994, regulation 3.01–3.10.

All jurisdictions largely take the same approach as they have all adopted the National Standard for Occupational Noise which provides, among other things, the exposure standard for noise. However the key differences are outlined below:

- Only Victoria and Tasmania have provisions in their regulations that require audiometric tests for workers who are supplied with hearing protectors as a means to control noise. Victoria and Tasmania require audiometric testing for workers at the commencement of employment and at least every two years thereafter in regard to noise levels in excess of the exposure standards.
- Only Victoria, the ACT and the Commonwealth include noise-specific duties for 'upstream' duty holders including designers, suppliers, manufacturers and importers.

All jurisdictions have Codes of Practice for noise based on the *National Code of Practice for Noise Management and Protection of Hearing at Work – 3rd Edition [NOHSC:2009(2004)]*. The Codes of Practice include provisions around audiometric testing in those jurisdictions that have not mandated it in regulation.

What is the problem?

There is consistency across all jurisdictions in regard to the exposure standards for noise; however there are differences in relation to mandating audiometric testing and imposing noise-specific duties on upstream duty holders.

Currently Victoria and Tasmania require audiometric testing where the worker is exposed to noise that exceeds the exposure standard for noise. These requirements, prescribed in the Tasmanian and Victorian regulations, are essentially the same.

In addition to the differences associated with audiometric testing, there are also differences in how jurisdictions regulate 'upstream' duty holders.

In all Australian jurisdictions, upstream duty holders—including the designers, manufacturers, suppliers and installers of plants—are covered in regulations dealing with plant, while only Victoria, ACT and the Commonwealth have regulations for upstream duty holders that are specific to noise. The duties imposed in the noise-specific regulations by Victoria, ACT and the Commonwealth are largely the same; however the Commonwealth does not place specific duties on designers within the noise-specific regulations.

This produces some inconsistency across jurisdictions in managing the risk of noise exposure. Harmonisation in this area would provide the same protections for workers across all jurisdictions and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

The draft model WHS Regulations released for public comment required PCBUs to ensure that a worker is not exposed to noise at the workplace that exceeds the exposure standard for noise.

Under the proposed regulations, PCBUs would be required to eliminate the source of noise, or if that is not reasonably practicable, implement control measures to minimise the exposure to levels below the exposure standard for noise by substituting quieter plant or processes, or using engineering controls, administrative controls or personal hearing protectors as a last resort.

A model Code of Practice is being developed to provide guidance on:

- how to identify hazardous noise
- how to assess the risks of hearing loss, and
- the types of control measures that can be implemented to eliminate or reduce exposure to noise in the workplace.

The draft regulations did not include mandatory audiometric testing, as this was included in the relevant Code of Practice.

A Code of Practice is a guide to duty holders on how to meet their obligations under the Act or its Regulations. It is not required that Codes of Practice be complied with; however because they represent evidence of knowledge of risk and risk control they are evidence of what would be reasonably practical in the circumstances. Compliance with the model WHS Act and model WHS Regulations may be achieved by following another method, such as a technical or industry standard, only if it provides an equivalent or higher standard of work health and safety than the Code of Practice.

Public comment, final proposal and rationale

Limited comment was received on the proposed draft regulations. The most significant concerns were:

- the absence of audiometric testing
- the noise exposure level
- the absence of duties for designers, manufacturers, suppliers and importers, and
- the reliance on Australian Standard AS/NZ 1269.

In response to public comment, Safe Work Australia agreed to introduce a requirement for audiometric testing and duties for designers, manufacturers, suppliers and importers.

Audiometric testing

A number of comments were received requesting the inclusion of audiometric testing in the regulations, noting that removal of the provisions in the jurisdictions where it is currently mandated would significantly reduce the level of testing carried out. However only anecdotal evidence was provided on whether this would actually increase the degree of hearing loss in the community.

In response to this public comment, it is proposed to require a PCBU who provides hearing protectors to provide for audiometric testing of workers within three months of the worker commencing work and in any event at least every two years. In practice, this would mean that audiometric testing is only required where there is potential for workers to be exposed regularly to high levels of noise and where hearing protection is the chosen method to control exposure.

Audiometric testing will allow the hearing of workers exposed to noise to be monitored through regular audiometric examinations. When temporary or permanent threshold shifts are revealed by audiometry or new tinnitus reported, it will enable action to be taken to:

- review the worker's work to identify any changes that may have caused an increase in exposure
- reduce the levels of noise that the worker is exposed to and also reduce the duration of exposure, and
- verify that the nominal performance of the worker's personal hearing protector is adequate for the level of exposure to noise.

Two jurisdictions already mandate audiometric testing in full and one in part. Victoria and Tasmania have provisions in their regulations to provide audiometric testing of employees who are required to wear hearing protectors. Under these regulations, audiometric testing must be provided within three months of commencing work for which hearing protectors are required, and then at least every two years. The WA mining work health and safety legislation specifically requires audiometric testing as part of health assessments.

Victorian work health and safety regulations also require audiological examinations be conducted to determine the cause of hearing loss where audiometric testing indicates a reduction in hearing levels.

The Queensland and WA mining industry work health and safety regulations already include general requirements for employers to provide health surveillance of employees exposed to health hazards.

Exposure standards

A number of comments from unions stated that the current prescribed noise exposure level is both too high and outdated. There was strong argument that the noise exposure standard needs to be lowered to 80dBA and 115 dBC respectively. The values that apply in Europe are 80dBA and an LC, peak of 135 dBC.

Safe Work Australia agreed that further research is required in order to determine if changes should be made to the noise exposure standard. It was determined that Safe Work Australia commence a review of the noise exposure standard.

'Upstream duty holders'

It is also proposed that the regulations require:

- a designer of plant to ensure that the plant is designed so that its noise emission is as low as is reasonably practicable
- the designer to give certain information regarding noise emissions to the importer or supplier of plant
- a manufacturer of plant to ensure the plant is manufactured so that its noise emission is as low as is reasonably practicable
- a manufacturer to give certain information regarding noise emissions to the importer or supplier of plant, and
- an importer or supplier to obtain certain information from the manufacturer and to provide it to any person they supply the plant to.

While there are general duties under the model WHS Act, there is a case for more specific risk control duties to be imposed in relation to noise on designers, manufacturers, importers and suppliers of plant to provide greater specificity of the factors to be controlled in order to protect workers from the risk of developing noise-induced hearing loss.

Reference to AS/NZ 1269

As stated above, concerns were raised about the Australia Standard being referenced in the model WHS Regulations. AS/NZ 1269 sets out the process for measuring the exposure standard.

The referencing of Australian Standards in the model WHS Regulations has been kept to a minimum. Noise experts in WA and Queensland argued for the inclusion of reference to AS/NZ 1269.1 with regard to the definitions of LAeq, 8h and LC, peak for technical and legal clarity reasons. No changes are proposed to remove the reference to AS/NZ 1269.

Overview of impacts

Audiometric Testing

The largest impact in relation to noise will be the new requirement (except for Tasmania and Victoria) for compulsory audiometric testing in the regulations.

Submissions provided to Safe Work Australia explained that the benefits of audiometric testing are that it is a good way to determine if a noise policy was working and that it represented value for money in terms of preventative health interventions. However no evidence was provided indicating that there are reduced levels of hearing loss in Victoria and Tasmania, where audiometric testing is compulsory.

The cost of audiometric testing is about $40–$50 for an air conduction test. Depending on the results of that test, a full audiometric test may be needed, which is around $200. The majority of people only require the basic test (cost information supplied by WorkCover WA).

There is also a requirement for around 16 hours of quiet prior to the test, with some costs from lost work time in order to meet this requirement.

The exact number of businesses that will have increased compliance costs due to the requirement for audiometric testing is unknown, as many businesses may already be doing so due to some specifications for audiometric testing already existing in jurisdictional Codes of Practice. For example Queensland currently has a Code of Practice for noise which contains audiometric testing.

For illustrative purposes the maximum number of businesses that could be impacted by this new requirement are over 120 000 businesses in industries that comprise over 50 per cent of the claims for deafness. These include:

- fabricated metal product manufacturing
- transport equipment manufacturing
- machinery and equipment manufacturing
- general construction (building and non-building), and
- road and rail transport.

Source: Safe Work Australia National Dataset for Compensation Based Statistics (NDS), 2010

In 2010 business entities (employing businesses) in each of these industries by jurisdiction was as follows:

Jurisdiction	Total	1–19 employees
New South Wales	22 121	20 149
Victoria	17 981	16 216
Queensland	14 784	13 033
South Australia	3874	3294
Western Australia	6215	5382
Tasmania	1276	1136
Northern Territory	475	402
Australian Capital Territory	596	554
Total	67 322	60 166

Source: ABS 8165.0 Counts of Australian Businesses, including Entries and Exits, October 2010

It is likely that small businesses employing 1–19 people will be more likely to be affected as some larger companies already use audiometric testing. As it is a requirement to test all workers, the cost of compulsory audiometric testing will also be increased further for businesses that engage workers for short periods. For example a labour hire contract worker could work for as many as 12 PCBUs per year. A sub-contractor would generally work for at least 2–3 PCBUs in larger commercial sites and up to 10 PCBUs in residential sites. The construction industry in particular will be affected due to the number of small employers that engage sub-contractors for short periods. It should be noted that the above figures are an overestimate, as most of these businesses may not need to make any changes.

Upstream Duties

The inclusion of duties for designers, manufacturers, suppliers and importers may also result in additional regulatory burden for some jurisdictions, as these duties are currently only contained in noise-specific regulations in the ACT, Victoria and the Commonwealth. However it is anticipated that this will be minimal as all jurisdictions require upstream duty holders i.e. designers, manufacturers, suppliers etc., to ensure, so far as is reasonably practicable, that plant is safe and without risks to health and safety. In addition, designers, manufacturers and suppliers all have obligations within plant specific regulations. This existing duty has been strengthened in that there is a specific regulation dedicated to Part 4.1 that requires the relevant duty holder to systematically address risk management principles prior to designing and manufacturing and provide specific details of the information that is to be supplied to meet the requirements in the model WHS Act.

Therefore, this duty provides greater specificity to the duties that are already placed on these duty holders through sections 19, 22, 23, 24 and 25 of the model WHS Act.

There are many potential benefits associated with imposing duties on designers (duties that flow through to manufacturers, suppliers and importers), as studies have shown that design contributes significantly to serious work-related injury. The reduction of risk by redesigning or modifying manufactured equipment and processes after they have

been introduced into a workplace is difficult and expensive when the most cost-effective and efficient stage at which to control risks is at the design stage.

6.6.2 Hazardous manual tasks

What is it?

Hazardous manual tasks are activities in the workplace that have the potential to cause musculoskeletal disorders (MSD) due to hazardous factors including manual tasks that involve repetitive or sustained force, high or sudden force, repetitive movement, sustained or awkward posture and exposure to vibration.

Injury from manual tasks is a huge cost to the economy. Each year there are around 34 000 compensation claims paid to workers who require a week or more off work due to an injury related to a hazardous manual task. A typical workers' compensation claim for this type of injury is $5100, resulting in $900 million annually in direct compensation payments and over $5 billion in total economic costs (National Data Set for Compensation-based Statistics and ASCC Total Economic Cost of Work-related Injury and Illness to the Australian Employers, Employees and the Community).

What are the current jurisdictional regulations?

All jurisdictions, with the exception of Queensland, currently have regulations requiring the management of risk from manual handling or manual tasks.

Specifically, hazardous manual tasks are currently regulated in:

- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulations 64–68
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), regulation 3.4
- Northern Territory—Workplace Health and Safety Regulations (NT), regulation 59
- Tasmania—Workplace Health and Safety Regulations 1998 (Tas), regulation 65
- Victoria—Occupational Health and Safety Regulations 2007 (VIC), regulation 3.1.1–3.1.3
- New South Wales—Occupational Health and Safety Regulations 2001 (NSW), regulations 79–81
- ACT—Work Safety Regulations 2009 (ACT), Part 10, and
- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), Part 5.

The laws generally require a duty holder to step through a hierarchy of controls in the management of the risks associated with manual tasks within the workplace.

The regulations in NSW, the Commonwealth, SA, NT, Tasmania and WA also require that a risk assessment be conducted. All jurisdictions including Queensland have general regulations dealing with the design, manufacture, supply and import of plant that have application to manual tasks.

While Queensland does not have specific regulations it has a comprehensive Code of Practice—the *Manual Tasks Code of Practice 2010*—and various guidance materials for hazardous manual tasks in specific industries, including road freight, construction, and packing and cleaning. Section 26 of the Queensland *Workplace Health and Safety Act 1995* provides that if a Code of Practice states a way of managing exposure to a risk, a person discharges their workplace health and safety obligations for exposure to the risk *only* by adopting and following a way stated in the Code of Practice for managing exposure to the risk. In addition, section 42 of the Queensland *Workplace Health and Safety Act 1995* also provides that in a proceeding, a Code of Practice is admissible as evidence. The Code of Practice must be complied with in the same way as if the duties were prescribed in the regulations.

In addition to the various legislated regulatory frameworks, the *ASCC National Standard for Manual Tasks 2007* (National Standard for Manual Tasks) also provides requirements for managing risks associated with hazardous manual tasks. The National Standard for Manual Tasks provides a very broad definition of a hazardous manual task, which is any activity requiring a person to use any part of their musculoskeletal system in performing their work. It sets out the principles for the effective management of hazardous manual tasks to avert MSD arising from manual tasks in the workplace. The National Standard for Manual Tasks has provided jurisdictions with a national framework, either by jurisdictions giving effect to it in regulations or Codes of Practice or referencing it directly in regulations. All jurisdictional regulations except Queensland are generally consistent with the intent of the National Standard for Manual Tasks. South Australia and Tasmania refer to the National Standard for Manual Tasks in their regulations.

What is the problem?

As stated, the risks associated with hazardous manual tasks are currently regulated by most jurisdictions consistent with the intent of the National Standard for Manual Tasks. The current regulatory framework regulating hazardous manual tasks is not prescribed exactly the same way in every jurisdiction. There are slight differences around the definition of what is a hazardous manual task, which is partly due to the different drafting techniques between the jurisdictions. These differences relate to form rather than substance. Also, the manner in which the risk associated with a hazardous manual task is managed differs slightly across jurisdictions.

Not all jurisdictions place specific duties on designers, manufacturers, importers and suppliers within their regulations. Victoria, NSW, Commonwealth, NT, WA and Tasmania do not contain these duties in regulations specific to manual tasks.

Although differences between jurisdictions may appear relatively minor, they can make compliance complex for multi-state organisations. While there are general legislative duties under the model WHS Act, there is a case for the regulations to include specific requirements in regard to hazardous manual tasks. Without uniform definitions across jurisdictions and a continued lack of uniformity in the manner in which duties are expressed, duty holders may not consistently put in place the most effective measures to control the risk and protect workers from the risk of developing MSD.

What was proposed?

The proposed model WHS Regulations impose duties upon PCBUs to manage the risk of a MSD associated with a hazardous manual task.

Part 4.2 of the draft model WHS Regulations provided for public comment require a PCBU to eliminate or, if that is not reasonably practicable, minimise the risk of musculoskeletal disorders arising from hazardous manual tasks. The draft model WHS Regulations include:

- control measures to minimise the risk
- factors that must be considered when determining control measures, and
- when it is necessary to review and revise control measures.

A draft Code of Practice *Hazardous Manual Tasks* for this part of the regulations provides guidance on preventing MSD caused by hazardous manual tasks. It includes information on:

- how to identify hazardous manual tasks
- risk factors associated with MSD
- how to control risks, and
- the role of design in eliminating or minimising risks.

The draft model Code of Practice will be supported by additional guidance material for manual tasks in specific industries.

Public comment

Public comment on the model WHS Regulations included:

- that there should be greater clarity around the definitions of 'hazardous manual tasks' and 'manual tasks'. Others commented that they wanted more prescription detailing when a task is deemed hazardous as the definitions are too broad, and
- inclusion of duties for 'upstream' duty holders including designers, manufacturers, importers and suppliers of plant or structures within the hazardous manual tasks regulations. Others commented that the inclusion of such duties would duplicate the model WHS Act or requirements in the plant regulations.

Public comment on the model manual task Code of Practice included the following:

- there should be a simplified risk assessment tool
- clarification is needed on record keeping requirements and on the recording of all risk assessments for all hazardous manual tasks
- there is inappropriate usage of the term 'so far as is reasonably practicable'
- workplace design and its potential effects on MSD is a significant issue and appears to have been overlooked, and
- the Code needs to be easily understood and applied as it may have a large, small and medium enterprise audience.

Final proposal and rationale

It is proposed that the definition of hazardous manual tasks be simplified for readability, and specific and varied examples be included for clarity to provide a practical flavour to tasks that may not be immediately assumed as being hazardous. These include tasks

requiring a person to lift live animals or sort objects on a conveyor belt. In addition, the relevant duty holder will manage risks in accordance with the general risk management requirements set out in Part 2.1 that contains duties that are common across all or most chapters of the model WHS Regulations. This will result in a more consistent and effective approach to risk management. The use of 'so far as is reasonably practicable' was also considered throughout the regulations and Codes of Practice to ensure an appropriate and consistent use of this particular qualifier—including on Part 2.1 of the draft model WHS Regulations—and changes were made where necessary.

It is proposed the model WHS Regulations retain a list of matters that must be taken into account when determining appropriate control measures including postures, movements, forces, vibration, duration and frequency of the task, and environmental conditions. Control measures will be reviewed in accordance with the general review of control measures set out in Part 2.1 of the draft model WHS Regulations.

While there are health and safety duties under the model WHS Act imposed on 'upstream' duty holders, it was considered that, for the sake of clarity and to provide additional certainty about requirements to duty holders, more specific risk control duties should be imposed in relation to manual handling on designers, manufacturers, importers and suppliers of plant within the hazardous manual tasks regulations to provide greater clarity. It is therefore proposed that a specific regulation be included within Part 4.2 of the model WHS Regulations to require, so far as is reasonably practicable:

- a designer of plant or a structure to ensure the plant or structure is designed to eliminate or minimise the need for a hazardous manual task to be carried out in connection to the plant or structure
- a manufacturer of plant or a structure to ensure the plant or structure is manufactured to eliminate or minimise the need for a hazardous manual task to be carried out in connection to the plant and structure
- a designer and manufacturer to provide certain information to an importer or supplier, and
- an importer or supplier to obtain certain information from the manufacturer and to provide it to any person they supply the plant or structure.

Overview of impacts

All jurisdictions currently regulate hazardous manual tasks but the manner in which this regulation is achieved varies as previously detailed. With the exception of Queensland, all jurisdictions have specific regulations for hazardous manual tasks.

The impact that the harmonisation will have on a particular business will depend on the nature of the business and its current awareness and compliance with existing regulatory regimes applicable to the relevant jurisdiction. It is envisaged that any changes that will be required under the harmonisation will result in a risk management process that is more effective and transparent. This will be the case whether it is in relation to small businesses or specific industry groups including not for profit organisations.

Risk assessment

Consistent with the approach in the draft model WHS Regulations relating to risk management the proposed regulations do not mandate risk assessment. This approach acknowledges that where well-understood and widely-used risk control measures exist formal risk assessment may not be necessary, except in relation to a small number of high risk activities. The regulations in NSW, the Commonwealth, SA, NT, Tasmania and WA currently require a risk assessment to be conducted. The fact that a risk assessment does not have to be undertaken in all circumstances is a change that has the potential for significant savings to businesses, especially for small businesses and not for profit organisations that may not have in-house expertise to conduct an assessment and will benefit from the reduction in record-keeping requirements.

Queensland

As Queensland does not regulate manual tasks within its current regulations, the proposed regulations could affect businesses in that state. However as outlined, Queensland currently has a comprehensive Code of Practice imposing similar requirements that a business can follow in order to discharge legislated workplace health and safety obligations. The Chamber of Commerce and Industry Queensland noted in its submission the change would represent a new regulation in Queensland that would impose additional requirements. The Chamber also noted that although Queensland currently does not have a regulation relating to hazardous manual tasks, there does not appear to be higher incidence rates of these injuries within the state compared to other jurisdictions that currently regulate this activity.

Upstream duties

It is possible that the inclusion of designers, manufacturers, importers and suppliers' duties within the hazardous manual tasks regulations may result in additional regulatory burden for jurisdictions that do not currently contain these duties in regulations specific to manual tasks (Victoria, NSW, Commonwealth, NT, WA and Tasmania). All jurisdictions currently regulate upstream duties in some form within primary legislation and designers, manufacturers and suppliers all have obligations within jurisdictional plant regulations. This duty does no more than provide greater specificity to the duties that are already placed on these duty holders by sections 19, 22, 23, 24 and 25 of the model WHS Act, but makes it clear that the provisions also apply in regard to hazardous manual tasks.

The RIS that was prepared in relation to the National Standard for Manual Tasks and *National Code of Practice for the Prevention of Musculoskeletal Disorders from Manual Tasks at Work 2007* suggested that upstream duties will impose some new and additional costs for business. The RIS then projected the main costs came from requirements for hazard identification and consultation processes, which could impose additional costs in the order of $9.4 million. It was projected that over time these costs are likely to fall with increased familiarity with the standard and knowledge gained from consultations and research. However it should be noted that the duties imposed on 'upstream' duty holders under the proposed regulations are not as onerous as the duties under the National Standard for Manual Tasks. The proposed duties will impose a duty to manage risks that is already required under Part 2.1 of the regulations, and

duties that simply mirror the duties under sections 19, 22, 23, 24 and 25 of the model WHS Act.

The RIS suggested that the net benefits of the changes were quite large in net present value dollar terms, with net benefits amounting to $102 million per year. In addition, it also stated that improvements to quality of life resulting from the fall in manual handling incidents were of an order of magnitude of $429 million or more per year.

The ASCC RIS indicated that there were some costs to businesses in moving to the National Standard for Manual Tasks including hazard identification and design changes for manufacturers, designers and suppliers of equipment; hazard identification and modifications for owners of workplaces; hazard identification and modifications for those with control of work; costs associated with record keeping for those with control of workplaces; and the transitional costs for businesses and work health and safety authorities associated with regulatory change.

There are many potential benefits associated with imposing duties on designers. Studies have indicated that design can contribute significantly to reducing serious work-related injury in a cost-effective way, particularly compared to measures that are imposed after equipment is introduced into a workplace. Although the proposed measures will not generate significant additional benefits, as they effectively only continue current requirements, the measures will help to increase the focus on achieving safety benefits in the area of hazardous manual tasks through design.

6.6.3 Confined spaces

What is it?

Entry into and work in confined spaces can be dangerous because physical or chemical agents in the space may increase risks that would not occur if the space was not confined or are exacerbated because of the nature of the space. The result may be unsafe levels of oxygen or atmospheric contaminants that are immediately dangerous to life and health but not immediately obvious. There is also an increased risk of injury or death because workers are restricted in the distance they can keep from hazards. Where an injury or fatality occurs in a confined space where entry has not been properly managed, death or injury may also occur to those trying to rescue the person

The extent of compensable confined space incidents is difficult to quantify accurately because classification of mechanism of injury/fatality does not always identify that it related to a confined space. The National Data Set for Compensation-based Statistics does identify 46 confined space related serious compensable incidents during the period 2001–2007.

What are the current jurisdictional regulations?

The regulations in the Commonwealth and all states and territories are based on the NOHSC National Standard and Australian Standard *Safe Working in a Confined Space*. The standard was updated by Standards Australia in 2001 and published as *AS/NZS 2865:2001 Safe Work in a Confined Space.* AS/NZS 2865 has recently been further revised and released as AS/NZS 2865:2009.

Queensland, WA and Tasmania reference this standard either wholly or in part in their regulations.

The ACT, Commonwealth and NSW have regulations that closely reflect all of the national standard elements of AS 2865:1995. The ACT and NSW time periods for keeping records also reflect those in AS 2865:1995. The Commonwealth has a different time period for keeping entry permit records of three months. The Victorian regulations are largely based on the national standard elements of AS 2865:1995, although the requirement to undertake a risk assessment is not explicitly required and the entry permit becomes the main documentation of the risks associated with confined space entry. Victoria requires this document to be kept for 30 days.

South Australia and NT each have AS 2865 as an approved Code of Practice. Organisations managing confined space work and training organisations generally rely on the provisions in the Australian Standard as the basis for regulations and confined space entry resulting in requirements for entry into confined spaces across Australia being generally consistent.

Current jurisdictional requirements for confined spaces include:

- general requirements to assess and control risks
- specific risk controls, including the isolation of services and purging of spaces
- prohibition to enter or work in a space that has unsafe oxygen levels or an atmospheric contaminant above the appropriate exposure level
- preparation and use of entry permits
- standby persons
- provisions for emergencies, including appropriate equipment
- signage and protective barriers
- atmospheric testing and monitoring
- training, and
- record keeping, including entry permits, risk assessments and training.

What is the problem?

Despite the requirements for entry into confined spaces being generally consistent across Australia there are differences across jurisdictions relating to the definition of a confined space, provision of a standby person during entry, and the time period for which records have to be kept. This means that there needs to be different training requirements in each jurisdiction for those people assessing or entering confined spaces and in procedures required where companies may operate across more than one jurisdiction.

Scope of application differs across jurisdictional regulations. The key difference between jurisdictional definitions is that some jurisdictions have a narrower scope where, in order to meet the definition of a confined space, the space needs to have a restricted means of entry or exit.

Specifically, the definition currently used in the ACT, Commonwealth, NT, NSW, Queensland and SA is based on the 1995 and 2001 versions of the standard, which states that part of the definition of a confined space “may have a restricted means of entry or exit”. This is discretionary criteria and whether the space has a restricted

means of entry or exit is not a key factor in determining whether the space is a confined space. The 2009 version of the Australian Standard has removed this criterion from the definition.

The definitions used by Victoria, Tasmania and WA are narrower in scope as they require that the confined space must have a restricted means of entry or exit. This means that there are spaces regulated as confined spaces in the other jurisdictions that would be excluded in Victoria, Tasmania and WA.

Jurisdictions currently apply different time periods for keeping the records generated under the confined space regimes. The National Standard set record-keeping requirements of five years for risk assessments, one month for entry permits and training records for the term of the worker's employment.

What was proposed?

The draft model WHS Regulations released for public comment defined a confined space as:

> *… an enclosed or partially enclosed space that:*
> *(a) is not designed or intended primarily to be occupied or entered by a person; and*
> *(b) has a restricted means of entry and exit; and*
> *(c) is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and*
> *(d) presents a risk to health and safety from:*
> *i. an atmosphere that does not have a safe oxygen level; or*
> *ii. contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion; or*
> *iii. harmful concentrations of any airborne contaminants; or*
> *iv. engulfment.*

The proposed definition was generally based on AS 2865 with the exception of (b), which required that a space have a restricted means of entry or exit to be determined as a confined space.

The draft regulations would apply to any spaces that are entered, intended to be entered or could be inadvertently entered by a person.

The draft regulations placed a general duty on designers, manufacturers, importers and suppliers of plant or structures to eliminate or minimise the need for entry to a confined space and the risk of inadvertent entry.

PCBUs would have to ensure entry into a confined space was not allowed unless the risks of entry are managed by:

- assessing the risks associated with the space and recording the risk assessment
- ensuring an entry permit is issued to each worker prior to entry, which sets out details about the confined space, the control measures that must be used, and the communication and safety monitoring systems to be used including provision of a standby person
- ensuring signs are put in place to identify confined spaces

- putting in place controls to eliminate or minimise risks associated with connected plant and services, contaminants in and air quality of atmospheres, flammable gases and vapours and fire and explosion, and
- putting in place emergency procedures.

Workers who will be entering a confined space must be provided with information, training and instruction in relation to the risks and controls to be used and a record of training must be kept.

It was proposed that records of the risk assessment and the entry permit must be kept for two years and that records of training be kept for six months.

A Code of Practice on confined spaces supported the draft regulations and included guidance on:

- identifying confined spaces and assessing and controlling risks
- isolation controls, atmospheric testing and monitoring, fire and explosion, entry permits, standby person, and signs and barricades
- hazards that are unique to confined spaces including biological and environmental
- the effective use of respiratory equipment
- emergency rescue procedures, record keeping, providing information, instruction and training, and
- a sample confined space entry permit.

The Consultation RIS and discussion paper

The issues paper accompanying the draft model WHS Regulations for public comment specifically sought comment on the inclusion of having a restricted means of entry or exit as a criterion for determining a confined space.

Public comment, final proposal and rationale

Definition of a confined space

A number of comments were received relating to the definition of a confined space proposed in the draft regulations, with the majority of comment requesting the definition be aligned with the definition in AS 2865. Comments from ACCI supported this view and specifically questioned whether a space necessarily needs to have restricted means of entry and exit for it to be classified as a confined space. Ai Group sought reconsideration of the definition and scope. Individual comments requested more detail be provided on some elements of the definition. There was also comment that the revised definition would require reworking of existing confined space registers and risk assessments.

The reference to having a restricted means of entry and exit was removed from the definition, following public comment. The definition is now consistent with the Australian Standard and aligns with the majority of jurisdictions' current definitions. The scope of the regulation will not be changed for these jurisdictions and will ensure that current spaces managed as confined spaces will continue to be managed in that way.

New South Wales also indicated that the revised definition was important to ensure that entry to spaces such as large sewerage outlets and large grain silos with access doors were assessed for confined space risks and managed as confined spaces if those risks were present due to past fatalities in these spaces.

Record-keeping requirements

Comments were received on the record-keeping requirements for confined space assessments and entry permits, including from ACCI, who held the view that the proposed requirements were too extensive and the period for keeping records too onerous.

Record-keeping provisions were amended to require risk assessment records to be kept for 28 days after the work to which it relates is completed. Entry permits are required to be kept only until the work is completed. Where a notifiable incident occurs the records must be kept for two years following the incident. This aligns with the time within which an investigation must be completed and any legal action taken by the regulator is to be commenced. This approach to record keeping is also consistent with other record-keeping provisions in the regulations.

Inadvertent entry

There was a comment on the need to clarify the duties preventing inadvertent entry into confined spaces.

Provisions relating to responsibilities for controlling entry have been clarified in the final proposal including having a reasonably practicable qualifier on duty of the PCBU to ensure a worker does not enter a confined space. Identified confined spaces need to be managed to minimise the risk of inadvertent entry.

Standby person

One comment requested that an alternative to a “standby person” be included if the system of work has an equal or better safety outcome than a standby person.

Consideration was given to whether there was a suitable alternative to a standby person. In the event of an incident involving a worker in a confined space it was imperative that a person be available outside the space to raise the alarm immediately or commence removal or rescue proceedings. It was agreed that there was not an alternative that could provide a similar level of safety.

Additional guidance on training

One comment requested that further consideration should be given to providing additional guidance either in the model WHS Regulations or the Code of Practice on what could be considered to be adequate training and that training should be provided by a competent person.

For a duty holder to meet their duty in providing training, the training would need to be appropriate and provided by a competent person. It is not necessary to further detail this in the regulations. Guidance on training will be provided in the Code of Practice.

Other comments

One comment identified the need for a Code of Practice for confined spaces in the aviation industry.

This can be assessed by Safe Work Australia after the WHS Regulations and Codes of Practice required for implementation by 1 January 2012 have been completed. Safe Work Australia will have a process by which industry sectors are able to bring forward a proposal for a national Code of Practice including sufficient justification to warrant development of such a Code of Practice.

Other matters

The final proposal reflects the draft circulated for public comment with the changes identified above.

Overview of impacts

Victoria expressed the view that there will be an increase in regulatory burden in that state due to:

- a wider scope than in the definition currently applied in Victoria meaning that the confined space provisions may now apply to a much broader range of spaces, including cold rooms and shipping containers. In Victoria's view this will have a considerable impact
- the regulations encompassing engulfment of liquids
- record-keeping requirements for risk assessment and training records including the requirement for risk assessment with associated record-keeping requirements (which differs to the 'hybrid risk assessment' model in the Victorian Regulations 2007 – see r. 3.4.7), and
- the mandatory requirement for a standby person.

Regulators that currently have a definition of a confined space consistent with the proposed definition have stated that they do not consider cold rooms and shipping containers to be confined spaces under the definition. It is expected that this interpretation will prevail under the proposed regulations and that the impact in Victoria in relation to this issue will not be as great as Victoria have initially anticipated.

Engulfment from liquids is currently in the definitional scope of other jurisdictions and covers situations where working in pipelines or tanks connected to other processes could present a risk of engulfment and are considered a necessary consideration in identifying a confined space in those jurisdictions. The outcome from a failure to properly manage entry into, and work in, a space where there is a risk of engulfment from liquid could be fatal in extreme cases. It would be expected that these risks would be required to be managed at present under the general duty in the model WHS Act.

For Victoria there will be an increase in costs associated with managing the risk of engulfment. It is not possible to estimate the number of spaces in Victoria to which these provisions would apply or to identify how entry to those spaces is currently managed. However, for those confined spaces already managed, the additional cost to manage the risk of engulfment would be in identifying and assessing the risk of

engulfment and implementing appropriate risk controls, such as isolations. The Victorian RIS (2007) for proposed occupational health and safety regulations identified costs of $3196 for an initial (full) hazard identification and a time cost of one hour for isolations. Overall, the relatively small total cost of implementing these provisions would be overshadowed by the risk of engulfment manifesting itself and leading to a likely fatality.

As current legislation across all jurisdictions has been developed based on the requirements of the NOHSC/AS 2865 standard, the overall impact of the confined spaces regulations over current provisions will be minimal. Victoria, Tasmania and WA will have an increased scope of coverage of spaces under the agreed definition in the regulations. These may include spaces such as large diameter sewerage outflow pipes and some large grain storage silos that have access doors and also meet the hazard criteria for a confined space.

Record-keeping requirements have been set at a minimum level to allow for effective operation of the provisions in the regulations without requiring records to be kept for extended periods after the work to which they relate is completed safely. Risk assessment records and entry permits are currently required in all jurisdictions; and this will have minimal impact, and for a number of jurisdictions will reduce requirements. Given this minimum level, record-keeping requirements will not be onerous and there will be a minimal impact in relation to both records required and the keeping of records. The record-keeping periods set are less than those set out in the various iterations of AS 2865 on which the majority of jurisdictions base their requirements. The period for keeping risk assessments (28 days) aligns closely with the Victorian record-keeping requirement of 30 days.

Due to the risks associated with confined space entry and the consequent training provisions, safety equipment and processes required to undertake this work safely the work is generally undertaken by contractors that specialise in confined space entry or by larger organisations that have the capacity to maintain the required level of expertise and facilities. Smaller companies that have a regular need to enter a confined space may set up requirements specific to the entry required. As the risks and the nature of the work are relatively constant it may be more efficient for the expertise to be held in-house. An example of this would be a company that manufactures tanks and requires a person to enter the tank to carry out welding operations.

These sorts of organisations will be required to comply with the confined space entry requirements in the particular jurisdictions in which they operate. In those jurisdictions where the scope of what a confined space is has been expanded through the change in definition, which expands the scope to include confined spaces that do not have restricted means of entry and exit, there will be additional administration requirements, for example around entry permits and record keeping in relation to those additional spaces. However, the only businesses that are likely to be significantly affected would be any that do not currently have confined spaces but will have under the new definition.

The costs of the implementation of confined spaces risk management arrangements for such businesses are potentially significant. The Victorian RIS (2007 pp 69–70) identified a range of costs to meet confined space requirements. These cost estimates included:

- $3196 for an initial hazard identification

- $2400 for signage
- $7860 for personal protective equipment
- $4698 for entry permit systems
- $4100 for rescue equipment
- $2000 for atmospheric monitoring
- $12 400 for information, instruction and training
- $400 for record keeping, and
- $8750 for emergency procedures.

Other costs identified, including the isolation of services, purging of contaminants and a standby person, were quantified in terms of worker's time, being a total of six hours in all.

Based on the above information the first-time implementation of confined spaces risk management arrangements may cost a business between about $25 000 and $45 000, depending on, for example, the personal protective equipment, emergency equipment and training required. However, while overall it is expected that there will be a very small number of businesses so affected and therefore a minimal impact, for those individual businesses with risks that are currently not covered by confined space regulatory requirements in Victoria, Tasmania and WA, there may be major costs to implement confined spaces requirements to manage those risks, which may be significant for smaller businesses.

It is anticipated that businesses will continue to manage confined space entry in a manner similar to the way they are required to do under existing legislation either through in-house expertise or the use of contractors. Impact from the proposed regulations on businesses more generally is expected to be minimal.

The impact on not for profit organisations is expected to be minimal due to the number of not for profit organisations engaged in work requiring confined space entry. If these organisations were carrying out work in a confined space they would be required to comply with existing requirements.

6.6.4 Falls

What is it?

Slips, trips and falls usually result in sprains and strains (also known as musculoskeletal disorders) as well as cuts, bruises, fractures and dislocations.

The draft model WHS Regulations proposed provisions to cover falls by persons from one level to another that are reasonably likely to cause injury and would not for example cover falls at level such as slips and trips.

Approximately 15 fatalities occur annually because of falls from height with a typical compensation payment for a fatality claim in excess of $100 000.

What are the current jurisdictional regulations?

All jurisdictions currently require risks of falls by persons in the workplace to be managed by, so far as is reasonably practicable, eliminating the risk, or if that is not reasonably practicable, minimising the risk so far as is reasonably practicable.

Under general principles for managing risks in the workplace, most jurisdictions also apply a 'hierarchy of controls' that requires duty holders to step through a list of risk control measures, from the most to least effective, and to apply the most effective measures or combination of measures, so far as is reasonably practicable. No height threshold applies, so these general hierarchies apply to all kinds of falls regardless of height.

In addition to these requirements most jurisdictions also specifically regulate the risk of falls by persons in the workplace, for example:

- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), Part 13
- New South Wales—Occupational Health and Safety Regulations 2001 (NSW), Division 6 of Part 4.3
- Victoria—Occupational Health and Safety Regulations 2007 (Vic), Part 3.3
- Queensland—Workplace Health and Safety Regulation 2008 (Qld), Subdivision 11 of Division 2 and Subdivisions 10–14 of Division 3 of Part 20 (Construction work)
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), Division 5 of Part 3
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 76
- ACT—Work Safety Regulation 2009 (ACT), Division 7.3 of Part 7, and
- Northern Territory—Workplace Health and Safety Regulations (NT), regulation 47A.

Of these jurisdictions, NSW, SA, the ACT and NT prescribe further general controls. These kinds of provisions include rank fall prevention devices including secure barriers ahead of fall arrest systems. This means that fall prevention strategies must be considered and applied so far as is reasonably practicable before considering and applying fall arrest systems, so far as is reasonably practicable, and then lower-order controls. Most of these laws also clarify that fall arrest systems that could be classified as PPE rank above PPE in the hierarchy of controls.

Queensland does not prescribe falls regulations with general application but instead applies a comprehensive scheme for the prevention of falls of both persons and objects in the construction industry. This scheme has been designed to ensure that administrative controls such as verbal warnings to 'stay away from the edge' cannot be used to control risk of falls by persons over two metres in general construction (or three metres for housing construction).

Victoria and the Commonwealth take a different approach and instead prescribe a hierarchy of controls with specific application to risks of falls by persons over two metres. Under the Victorian laws risk control measures (that is, after elimination) are listed in the following order: fall prevention device; work positioning system; fall arrest system; and a fixed or portable ladder used in accordance with the relevant regulation

and administrative controls. Where administrative controls are used to control the risk of falls over two metres, both of these jurisdictions require a record to be kept. Additional documentation requirements also apply in the Commonwealth jurisdiction.

In Victoria, a number of specific exemptions are provided including in regard to the performance of stunt work, the performance of acrobatics, a theatrical performance, a sporting or athletic activity and horse riding.

The construction sector is given special treatment in some jurisdictions. Western Australia and NT apply a specific height threshold for high risk construction work of two metres. New South Wales has a height threshold of three metres and in Queensland there is a height threshold of three metres for housing construction work and two metres for all other kinds of construction work. In Victoria and the Commonwealth the regulations only apply once work is being carried out above two metres and applies to all industries including construction.

What is the problem?

Differences in current regulatory approaches outlined above are generally considered to be differences in form rather than substance. That is because all jurisdictions require the risks of falls to be managed regardless of height, including in those jurisdictions that specifically prescribe a hierarchy of falls to deal with the risks of falls over two metres (Victoria and the Commonwealth).

There is also inconsistency in regard to how jurisdictions treat the construction sector. A different approach is also taken to specific controls around falls regarding the proper use of ladders (Queensland, WA and ACT).

Harmonisation in this area would remove current differences in wording. This would provide greater certainty about what is required and ensure that a consistent approach is taken to regulating specific controls around falls. The issue is largely around whether the specific controls are maintained or a more flexible approach is required.

What was proposed?

The model WHS Regulations released for public comment required duty holders to, so far as is reasonably practicable, eliminate the risks of falls by persons from one level to another that would be reasonably likely to cause injury.

If not reasonably practicable, then duty holders would be required to apply a prescribed hierarchy of controls to adequately manage the risks of these falls. The hierarchy listed the following controls that would need to be applied in this order so far as is reasonably practicable: ‘solid construction’; ‘passive fall prevention device’; ‘work positioning system’; ‘fall arrest system’; then any one or combination of the following: use of a ladder; an administrative control; and all other reasonably practicable risk control measures.

The proposed draft model WHS Regulations were loosely based on the current Victorian and Commonwealth laws except that unlike those laws the proposed hierarchy of controls applied to risks of falls by persons from one level to another that would be reasonably likely to cause injury to a worker or other person. The proposal did not include a height threshold to be applied generally (e.g. over two metres) but it

proposed to provide special treatment for the construction section and to apply a threshold of two metres.

The draft model WHS Regulations were supported by the *How To Prevent Falls at Workplaces* Code of Practice which provides practical guidance on:

- managing the risks of falls
- work on the ground or on a solid construction
- passive fall prevention devices
- work positioning and fall arrest systems
- ladders
- emergency procedures for falls
- controlling the risks of a falling object, and
- implementing and reviewing control measures.

Public comment and final proposal and rationale

The treatment of falls received considerable comment, including concerns about the additional regulatory impact imposed by the abolition of the height threshold in some states and territories. There were also concerns raised about recording administrative controls to control the risks of falls over two metres. The consultation led to a number of changes.

Height threshold and controlling risks of falls

Comment included:

- that a height threshold of two metres should apply in relation to the hierarchy of control for falls from one level to another, similar to the current policy in Victoria and the Commonwealth
- that the cost of identifying and controlling the risks of 'small falls' is considered to have high regulatory impact, particularly for the residential housing construction sector
- that the removal of the height threshold for Victoria and the Commonwealth would have a potentially significant regulatory impact in those jurisdictions (Ai Group)
- that a risk-assessment approach should be adopted in relation to controlling risks of falls by persons, and
- the hierarchy of controls for falls is overly complex and a simpler model such as the model used in the current SA or NT laws is supported (Ai Group).

It was then proposed that the hierarchy of controls at regulation 4.4.3 be simplified and amended so it applies more intuitively to all kinds of falls (not just those over two metres) and that it:

- complements the general risk management principles proposed for the model WHS Regulations, including a general hierarchy of controls to be included upfront in the Regulations

- explains how certain risk control measures should be used as part of a safe system of work, including information about how higher-order risk control measures should be ranked for purposes of the hierarchy of controls, and
- accommodates safe use of ladders.

The intention in proposing these changes is to address concerns that the proposed hierarchy of controls in regulation 4.4.3 is difficult to understand and also to accommodate the introduction of general risk management principles into the model WHS Regulations.

The proposed changes will make it clear that duty holders must provide adequate protection against the risk of falls by implementing a safe system of work. The intention is for Codes of Practice to give practical examples to assist duty holders to comply with this requirement in relation to all kinds of falls, from 'small falls' through to falls over two metres.

This approach aligns more closely with the models currently used in NSW, SA, the ACT and NT.

The proposed changes mean that no height threshold will be specified. This addresses concerns that prescribing a height threshold such as two metres sends a misleading message that risks of 'small falls' at the workplace do not need to be managed. This is also consistent with the policy position in most jurisdictions. Most jurisdictions prescribe a general hierarchy of controls that applies in relation to all kinds of falls including 'small falls'.

Exemptions

Comment included:

- some support for the Victorian approach of excluding certain activities (ACCI, Ai Group and others).

In response to public comment it is proposed that the revised provision be subject to an exception for the performance of stunt work, the performance of acrobatics, a theatrical performance, a sporting or athletic activity and horse riding.

Exceptions have been made in these cases because the controls covered in the relevant provisions may have no obvious application to these activities. General requirements for managing risks would continue to apply to these activities as is currently the case in all jurisdictions.

Recording of use of administrative controls to control the risks of falls over two metres

Comment included:

- strong opposition to the requirement to record the use of administrative controls to control the risks of falls over two metres, including reasons for doing so, in regulation 4.4.4 (ACCI, Ai Group and others).

Consistent with the weight of public comment it is proposed that the requirement to record the use of administrative controls to control the risks of falls over two metres (regulation 4.4.4) be omitted on regulatory impact grounds.

This change means there will be no regulatory impact for those jurisdictions that do not currently require this kind of documentation and will mean a reduction in regulatory impact in Victoria and the Commonwealth jurisdictions.

Use of administrative controls to control the risk of falls over two metres

Comment included:

- administrative controls should not be available to control the risks of falls by persons over two metres (ACTU, CFMEU and others).

It is considered that the proposed provisions read together with Codes of Practice on falls, will ensure against duty holders using administrative controls as the sole means of controlling the risks of falls of two metres or more.

In relation to the choice of risk control measures it is considered that more expansive advice can be provided in Codes of Practice or other guidance including advice that can be tailored to specific sets of circumstances.

Other—safe use of ladders etc.

Comment included:

- support for further regulation around requirements for ladders and the safe use of ladders (ACTU, CFMEU and others).

It is proposed that these kinds of provisions be translated into Codes of Practice or guidance material as appropriate. More expansive advice can be provided in Codes of Practice or other guidance including advice that can be tailored to specific sets of circumstances.

Overview of impacts

Prescribing specific controls vs hierarchy of controls with height threshold

Duty holders in all jurisdictions will be required to provide adequate protection against the risks of falls by implementing a safe system of work. The proposed general requirements are considered to be consistent with the status quo in all jurisdictions, which means that regulatory impact is considered to be neutral for those businesses and undertakings that currently comply with the requirements in their jurisdiction(s). There may be some minor impacts in NSW and Queensland for the proposed two metre threshold, which will apply to the construction industry.

In some jurisdictions specific controls around falls may be moved to Codes of Practice which will allow more expansive advice to be tailored to specific sets of circumstances.

The proposed change in policy has been criticised on the grounds that it will introduce a discretion that is likely to lead to uncertainty and arguably a reduction in protection in these jurisdictions.

Moving these kinds of requirements from regulations to Codes of Practice will not however leave these kinds of serious risks unregulated. Duty holders will need to comply with any standards set by relevant Codes of Practice in this area including by providing at least equivalent or better controls for preventing risks than those

prescribed. The intention is that, taken together, the model WHS Regulations and relevant Codes of Practice will ensure there is no lessening of safety standards in this area.

The proposed special requirement of the construction section is in line with current practices in Queensland, NSW, WA and NT, except that the proposed height threshold of two metres is lower than that in NSW where the threshold is three metres, and lower than the three metre height threshold for the housing construction section in Queensland (the threshold is two metres for other construction in Queensland). The measure may therefore marginally increase the compliance burden in NSW and Queensland, but may reduce compliance burdens in the ACT, Tasmania and SA which do not currently have these thresholds for the construction sector.

Proposal to remove requirement to record use of administrative controls in certain circumstances

Removal of regulation 4.4.4 means that the level of regulatory impact anticipated earlier in the Consultation RIS will not occur. However regulatory impact may decrease in those jurisdictions with requirements similar to regulation 4.4.4 including Victoria and the Commonwealth.

6.6.5 High risk work

What is it?

The regulation for high risk work requires persons carrying out classes of high risk work to be licensed, identifies relevant qualifications for an applicant for a high risk work licence, establishes the licensing process and process for review of licensing decisions, and provides for accreditation of assessors of competency. It also prescribes requirements for authorisation of work and required qualifications.

High risk work is collectively a group of activities that have been identified as being of sufficient risk that those permitted to undertake that work can only do so after they have demonstrated they are competent to do the work safely and have obtained a licence to allow them to carry out the work. The type of work covered includes the operation of cranes, hoists, forklifts and boilers, and dogging, scaffolding and rigging work.

What are the current jurisdictional regulations?

Current jurisdictional regulations are based on the *National Standard for Licensing Persons Performing High Risk Work* declared in 2006 by the ASCC. It was a revision of an earlier NOHSC standard, published in 1992 and revised in 2001.

The regulations set up the basis for common categories of licences across all jurisdictions, which is the common approach to the licensing process and mutual recognition of licences in each jurisdiction.

New South Wales, SA, ACT and Queensland also retain some licensing of loadshifting equipment based on the National Guidelines published in 1992.

What is the problem?

High risk work is characterised by work that relies heavily on the competency of the person undertaking the work to manage risks that have the potential to lead to multiple fatalities. Persons undertaking high risk work are required to meet prescribed competency standards and to be licensed.

Many of these activities have been licensed at jurisdictional level in some form for several decades. A significant reform to harmonise licence categories associated with this type of work occurred with the development of *National Occupational Health and Safety Certification Standard for Users and Operators of Industrial Equipment* [NOHSC1006:1992] and the accompanying *National Guidelines for OHS Competency Standards for the Operation of Loadshifting Equipment and Other Types of Specified Equipment* [NOHSC: 7019 (1992)].

The standard also formed the basis for developing national units of competency for each of the licence categories. This standard was adopted in all jurisdictions except the Commonwealth and formed the basis of nationally harmonised licensing requirements and mutually recognised licences across Australia. The Commonwealth requires operators to be licensed but relies on the states and territories to issue the licences based on the location of the Commonwealth employees.

The 1992 standard and guidelines were reviewed and revised in 2006 with the publication by the ASCC of the *National Standard for Licensing Persons Performing High Risk Work.* The development of this revised standard and the accompanying units of competency and assessment instruments addressed a number of inconsistencies that had arisen since the publication of the 1992 documents.

There are currently some small inconsistencies in jurisdictional approaches to applying the licensing provisions in the National Standard including how reach stackers are dealt with under existing licence categories. The licence categories for boilers have also become outdated with changing technology and need to be reviewed to reflect operating requirements for modern boilers. There is also a need to consider how heritage plant should be dealt with under the regime as the competency requirements for modern plant do not reflect requirements to safely and competently operate heritage plant. There is also a need to clarify some of the definitions of licence classes and categories to remove ambiguity.

There is also inconsistency in that NSW, SA, ACT and Queensland retain some licensing of loadshifting equipment.

The development of model regulations for high risk work licensing is about reflecting the existing licensing provisions in jurisdictional regulations that are already harmonised.

What was proposed?

The draft model WHS Regulations released for public comment was based on the National Standard and therefore existing jurisdictional legislation. The draft regulations provided for licensing of high risk work. This was defined in a Schedule to the regulations and included scaffolding, rigging, dogging and the operation of cranes, hoists, forklifts and pressure equipment.

The proposed classes, definitions and descriptors of high risk work were based on the National Standard with minor revisions to the licence class structure and some further clarification of class definitions.

Reach stackers were proposed for inclusion as a new separate licence class. Safe Work Australia set up a review protocol for all classes of high risk work. The operation of reach stackers was identified as being high risk work. Most jurisdictions license the operation of reach stackers under 'non-slewing mobile cranes' on the basis of a national decision made by the Heads of Workplace Safety Authorities (HWSA), but the competencies needed to safely operate a reach stacker are not fully met by the licence to operate a non-slewing mobile crane.

The proposal would extend the licensing category of concrete placing booms, extending to all booms and not just those that are vehicle mounted, on the basis that there was little difference in the risks involved in operating such equipment.

The proposal also set out the processes around applying for issuing and administering the licence regime. This included the option for jurisdictions to accredit assessors that assess workers' abilities to carry out high risk work for licensing purposes. It required assessors to meet certain standards in carrying out assessments.

Public comment, final proposal and rationale

National consistency and recognition

Comments from ACCI and other submissions identified concerns around current problems with national consistency and recognition of licenses. ACCI noted that licensing should be consistent across jurisdictions and that there should be mutual recognition of high risk work licences.

The policy intention since 1992 has been to ensure national recognition. There is currently a high level of cross-jurisdictional recognition of licenses issued under this regime. The final proposal will make it explicit that licences issued under the model WHS Regulations will be recognised nationally.

The final proposal modifies some definitions to ensure clarity and minimise the opportunity for different interpretations in different jurisdictions. For example, the definition of scaffolding was amended to include the words '... *or from the structure being erected'*, to clarify that the licence applies where the person could fall more than four metres from the platform or scaffolding being constructed even if the platform height is less than four metres.

ACCI also noted that licensing and competency should be linked to units of competence and training requirements. This approach has been included in the regulations.

Boilers

There was support for a rationalisation of the boiler classes to better reflect the risks associated with contemporary boiler designs and industry needs.

After consideration of the issues, Safe Work Australia agreed that the boiler licence classes would be reduced from three to two, with new definitions that were relevant to

the technical standards applied by industry, and would be flexible enough to allow for future industry development. The new definitions also better align with risks associated with operating current technology boilers and will remove existing training duplication (i.e. a person will no longer need to complete the Standard boiler training and assessment before completing the Advanced boiler training and assessment).

Heritage boilers

Comments also identified the issue of boiler licensing and the competencies gained as not being applicable to heritage boilers.

The competencies required for the safe operation of heritage boilers compared to contemporary boilers are significantly different and this makes the training related to licensing irrelevant for operators of heritage boilers. Some jurisdictions (Victoria and NSW) currently license the operation of heritage boilers as high risk work.

The Association of Tourist and Heritage Rail Australia proposed that operators who are regulated by rail safety legislation be exempt from licensing. They asked that this practice be extended to the regulations so that the operation of heritage boilers will not be considered high risk work. They suggested that a Code of Practice replace the requirement for high risk licences for heritage boiler and reciprocating steam engine operation.

The impact of the removal of licensing requirements for heritage boiler operation classes would be minimal as very few heritage boilers are in commercial operation. Most heritage boilers are operated for hobby and display purposes.

A general exclusion has been included and heritage boiler operation will not be licensed as high risk work. A Code of Practice for heritage plant is being developed with the heritage plant community. This Code of Practice will include the operation of heritage boilers and should be effective in ensuring the continued safe operation of heritage boilers.

Reach stackers

Ai Group provided comments regarding the inclusion of a new class of licence for reach stackers. The regulations do not currently have sufficient information to identify exactly which pieces of equipment are to be covered. It is not possible to quantify the level of regulatory burden that may occur within specific industries.

The proposal narrows the definition of reach stacker to only the operation of those items of plant that lift and move with a shipping container. The regulations are now consistent with the way in which reach stackers are currently accepted for licensing under the non-slewing mobile crane category and will formalise what is already done in most jurisdictions.

Ai Group asked that a broad range of industry be consulted during development of the reach stacker licence class to ensure that there is clarity around which equipment is included and excluded. This consultation has occurred through the Licensing Temporary Advisory Group (TAG) and Safe Work Australia. The development of reach stacker competencies is being undertaken by the Transport and Logistics Industry Skills Council and will be subject to their broad consultation process.

Loadshifting equipment

Comments regarding loadshifting equipment ranged from concerns that a licence would no longer be required to support for the removal of licensing and achieving a nationally consistent approach.

The removal of loadshifting licensing in those jurisdictions that currently require a licence (NSW, SA, ACT and Queensland) was identified as a benefit for business administratively and financially, and for workers who worked across state boundaries. The Safe Work Australia review protocol did not identify loadshifting equipment as high risk and this indicates there would be no reduction in safety. The overall impact will be minimal. Most jurisdictions were already no longer licensing these classes of equipment in line with the 2006 National Standard.

Assessment and assessors

Specific comments received in relation to assessment included:

- if a person is assessed as not yet competent they need to undertake retraining and therefore should not be able to be reassessed straight away. Traditionally 21 days has been identified as the period during which the person should be ineligible for reassessment, and
- that regulators should be able to conduct assessments if there is a shortage of assessors.

The registration of assessors will not be a mandatory element of the regulations. Jurisdictions may or may not choose to undertake registration. This will enable jurisdictions to either manage the quality of assessors and assessments through the Registered Training Organisation processes in their jurisdictions or maintain an independent level of assessor evaluation.

Other comments

Ai Group noted that there are a wide range of tasks that can be considered high risk work, even within one class of work. They suggested that where a task was of a low level of risk that it be exempt from licensing. Safe Work Australia did not accept this suggestion and did not consider it appropriate to extend exemptions beyond the proposed exemptions for the special cases of heritage boilers and loadshifting equipment. An extensive review undertaken of high risk work found that generally all the current classes of high risk work were of significant risk to the operator, other workers and members of the public. This decision was recommended by the Licensing TAG and endorsed by Safe Work Australia.

The regulation for high risk work requires persons carrying out classes of high risk work to be licensed, identifies relevant qualifications for an applicant for a high risk work licence, establishes the licensing process and process for review of licensing decisions and provides for accreditation of assessors of competency. It also prescribes requirements for authorisation of work (for section 43 of the Act) and required qualifications (for section 44 of the Act).

Overview of impacts

The impact of the model regulations will be minimal as all jurisdictions' arrangements were based on the existing National Standard.

Existing boiler licence holders will be transferred into the two new classes without the requirement for additional competency training.

Jurisdictions that will no longer license loadshifting equipment will need to transition from these arrangements. This is expected to have a slight benefit to operators in NSW and Queensland as they will no longer need to apply for and pay for licences. It is likely to have little impact on worker safety as the competencies for these types of equipment are generally included in broader industry training requirements such as mining and construction packages.

New South Wales has already announced that as part of the transition to the model work health and safety laws on 1 January 2012, NSW operators of front-end loaders, backhoes, skid steers and excavators will no longer need a certificate of competency from 30 September 2011.

Operators of static concrete placing booms and reach stackers will require a new licence. Jurisdictions will need to implement appropriate transitional arrangements to allow operators to continue to work safely until an appropriate licence is obtained. There is expected to be minimal impact as both reach stacker and concrete placing boom operators are likely to already hold licences due to current licensing requirements (e.g. 'non-slewing mobile crane' licence class used for reach stacker operation) or industry demands (e.g. the need for workers able to operate both a vehicle mounted and a static concrete placing boom).

Operators of heritage boilers will no longer need to be licensed but must have appropriate competencies to operate their heritage plant safely. This will ensure that operators do not have to complete time consuming and costly training and assessment towards obtaining a boiler licence when this is irrelevant to the plant to be operated. Heritage boiler operators must be given appropriate training and information to ensure that they can operate the plant safely. Safe Work Australia has been working with heritage plant interest groups and operators to develop a heritage plant Code of Practice that will provide guidance on the training and operational requirements of heritage plant required for its ongoing maintenance and safe operation. This will ensure that the risks associated with heritage plant are managed within a framework of knowledge and training that is relevant to the older technology (such as riveted boilers).

Clarification of definitions and greater detail around licensing processes will minimise the opportunities for differing interpretations of requirements. Identifying that licences will be recognised across Australia will also reduce concerns that this may not be happening at present.

6.6.6 Demolition work

What is it?

Demolition work occurs within the construction industry. Construction is one of Australia's highest risk industries. In 2007–08 approximately 7 per cent of employees worked in the construction industry (665 600); however, the industry accounted for 11

per cent of accepted workers' compensation claims resulting in one week or more lost. An average of 50 construction workers are killed at work each year.

According to the Australian Bureau of Statistics' Work-Related Injuries Survey, there were 877 000 workers in the construction industry in 2005–06 and around 75 700 of these workers experienced a work-related injury. This equates to 86 injuries per 1000 workers which is 25 per cent higher than the incidence rate for all Australian workers of 69 injuries per 1000 workers.

Information about incidents arising from excavation work is consolidated within construction industry incident data. This means there is no data available that specifically reports on injuries or fatalities arising out of demolition work.

Demolition work that impacts on the structural integrity of a building is considered high risk construction work and is characterised by a range of very hazardous working environments. Hazards associated with demolition work include:

- the instability of the structure
- poor or excessive loading on floors
- loading against walls
- unprotected openings
- glass fragmentation
- obstructed site access
- access within structures
- the discontinuation of services such as electricity, and
- the presence of asbestos.

What are the current jurisdictional regulations?

Demolition work is regulated under a range of laws including work health and safety, building and consumer protection laws.

Depending on jurisdictional arrangements, licensing, permits or notification of certain demolition work may be required under existing work health and safety laws, building laws, consumer protection laws or a combination of these. There is no common approach to licensing, permits or notifications. Examples of current work health and safety laws in this area include:

- New South Wales (licensing, permits, notifications)—Occupational Health and safety Regulation 2001 (NSW), Parts 8.6, 11.2, 12.3
- Queensland (licensing)—Workplace Health and Safety Regulation 2008 (Qld), regulations 46–50
- Western Australia (licensing, permits, notifications)—Occupational Safety and Health Regulations 1996 (WA), subdivision 7 of Division 9 of Part 3
- South Australia (approvals, notifications)—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulations 235, 416

- Northern Territory (notifications)—Workplace Health and Safety Regulations (NT), regulation 26.

In NSW and WA certain categories of licensed demolition work are subject to further permit or notification requirements. In SA certain high risk demolition work is notifiable. There is also a separate regime for approvals. Queensland relies on a licensing system but does not require case-by-case notification of demolition work. Northern Territory only requires notification of certain kinds of high risk demolition work. The Commonwealth does not generally regulate licensing and instead relies on state and territory based licensing.

Jurisdictions that regulate demolition work under building laws include Victoria, WA, Tasmania and the ACT.

Summary of current jurisdictional demolition regulation requirements

Jurisdiction	Licence required	Notification required	Building Approval or permit required
NSW	Yes	Yes	Yes*
Victoria*	Yes*	Yes*	Yes*
Queensland	Yes	No	Yes*
WA	Yes	Yes	Yes*
SA	Yes*	Yes	Yes*
Tasmania*	Yes*	Yes*	Yes*
ACT*	Yes*	Yes*	Yes*
NT	No	Yes	Yes*
Commonwealth#	Not applicable (N/A)	N/A	N/A

* Demolition work regulated under building laws.
# The Commonwealth does not directly regulate demolition work, but instead relies on state and territory based licensing.

Demolition licensing falls within the jurisdiction of the National Occupation Licensing System (NOLS) which is scheduled to commence in July 2012. Transitional arrangements to accommodate NOLS are explained further below.

Information about safe work method statement (SWMS) requirements for demolition work is included in the construction discussion.

What is the problem?

Nationally there are inconsistencies in the arrangements for licensing, permits and notifications of demolition work. All jurisdictions agree that demolition work presents a high safety risk and that regulators need to be made aware of planned work and to promote safe outcomes. However Victoria, Tasmania and the ACT require only notification of building regulators. As building regulators are seeking information from a

planning perspective, different information is being sought to that needed to ensure worker safety, particularly where certain high risk methods are used.

Although all jurisdictions treat demolition work as 'high risk construction work' other requirements vary.

Queensland, NSW, SA and WA have additional specific demolition requirements, for example:

- NSW requires the notification of demolition work and a licence to carry out the work, with differentiation of 'classes' based on height (e.g. over 15 metres), construction method (e.g. pre- and post-tensioned concrete), and demolition method (e.g. using explosives or loadshifting equipment on suspended floors)
- Queensland requires a licence based on not exceeding two storeys or over 10 metres in height, and
- WA has three classes of licence for demolition work (differentiated by height, plant to be used and demolition method), and a requirement to notify five days before any work that requires a licence commences.

What was proposed?

The draft model WHS Regulations released for public comment did not expressly propose regulations for demolition work except in the construction chapter where it is identified as 'high risk construction work'. This classification triggers requirements for SWMSs which are described more fully in the section dealing with construction generally.

Harmonisation of demolition licensing work falls within the jurisdiction of NOLS and no licensing or permit requirements were proposed at the time the draft model WHS Regulations were provided for public comment. Decisions on related notification and permit requirements were also delayed pending the outcomes of the NOLs process.

Public comment, final proposal and rationale

To avoid a regulatory vacuum pending the commencement of NOLS it is proposed that jurisdictions that currently regulate licensing of demolition work under their work health and safety laws be permitted to continue to do so pending commencement of NOLS.

To ensure regulators have the necessary information to ensure compliance and enforcement in this high risk area it is also proposed that prescribed classes of high risk demolition work be notifiable to the regulator. This would include, subject to certain exclusions, demolition work involving:

- explosives
- mechanical plant on suspended flooring, and
- a structure more than six metres in height including demolition of part of the structure that is load bearing or otherwise related to the physical integrity of the structure.

For greater certainty it is also proposed that the term 'demolition work' be defined.

Under the revised policy the notification to the regulator must be made at least five days before work commences and in the manner and form required by the regulator.

Overview of impacts

Transitional arrangements that will allow current demolition licensing arrangements to continue pending commencement of NOLS involve no change related to WHS legislation and therefore no regulatory impact.

Notification requirements will increase regulatory impact in those jurisdictions that do not currently require comparable notifications to be made to work health and safety regulators, specifically Victoria, Queensland, Tasmania and the ACT.

In NSW the average number of notifications for demolition work made to the NSW Regulator from 2008–2010 was 6766. While the scope of notifications is slightly different (with the main difference being that NSW has a lower height threshold of four metres), it provides an upper estimate of the anticipated number of notifications that could be expected under the proposed regulations. These figures have been extrapolated below.

Notification will be required in the manner and form required by the regulator. Assuming a simple notification process it is estimated that the requirement to notify regulators will take approximately 15 minutes. Based on the average weekly wage of $1121.40 ($33.71/hour) the consolidated costs to businesses are estimated as follows:

Notifications of prescribed demolition work

Jurisdiction	Estimated number of notifications	Consolidated estimated cost to businesses per jurisdiction
Victoria	5550	$46 700
Queensland	4140	$34 800
Tasmania	450	$3800
ACT	290	$2400

In addition to the direct compliance costs of notification there may potentially be costs to businesses through delays caused by the requirement for notification to occur five days before work commences. This may occur both in the jurisdictions without a current notification requirement and in SA where the current minimum notification period of 24 hours is shorter than that proposed. The longer notification period reduces flexibility for businesses. Conversely, there might be a small benefit for NSW and NT businesses where the current notification period is seven days.

The Victorian regulator opposes the proposed notification requirement as ‘a duplication and burden on demolition contractors’. It notes that in Victoria the Building Commission determines the competency of demolition contractors and building permits must be obtained from the relevant local authority. In its view the proposed requirement would require demolition contractors to deal with three separate agencies. Similar duplication of building regulation notification requirements will also occur in Queensland, Tasmania and the ACT.

Demolition work may be of short duration but involves significant risk. Notification enables regulators to understand the demolition work that is occurring and where appropriate organise workplace visits by inspectors while work is in progress, enabling targeted enforcement rather than reactive inspections after an incident. Where inspections occur there may also be compliance costs for the business in hosting the inspection.

Notification will require forward planning by duty holders and provide a clear trigger for meeting work health and safety requirements. Notification requirements are expected to have a benefit by playing an important role in raising and maintaining awareness levels of risks throughout the industry sector and in signalling regulators' views about safe demolition work practices. It is anticipated that this positive obligation to notify of planned demolition work will assist organisations to continuously improve their management of risk and, over time, will lead to improvements in safety and consequent reduction in injury.

There will be an impact on small businesses that undertake demolition work in those jurisdictions that currently do not have comparable notification requirements.

However the intention is that only high risk demolition work be notifiable. The six-metre threshold has been determined to exclude much of the demolition of single-storey buildings from notification requirements. These are lower-risk demolition jobs where it is expected many of the smaller demolition businesses would operate, thus lessening the overall impact.

For NSW, WA and NT there will be no new costs. However regulatory impact may be reduced in the jurisdictions that currently require notifications or permits for certain demolition work, as fewer kinds of work will be notifiable. In NSW notice will not be required for the demolition of a building, structure or installation that is between four to six metres high involving mechanical demolition, except if it involves loadshifting machinery on suspended floors or explosives.

It is not anticipated this change will impact on the not for profit sector as demolition is not a sector of industry in which they are generally involved.

6.6.7 Electrical safety and energised electrical work

What is it?

Each year throughout Australia there are many electrical accidents at work. Contact with energised electrical currents or an apparatus of the electrical installation creates a serious health risk as a current passing through the body interferes with the operation of the heart. The electrical conductivity of the heart muscle is disrupted and the muscle can fibrillate. This condition dramatically reduces the output of oxygenated blood to vital organs including the brain and, unless reversed immediately, death will follow.

Electrocution accidents can be fatal and non-fatal shocks can result in serious and permanent burn injuries.

Indirect injuries occur when shocks from faulty equipment lead to falls from ladders, scaffolds and other work platforms. Falls from heights can escalate the electrical shock to major body fracture injuries.

Those working with electricity may not be the only ones at risk, as poor electrical installations and faulty electrical appliances can lead to electric shock to other persons at or near the workplace. Fire and explosions from an electrical fault can cause extensive and costly damage to property, adding to the magnitude of the accident.

The hazards associated with electrical work can be linked to how and where it is used as well as to the inherent dangerous properties of electrical currents. The hazards associated with electrical work include:

- that electrical currents are not visible, neither is there any smell or sound
- the unknown presence of overhead or underground power lines
- poor electrical installation or faulty electrical equipment
- unqualified persons working with electricity
- fires and explosions, as electricity can be an ignition source
- working in confined spaces, and
- working with conductor metals.

Annually, there are approximately 190 accepted workers' compensation claims relating to contact with electricity. Approximately eight fatalities occur annually due to contact with electricity, with a typical compensation payment for a fatality claim in excess of $190 000.

Accepted claims for contact with electricity during the period 2003–04 to 2007–08 resulted in an average of $7.8 million in direct workers' compensation payments and an estimated $50 million annually in total economic costs (covering areas such as lost productivity, health care costs and loss of human capital).

What are the current jurisdictional regulations?

All jurisdictions currently require electrical risks in the workplace to be managed by, so far as is reasonably practicable, eliminating the risk, or if that is not reasonably practicable, by minimising the risk so far as is reasonably practicable.

In addition to these general requirements more specific provision may be made under general work health and safety laws, industry-specific electrical safety laws or both.

The following general work health and safety laws currently regulate electrical safety in some way, noting the list does not reference mining-specific requirements:

- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), Part 10
- New South Wales—Occupational Health and Safety Regulations 2001 (NSW), Division 3 of Part 4.2 of Chapter 4, Divisions 7A and Division 8 of Part 4.3 of Chapter 4, Part 7.7 of Chapter 7
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), Division 6 of Part 3
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulations 49–57

- Tasmania—Workplace Health and Safety Regulations 1998 (Tas), regulation 80
- ACT—Work Safety Regulation 2009 (ACT), Division 7.7 of Part 7
- Northern Territory—Workplace Health and Safety Regulations (NT), Division 4 of Part 7.

These jurisdictions may regulate electrical safety at the workplace generally, electrical safety at construction workplaces, energised electrical work or a combination of these.

The Commonwealth, NSW, Victoria, Queensland, WA and NT have implemented the National Construction Standard in their work health and safety regulations so regulate energised electrical work and similar risks under SWMS requirements in their construction regulations.

The Commonwealth regulates general workplace electrical safety (including a 'test and tag' regime), energised electrical work and work in the vicinity of overhead and underground electric lines.

New South Wales regulates general workplace electrical safety (including a 'test and tag' regime), RCDs subject to transitional arrangements, energised electrical work and work in the vicinity of overhead electric lines.

Victoria regulates electrical safety under general risk management requirements.

Western Australia regulates general workplace electrical safety, electrical safety at construction workplaces, RCDs and work in the vicinity of overhead electric lines.

South Australia regulates general workplace electrical safety (including a 'test and tag' regime), work in the vicinity of electrical hazards and RCDs (including special provision for construction workplaces).

The ACT regulates general workplace electrical safety including work in the vicinity of overhead or underground electric lines.

Notably many of the requirements around general workplace electrical safety, including requirements for ensuring the safety of electrical equipment, apply across all jurisdictions whether they are separately expressed in regulations or not. That is because they are covered by the general work health and safety duties required under the parent legislation.

A key difference however relates to policies for 'testing and tagging' of certain electrical equipment and requirements for RCDs, which is dealt with in more detail below.

Other approaches to regulation

Some jurisdictions do not specifically regulate electrical safety under general work health and safety laws, preferring instead to regulate under industry-specific laws that also generally deal with minimum technical standards for carrying out electrical work and licensing requirements. These include the *Electricity Safety Act 1998* (Vic), *Electrical Safety Act 2002* (Qld), *Electricity Safety Act 1971* (ACT) and subsidiary laws.

Queensland does not support moving away from its current regulatory model, but has indicated at this stage that it intends to amend these laws for consistency with the proposed electricity regulations under the model WHS Regulations.

What is the problem?

Nationally there are inconsistencies in the regulation of electrical safety under work health and safety laws. For example some but not all jurisdictions specifically regulate 'testing and tagging' of certain electrical equipment, use of RCDs and energised electrical work.

Harmonisation of regulations for electrical safety and energised electrical work will provide uniform coverage of safety for workers and will lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

In summary the draft model WHS Regulations released for public comment:

- restated general requirements for managing electrical risks in the workplace
- included specific testing and tagging requirements for equipment used in 'hostile operating environments' as defined
- included requirements for disconnecting (or isolating) unsafe electrical equipment
- prohibited energised electrical work except in the permitted circumstances and in accordance with the requirements of the Regulations
- required construction work to comply with AS/NZS 3012:2010 (if applicable)
- required the use of RCDs and their testing as set out in regulations 4.7.21, 4.7.22 (this issue is dealt with separately below), and
- addressed work that is carried out near overhead electric lines.

The policy intention was to broadly capture current requirements under general work health and safety laws while taking into account the need to ensure there is no lessening of safety standards.

The draft model WHS Regulations did not apply to 'the works of an electricity supply authority used for the generation, transmission or distribution of electricity for the public' (regulation 4.7.1(1)).

Public comment, final proposal and rationale

Definitions

- Key definitions of 'electrical equipment', 'electrical installation' and 'electrical work' should be consistent with the widely used corresponding definitions in AS/NZS 3000.

Strong support to base definitions of 'electrical equipment', 'electrical installations' and 'electrical work' on the corresponding definitions in AS/NZS 3000 is noted. At this stage the intention is for these definitions to be aligned, so far as is possible, with the corresponding definitions proposed for the National Occupational Licensing System (NOLS) scheduled to commence from July 2012. As settled definitions are not currently

available it is expected that a technical amendment will be made to harmonise with NOLS as soon as possible. This alignment will ensure, for example, that the concept of 'electrical work' is treated in the same way in related laws including work health and safety and electrical safety and licensing laws.

Application

- The proposed exclusion for electrical supply authorities requires clarification as it is not clear what is being excluded from the scope of the regulations.

It is proposed that the exclusion be amended to clarify that the requirements for energised electrical work do not apply to electricity supply authorities. This would correct an inadvertent error as general workplace requirements for electrical safety were intended to continue to apply to these authorities. The amended exclusion is intended to accommodate the work of the Ministerial Council on Energy as it was prior to 1 July 2011.

A jurisdictional note would allow each jurisdiction to define what an 'electricity supply authority' means in the jurisdiction. This flexibility is considered necessary as each jurisdiction has different institutional arrangements so uniform definitions would be unworkable. No further amendment is considered necessary for that reason.

Inspection, testing and tagging

- 'Test and tagging' requirements should be amended to clarify how new electrical equipment 'out of the box' should be treated and in particular whether testing or tagging is required prior to first use.
- Minimum testing intervals for 'test and tag' and also testing RCDs should be prescribed in the regulations.

It is proposed that the 'test and tag' requirements be amended to provide that new equipment 'out of the box' does not require to be tested before use. The intention is that a Code of Practice would provide further guidance on how new electrical equipment should be tagged to ensure it does not miss its first scheduled test after it is put into service.

Submissions that the model WHS Regulations should prescribe minimum testing intervals are not supported. It is considered that as these intervals vary depending on circumstances, Codes of Practice should be used to better explain how testing intervals should be determined.

Incorporating Australian and Australian and New Zealand Standards

- Additional Australian Standards including AS/NZS 3000 and AS/NZS 4836:2011 should be incorporated into the regulations (ACTU and others).
- AS/NZS 3012:2012 should not be incorporated into the regulations, at least not in its entirety. Particular concerns were also expressed by the electricity generators in this respect (ACCI and others).

The strong support for the inclusion of additional Australian and Australian and New Zealand Standards, particularly AS/NZS 3000 and AS/NZS 4836:2011 is noted (ACTU and others).

In relation to AS/NZS 3000 it is noted that this standard is already generally incorporated into other laws—usually those laws covering technical electrical safety requirements. To avoid overlap with those other laws it is not proposed to incorporate AS/NZS 3000 into the model WHS Regulations.

In relation to AS/NZS 4836:2011 it is noted that the content of this standard substantially overlaps with proposed regulations on energised electrical work, so it is not proposed to incorporate AS/NZS 4836:2011.

The strong opposition against regulation 4.7.20 (Electrical installations at construction sites) which incorporates AS/NZS 3012:2010 is also noted (ACCI, Ai Group and others). It is considered that this standard is drafted in a way that makes it suitable for inclusion in the model WHS Regulations. Minor amendments are proposed to clarify that other regulations covering the same subject matter do not apply in relation to construction work which should address concerns about duplication.

Energised electrical work (including electrical testing)

- The preliminary steps identified are too prescriptive for electrical testing and fault-finding and will work against securing a safe workplace, so should be separated out from the regime for energised electrical work (ACCI and others).

It is considered that the proposed model, which is largely derived from current Queensland electrical safety laws, is workable. No change is proposed for that reason.

In reaching this decision the risks associated with electrical testing and fault finding were taken into account.

Energised electrical work (including electrical testing)—risk assessments

- Requirements for risk assessments and SWMSs may require additional processes to be built into energised electrical work in some jurisdictions.

It is considered that the proposed requirements in relation to energised electrical work represent best practice and not prescribing these requirements would represent a decrease in current safety standards in a number of jurisdictions. It is considered that it is necessary to prescribe the proposed processes as the only way of carrying out energised electrical work safely.

Overhead electric lines

- Requirements for overhead electric lines should also apply to underground electric lines.

Treating overhead and underground electric lines in the same way for the purposes of general risk management is supported. It is considered that both can, and should, be regulated within the same regulation given the comparable nature of the risks involved.

Safe approach distances

- Nationally consistent safe approach distances should be established, whether in the regulations or Code of Practice.

It is considered that further guidance should be provided in a model Code of Practice.

Overview of impacts

Electricity can be a hazard in the workplace and it has great potential to seriously injure and kill.

Regulations are supported to provide further clarity around what must be done to ensure electrical safety in the workplace consistent with regulatory arrangements in a number of jurisdictions.

General workplace electrical safety

All jurisdictions currently require electrical risks in the workplace to be managed. Many of the proposed provisions (as revised) provide further guidance about what is required in a particular respect, for example in relation to:

- ensuring electrical equipment at the workplace is electrically safe, including by carrying out inspections and testing
- ensuring that unsafe electrical equipment at the workplace is not used
- preventing any person from coming into contact with electric equipment that could create a risk of electric shock, and
- ensuring so far as is reasonably practicable, that no person, plant or thing at the workplace comes within an unsafe distance of an overhead or underground electric line.

All of these are examples of basic performance-based health and safety duties that currently apply in every jurisdiction and must be met. Because the proposed regulations are performance-based they do not prescribe the processes that must be undertaken to meet the required standards. In that respect any regulatory impact is considered neutral as there will be no change to current standards in the areas listed above for any jurisdiction.

Other proposed regulations, particularly those incorporating process-based requirements, must be considered separately in terms of regulatory impact.

Inspection, testing and tagging—'hostile operating environments'

'Testing and tagging' of electrical equipment used in 'hostile operating environments' is considered to be essential to ensuring electrical safety and the proposed requirements are supported for that reason.

Regulatory impact is likely to be neutral in those jurisdictions that currently prescribe a comprehensive 'test and tag' scheme for 'hostile operating environments' including the Commonwealth, NSW and SA.

There may be an increase in regulatory impact in Queensland because regulation 83 of the Electrical Safety Regulation 2002 (Qld) only applies 'test and tag' requirements to electrical equipment with a current rating of not more than 20 amps. Also in that jurisdiction the requirements only apply to prescribed industries including manufacturing, rural, amusement and office-based work. In relation to office-based work there may be a choice between using an RCD or testing and tagging as per the relevant regulations. Queensland has commented that the proposed inspection and

testing requirements would represent a broadening of the current Queensland requirements and will result in increased regulatory impact.

In this context it is noted that the proposed 'test and tag' requirements apply to 'electrical equipment' that is 'supplied with electricity through an electrical socket outlet' and used in a hostile operating environment (as set out in the relevant provisions). A hostile environment is generally where the electrical equipment is exposed to potentially damaging conditions.

This wording is intended to ensure that the 'test and tag' requirements generally apply to smaller 'plug in' electrical equipment (even though the provisions will not be expressly limited to electrical equipment with a current rating of not more than 20 amps).

Consequently, duty holders in industries that are outside those currently covered (i.e. manufacturing, rural, amusement and office) will potentially face additional requirements. However, a large proportion of businesses with hostile work environments are likely to be covered by these industry sectors.

Regulatory impact for those jurisdictions without comparable regulatory-based schemes including Victoria, WA, Tasmania, the ACT and NT is difficult to evaluate, particularly because it is considered that 'testing and tagging' in 'hostile operating environments' would still need to be carried out in many circumstances to comply with general work health and safety duties. It is understood that AS/NZS 3760*, In-service safety inspection and testing of electrical equipment*, is widely complied with by businesses in order to discharge their duty of care to reduce the risk of electrical shock and a key method of achieving this is ensuring that electrical equipment is tested for electrical faults on a regular basis. In NSW this Standard is also an approved Code of Practice under its work health and safety laws.

Quantitative data is not available on the number of businesses that do not currently test and tag electrical equipment used in hostile operating environments and would therefore be impacted by the proposed requirements. However, the overall increase in regulatory impact is not expected to be significant for the above reasons.

Where a business is not already complying there will be additional costs. Businesses may engage electrical contractors or electrical safety specialists or alternatively the relevant testing may be carried out in-house using testing equipment or portable appliance testers, provided they have a suitably competent person. For businesses carrying out testing and tagging in-house, testing equipment and test tags range from $350 for an insulation meter and 100 test tags to $4000 for a programmable recording tester with memory, high current earth testing and current leakage testing. Competency training may also be required for in-house testers. The cost of outsourcing this work could start at around $450 (this is an example of an all-inclusive minimum charge for testing up to 100 pieces of equipment taken from a test and tag business website) and depends on the number of pieces of electrical equipment to be tested. For small businesses that have relatively few pieces of electrical equipment needing testing, the requirement will consequently have a relatively greater impact due to the fixed costs noted above.

Although the duty is process-based there is some flexibility in the requirement to 'test and tag' as the provision does not prescribe testing intervals. The intention is that duty holders should adjust testing intervals to meet the safety requirements of their

workplace, noting that it is also proposed that the Code of Practice clarify that testing be carried out at least annually. AS/NZS 3760 specifies 12-monthly testing for those workplaces that typically have a hostile operating environment.

Energised electrical work (including testing)

Requirements around energised electrical work (including testing) are considered necessary to ensure there is no lessening of current standards in this area.

The proposed requirements for energised electrical work have been drafted to reflect current industry practice, for instance practices set out in AS/NZS 4836, *Safe working on or near low-voltage electrical installations and equipment*, and reflect measures that are reasonably practicable for businesses to implement in order to manage the significant work health and safety risks associated with electricity.

It is expected that there would be little or no increased regulatory impact in those jurisdictions that currently prescribe comparable standards including the Commonwealth, NSW and Queensland. However, in Queensland the need for a SWMS would be a new requirement, but there would likely be relatively small incremental costs for preparing this as risk assessments are already required to be documented.

For other jurisdictions without comparable schemes there may potentially be significant impacts. The extent to which these will occur is difficult to evaluate as many businesses will already meet these standards to comply with general health and safety duties. In particular, many businesses will apply AS/NZS 4836 to demonstrate their compliance with their general duties. Therefore, the most significant impact may be due to the reduction in flexibility afforded to businesses in meeting the general requirement by specifying a process as a regulatory requirement.

Concerns have been expressed about the regulatory impact of some of the process-based requirements, particularly requirements for risk assessments and SWMSs. In addition to the three jurisdictions noted above, NT and Tasmania already require documented risk assessments for this work under their current generic risk assessment provisions.

For construction work involving work on live electrical systems, the NOHSC *National Standard for Construction Work* (2005) identifies work on energised electrical systems as high risk construction work. This generates a requirement to prepare a Safe Work Method Statement for this work. In addition, workplaces with more than five workers on site are required to have a documented safety management plan that includes a risk assessment. These provisions are reflected in current regulations in NSW, NT, Queensland, Victoria, WA and the Commonwealth.

Accordingly, the main impact of the risk assessment and SWMS requirements is likely to be in SA and the ACT, and on non-construction work (and small businesses doing construction work) in Victoria and WA. As noted above, Queensland would also be impacted by the need to prepare a SWMS.

Although definitive data on this is not currently available the Victorian regulator approximates that:

- all businesses and undertakings carrying out 'high risk construction work' (as defined under the proposed construction regulations) must already prepare and use SWMSs
- businesses and undertakings carrying out smaller maintenance work etc. are unlikely to be preparing SWMSs because there is an exception for minor maintenance and repair work under the Victorian construction regulations, and
- businesses carrying out work on larger maintenance projects are likely to already be preparing SWMSs for this work.

It is noted that a risk assessment is a prerequisite to preparing a SWMS which means that a risk assessment would need to be carried out even if this step was not prescribed.

The Victorian regulator advises that for those jobs that require a SWMS (that is, work on energised electrical equipment) the SWMS would cover everything needed in a risk assessment and therefore a separate risk assessment would not be required.

The Victorian regulator estimates that:

- it is likely to take three to four days to develop an initial SWMS template
- once developed it is likely to take 10–30 minutes to tailor a generic SWMS for a specific project, and
- the average cost of one hour including set-up and oncosts was considered appropriate.

Small businesses are likely to face a relatively greater burden to develop an initial SWMS template.

To reduce regulatory impact it is proposed that a standard SWMS template may be prepared and published in a Code of Practice or other guidance material. Further consideration may also be given to the possibility of developing a generic SWMS for the electrical industry which would further lower the regulatory impact on business.

Energised electrical work (including testing)—record keeping

In addition to the need to undertake the above documentation processes, the records will need to be kept for prescribed periods. This is likely to impose additional record storage costs for affected businesses, including the clerical costs in undertaking paper or electronic filing.

The proposed regulations will require risk assessments to be kept for 28 days after the work subject to the assessment is completed, or two years if an incident arises out of the electrical work. A copy of the SWMS must be kept until the work to which it relates is completed or two years if an incident arises out of the electrical work.

Keeping these types of documents for the duration of the electrical work is considered to be essential as these documents are primarily intended to be for the use and benefit of workers.

It is proposed that risk assessments be kept for 28 days after the work subject to the assessment is completed to ensure that this information is available for inspection under the model WHS Act for an appropriate period after the work is carried out.

The two-year record-keeping requirement would be expected to apply in a very small number of cases where a 'notifiable incident' (as defined under the model WHS Act) has arisen. In those circumstances it is considered appropriate that duty holders retain all relevant records for an appropriate period of time to assist with investigations.

Requiring compliance with AS/NZS 3012:2010

Compliance with AS/NZS 3012 is not expected to have a significant impact as this Standard is called up by AS/NZS 3000 which is mandated by industry-specific electrical safety laws.

The proposed provisions would ensure for example that the 'test and tag' regime under AS/NZS 3012:2010 continues to apply, consistent with current industry practice.

This approach avoids replacing the well-understood and widely accepted processes under AS/NZS 3012:2010 with the more generic processes proposed for other industries under the model WHS Regulations.

This means minimal transitional regulatory impact for the construction industry.

6.6.8 Electricity - residual current devices

What is it?

RCDs are commonly known as safety switches and disconnect electricity when a harmful level of electrical current is detected flowing to earth. This flow of electricity indicates a failure of insulation or contact with live parts by a person or both. These devices provide high levels of personal protection from electric shock and reduce the risk of fire from defective wiring or appliances.

The National Construction Code (NCC) 2011 (formerly the Building Code of Australia) applies AS/NZS 3000 which includes RCD requirements.

RCDs became a mandatory requirement nationally in new dwellings from:

- 1992—socket outlet (power) circuits, and
- 2007—socket outlet and lighting circuits using at least two RCDs.

Under AS/NZS 3000 and subject to more specific requirements RCDs are generally required for all new electrical installations and certain modifications including if the circuit protection on a switchboard is completely replaced or socket outlets are added to an existing circuit.

What are the current jurisdictional regulations?

All jurisdictions currently require duty holders to ensure that their workplaces are electrically safe.

In addition to this general requirement and the general building requirements referred to above, the following work health and safety laws make additional requirements for RCDs:

- New South Wales—Occupational Health and Safety Regulation 2001 (NSW), Division 7A of Part 4.3—subject to transitional arrangements
- Queensland—Electrical Safety Regulation 2002 (Qld), regulation 87 et al.
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), regulations 3.60, 3.61
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 56, and
- Northern Territory—Workplace Health and Safety Regulations (NT), regulations 64–65.

These requirements mostly apply when portable equipment is in use and in some cases allow the duty holder to choose between providing a portable or non-portable RCD.

General electrical safety laws may override this option in relation to new electrical installations and certain modified electrical installations as described above.

The SA provisions appear to have the broadest application, requiring ‘any risk associated with the supply of electricity through a socket outlet [to be] minimised so far as is reasonably practicable by the use of an RCD’ (regulation 56(1)), subject to certain exclusions (regulation 56(5)).

Most jurisdictions specifically apply the regime under AS 3012:2010 for construction work: Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 56(4); Occupational Safety and Health Regulations 1996 (WA), regulation 3.61 and Workplace Health and Safety Regulations (NT), regulation 64.

Queensland requires RCDs for construction workplaces under AS/NZS 3012:2010 for workplaces where manufacturing work is the primary work carried out at the place (subject to certain exemptions), and for amusement devices and amusement rides and certain electrical equipment used in the rural industry. For other forms of work including service or office work RCDs are optional as they may be used instead of inspection and testing and tagging requirements.

Although other jurisdictions do not expressly require RCDs many address the relevant issues in Codes of Practice and elsewhere.

What is the problem?

RCD requirements for workplaces are not nationally consistent.

Some but not all jurisdictions include specific requirements for RCDs in their work health and safety or electrical safety laws.

Some jurisdictions only provide guidance material on the use of RCDs in the workplace.

Harmonisation in this area would provide uniform coverage of safety for workers and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

The draft model WHS Regulations required the duty holder to ensure that the circuit in each socket outlet at the workplace is protected by an RCD. Where reasonably practicable, the RCD would be required to be permanently installed either before or as part of the socket outlet. These requirements were subject to certain exceptions provided in the draft Regulations.

The draft Regulations also require the regular testing of RCDs to ensure they remain effective.

Public comment, final proposal and rationale

Duty to ensure provision of RCDs

- strong support for the proposed requirements (ACTU and others).

Requirements for RCDs are supported for inclusion at the regulatory level rather than Codes of Practice.

RCDs provide insurance against electric shock. They are designed to prevent injury or death and, considering the nature of these risks, may be considered to provide an inexpensive safety measure.

A RIS regarding RCDs in community dwellings found that at least four lives would be lost per year due to preventable electrocutions in Queensland and that the cost of installing safety switches would be about $70 million over 20 years (Office of Queensland Parliamentary Counsel, 2002). There is also the potential to reduce costs associated with non-fatal injuries as well as the costs associated with damage to plant and infrastructure resulting from electrical faults. The Queensland RIS suggested that over a 20-year period, the estimated savings associated with non-fatal injuries is $1.5m (Office of Queensland Parliamentary Counsel, 2002). While not explicitly costed in the Queensland RIS, estimating the benefits using a value of statistical life approach over a 20-year period suggests that the benefits (lives saved) are about three times the costs of installing RCDs in domestic dwellings.

While extrapolation of these numbers to reflect the incremental changes that may need to occur in different jurisdictions and the different risks associated with workplace settings, as opposed to residential, is not possible, it could be expected that the introduction of RCDs where they are not currently used will save lives and produce an overall benefit.

Moving RCD requirements to Codes of Practice or guidance material is not supported as this would constitute a lowering of current standards in a number of jurisdictions.

Nature of duty to ensure provision of RCDs

- The duty to ensure the provision of RCDs in regulation 4.7.21(1) should be further qualified to at least accommodate the exceptions allowed by AS/NZS 3000.

- Further clarification should be provided as to whether the use of portable RCDs is allowed under the proposed requirements.

It is proposed that the duty to ensure the provision of RCDs is qualified by what is reasonably practicable. This will accommodate AS/NZS 3000 which explains the circumstances in which an RCD is not required.

It is proposed that the duty to ensure the provision of RCDs is clarified so that what is required is 'an appropriate RCD', so far as is reasonably practicable. It is envisaged that Codes of Practice and guidance material will provide examples of the kinds of RCDs that should be used in particular circumstances (e.g. portable, non-portable).

The proposed revisions correct a number of workability issues identified through public comment including concerns about the absolute nature of the original requirements and that the use of portable RCDs was not contemplated.

When RCDs must be provided

- Concerns were held that the provisions would require extensive retrofitting of pre-existing workplaces in some cases involving replacement of switchboards.
- Further cost-benefit analysis of the proposed requirements should be carried out. A number of submitters quoted estimates for example $150–$200 per electrical socket and estimates up to $8.6m for a string of retail outlets.
- Further consideration should be given to simply mirroring the requirements of AS/NZS 3000 or alternatively limiting any retrofitting requirements to high risk installations.

To address these concerns it is proposed that the requirements for RCDs as amended apply only in relation to 'hostile operating environments' (as defined) and only so far as is reasonably practicable to accommodate, for example, exceptions allowed under AS/NZS 3000.

This proposal will ensure that the proposed RCD requirements will be better targeted to apply to higher-risk workplaces.

This approach however is not uniformly supported and Queensland and SA have expressed concerns that the changes may mean a lessening of safety standards in those jurisdictions.

In proposing these changes however, the following information provided by the National Electrical and Communications Association (NECA) noted:

- installations that are 0–3 years old should require no installation work as they have already been fitted with RCDs consistent with AS/NZS 3000
- older sub-circuits may have been modified and fitted with RCDs consistent with clause 2.5.3.3 of AS/NZS 3000, particularly relating to hazardous environments and exposed equipment
- it is contemplated that most business installations would have been upgraded from time to time, so most switchboards would meet the standards originally proposed and would not need to be replaced. This means that single module-wide combination RCD/circuit breaker units could be fitted without more expensive modifications, and

- had the broader, original proposal been supported, it is contemplated that about 10 per cent of switchboards would need to be replaced involving additional work and downtime.

Submissions that many businesses have installed RCDs even where not strictly required by the law have also been noted (Ai Group).

Transitional arrangements

- A substantial transitional period (e.g. five years) would be required to enable the necessary work to be carried out to make workplaces compliant.
- The availability of qualified persons to carry out the work would be the most important factor in setting a transitional period, particularly in those jurisdictions where the use of RCDs is not extensively regulated (Ai Group).

It is proposed that a transitional period of 12 months apply to ensure that duty holders are able to comply with any changes in their jurisdiction.

This figure has been determined by taking into account the proposal to narrow the scope of the proposed RCD requirements, particularly by applying the requirements to 'hostile operating environments' only.

In many jurisdictions most workplaces should already be compliant based on current laws described above.

Overview of impacts

Uniform laws for workplaces across the country are considered to be an important regulatory reform.

Electrical hazards are often hidden and can be difficult to identify, such as a small hole in an extension lead or a power board damaged internally. Electrical accidents occur in an instant. RCDs are the only device that can protect workers and others at the workplace from these hidden dangers and give them a second chance. RCDs detect an imbalance in the electrical current and disconnect the power within 10 to 50 milliseconds, preventing electrocution and fire.

The proposed RCD requirements will have little or no regulatory impact in a number of jurisdictions that have comparable requirements in place including NSW, WA, SA and NT. There may be some regulatory impact for those Queensland industry sectors that are not covered by current regulatory requirements, which cover construction workplaces, workplaces where manufacturing work is the primary work carried out (subject to certain exemptions), for amusement devices and amusement rides, and certain electrical equipment used in the rural industry. However, the current coverage in Queensland could be expected to include a large proportion of 'hostile operating environments'. For Victoria, Tasmania, the ACT and the Commonwealth this will be a new regulatory requirement.

The proposed RCD requirements will have no regulatory impact in relation to electrical installations that were installed or modified in recent years, for the reasons given above.

Other laws—particularly general electrical safety and building standards laws—will continue to regulate new electrical installations and certain modifications of older installations.

It is difficult to quantify the regulatory impact on those jurisdictions that do not currently expressly require RCDs at the regulatory level, as the number of unprotected installations and affected businesses cannot be determined.

Proposed amendments mean the proposed laws will only have regulatory impact in relation to workplaces with 'hostile operating environments' as defined, not all workplaces more generally.

Victoria has estimated that 50–75 per cent of its workplaces would currently be non-compliant with the proposed requirements for RCDs. The cost to business of becoming compliant would depend on how many devices needed to be installed in the 'hostile operating environments' specified in the model Regulations and the level of disruption to the business. The cost of installing a single phase RCD is approximately $150–$250, and the cost of three-phase RCDs will be triple that for the single phase. As noted by NECA above, the cost would be considerably higher where a switchboard also needs to be replaced.

Anecdotal evidence obtained through public comment suggests that many of these higher-risk work environments are already compliant, so the overall compliance cost may not be large. But given the expected safety benefits, even a substantial cost would likely be offset.

6.6.9 Diving work

What is it?

Underwater diving work involves many varied diving tasks and activities conducted in the course of a business or undertaking. Diving work for the purposes of the model WHS Regulations involves all diving activities performed for purposes other than recreation.

Underwater diving work can be broken into two broad categories according to risk:

- construction diving work or 'high risk diving work'—diving work regarded as possessing the highest risk e.g. constructing a structure, inspecting or repairing a weir wall, constructing bridge pylons using a caisson, and
- general diving work—diving work regarded as possessing high and moderate risk.

The incidence rate of fatalities related to diving is 109.6 per 100 000 and is significantly higher than the 3.5 per 100 000 for the workforce generally. Data from the Notified Fatalities database shows that 17 diving related notified fatalities occurred between July 2003 and March 2007. Of these 12 were work-related and five involved bystanders, including tourists. There have been numerous coronial recommendations calling for improved standards for diving including regulation of the recreational diving industry.

What are the current jurisdictional regulations?

In Queensland, Part 14 – Underwater Diving Work, of the Workplace Health and Safety Regulation 2008 commenced in January 2005. This is the most comprehensive diving legislation in Australia.

Jurisdictional regulations covering diving work are varied and only NT and Tasmania have regulations that relate to 'general' diving work. These are:

- Workplace Health and Safety Regulations (NT), Part 12, Division 4, which contains specific requirements relating to underwater work, and
- Workplace Health and Safety Regulations (Tas), Part 4 Division 10, which also contains specific requirements relating to underwater diving that are limited to diver competence.

New South Wales, SA and WA only regulate the construction diving sector. This work must be performed in accordance with AS/NZS 2299:1 *Occupational Diving Standards*. AS/NZS 2299:1 provides organisational and logistical requirements for the use of compressed gas supply apparatus in construction and other high risk diving operations and specific requirements for the use of surface-supplied breathing apparatus and self-contained underwater breathing apparatus in occupational underwater operations in depths not exceeding 50 metres (165 feet). An Approved Code of Practice for Tuna Farming has also been developed in SA.

Victoria, ACT and the Commonwealth do not specifically regulate diving sectors although the ACT has specific requirements about air supplied respiratory equipment. In Victoria employers, self-employed persons and other duty holders must, however, still meet their obligations under the authorising Acts for workplace health and safety. Victoria has guidance material in this area.

In addition, all jurisdictions that have implemented the National Construction Standard in their work health and safety regulations also generally require a SWMS to be prepared for diving construction work. A SWMS describes what controls will be used to do high risk construction work (which includes diving) safely, and how the controls will be implemented. A statement provides a formal process for analysing and implementing risk controls for high risk work. This provides a standard and consistent approach across jurisdictions to how construction diving work is carried out and is required for high risk construction work under Chapter 6 of the model WHS Regulations.

What is the problem?

Human physiology and a pressurised non-respirable environment represent the major hazards for performing underwater diving work. These hazards remain the same for all diving activities, therefore only one set of regulations is needed to regulate the variety of diving activities. Multiple regulations would duplicate the same requirements.

Some of the categories of hazards associated with diving are:

- environmental conditions including current and tide
- task related factors including the complexity of the task
- hyperbaric/physiological factors including the depth and duration of the dive

- associated activity factors including manual handling
- emergency response factors including the location and availability of emergency response systems, and
- other hazards including dangerous marine animals.

Occupational diving is a high risk activity, with any incident likely to result in either death or a diving ailment that is extremely costly to treat and likely to result in permanent incapacity. Coronial reports in both Queensland and SA over a number of years have recommended specific regulations to improve safety standards in the diving industry. Although some regulation exists for aspects of occupational diving, the level of detail is inconsistent and is applied differently across the jurisdictions. The development of regulations or Codes of Practice have been in response to specific incidents in each jurisdiction e.g. a Tuna Farming Code of Practice was introduced in SA after a worker died trying to untangle a net without using air respiratory equipment. Queensland introduced regulations because of the extensive recreational diving industry in that state.

There is no national regulatory approach to addressing the risks and hazards associated with diving work. AS 2299 provides a national approach for only the construction diving sector and high risk diving occupations but this is not mandated in every jurisdiction. Harmonisation in this area at the regulatory level would provide the same protections to workers regardless of whether they are working in the construction diving sector or other diving sectors.

What was proposed?

The draft model WHS Regulations released for public comment required a PCBU to:

- prevent workers from carrying out underwater diving work unless they are medically fit and competent through either qualifications and/or experience
- identify hazards and conduct risk assessments, control risks (including a dive supervisor, for construction diving and a standby diver) and review risk control measures, including when there is a change to conditions or work
- prepare a diving plan, and
- establish and maintain a dive safety log.

They also contained provisions for diving work using breath hold techniques.

The object of this regulation is to impose duties on a person who conducts a business or undertaking involving general or high risk diving work to ensure the fitness, competence and health and safety of its workers and others at the workplace. The regulations in this area are outcome based and do not attempt to mandate every control measure that could be put in place to manage risks to health and safety from carrying out diving work. This minimalist model harmonises existing laws across the country and only mandates the basic requirements that are currently implemented by general diving sectors in practice. The draft regulation also balances the experience of jurisdictions that currently have regulations with the need to protect workers and others by minimising death, injury and illness. There is therefore likely to be minimal impact on existing general diving industry practices. This is possible due to the high level of self-regulation currently present in some sectors and because many diving sectors have already implemented safe working practices consistent with the proposal.

Public comment, final proposal and rationale

Diving was the topic for which the largest number of submissions was received. A total of 602 submissions were received (with many in a template form). The submissions came from a range of industry sectors including construction, scientific diving, pearling, abalone, recreational diving and research and training organisations.

Generally, there was a concern that the 'one size fits all' approach in the proposed regulations for diving will reduce safety in the construction diving sector; divers felt the regulations would restrict their ability to compete for business. Ai Group noted there is major concern within the industry about reduction in standards of how diving is undertaken and the training of divers, and that there is strong support for AS/NZ 2299:1.

Training and certification

Comments included:

- that the proposed regulations will enable poorly trained divers to undertake occupational and construction diving
- that under the proposed regulations it will not allow the Australian Diver Accreditation Scheme (ADAS) to maintain its functions, its accredited training establishments will not be able to remain competitive in the market place and Australian divers will lose their current global portability
- that there is an overlap with maritime regulations. However, there is no overlap with maritime or 'off-shore' regulations as the two regulatory schemes operate in different fields
- that training and supervision requirements were too stringent for the abalone industry and fail to recognise the experience of divers and that this would mean job losses and drive operators out of the industry due to massively increased costs
- that it was impractical to require deckhands to have the same qualifications as dive supervisors, which will 'wipe out small business, regional employment and all fishing based diving'
- that consultation was required with the abalone industry to define other pathways to recognise experience and competence for divers and dive supervisors and to provide pathways for new entrants
- that recreational divers should be required to operate under the same standards and certification as construction divers
- that AS/NZ 2299.1 should be mandated in the diving regulations and that compliance with AS/NZ 2299.1 and AS/NZ 2815 sets the base standard for safe diving operations, and
- that operators not complying with AS/NZ 2299.1 will bypass good practice such as minimum team sizes, lowering safety standards and driving compliant divers out of jobs (due to lower tenders).

Separation of diving sectors

Comments included:

- concern about the definition of 'construction diving' with the view that the 'blurred line between construction and general' will be interpreted differently by employers keen to save money on cheap divers, leading to accidents or fatalities
- that diving work covered under the definition of 'general diving' will result in persons with recreational diving qualifications being exposed to risks involved in more dangerous types of diving work
- that the regulations focussed on construction diving at the expense of understanding differences across the diving industry. A substantial number of submissions (especially from the abalone diving industry and also from the scientific and recreational diving operators) asserted there should be separate provisions for construction diving, fisheries, scientific and recreational diving industry sectors
- that no time limit be applied to 'limited' scientific diving work and stated concern that overregulation will hinder or stop scientific marine research, and
- that the same regulatory provisions should apply across the whole diving industry.

Free diving regulations

A number of comments were received requesting that the provisions for free diving either be amended or removed. Free diving is where a person dives while holding their breath and is generally done in shallow water (e.g. spear fishing). It is not possible to draft one set of requirements for free diving that can sensibly be applied to all diving sectors. There are also no fitness standards or recognised training in existence. Given the lack of knowledge about the appropriate standards in this area there was a concern about introducing any legislative requirements at this time.

High risk diving work

To address the majority of the concerns submitted, it is proposed to insert a separate Division into the model WHS Regulations for 'high risk diving work' and to require that work is carried out in accordance with AS/NZS 2299.1. In response to public comment, 'high risk diving work' will be defined to include construction work and minor construction work including routine maintenance, testing, repair of a structure and inspections for the purpose of construction work. It will also include the recovery or salvage of a large structure or a large piece of plant for commercial purposes. It is not proposed to include carrying out minor cleaning, inspecting, testing, maintaining or searching for a vessel or mooring repairs.

To address extensive public comment received from the Australian Diver Accreditation Scheme and construction and off shore divers it is proposed the model WHS Regulations will require a PCBU to ensure:

- the fitness of persons carrying out high risk diving work
- the competence of persons carrying out high risk diving work, and
- all diving work is carried out in accordance with AS/NZS 2299.1:2007 *Occupational Diving Operations*.

General diving work

As a result of the changes above to 'high risk diving work' it is proposed that general diving work is defined to mean work, other than high risk diving work, in or under water while breathing compressed gas. Examples of general diving work include taking tourists diving, scientific diving, harvesting and farming seafood and pearls.

There was broad misunderstanding about the competency requirements for general diving work. In particular, some scientific divers were concerned that there was no competency requirement for scientific divers. It is proposed that changes are made to make the competency requirements clearer by specifying two competencies based on existing competencies used widely by the industry in this sector. The coverage of the competencies is taken from the subject areas set out in AS 4005.2 *Training and certification of recreation divers – Part 2: Recreational SCUBA dive supervisor*. It is proposed that a PCBU must not direct or allow a worker to carry out general diving work unless the worker is:

- medically fit , and
- competent to carry out the diving work.

These provisions require the PCBU to sight a current medical certificate and a certificate from a relevant training organisation before the person dives. If the PCBU does not sight these documents they must not allow the person to dive. The requirement to be medically fit recognises that a pre-existing medical condition is a well-established and significant risk to the health and safety of divers.

It is also proposed that a PCBU must:

- manage all risks associated with carrying out general diving work including preparing and keeping a risk assessment
- appoint a competent person to supervise all diving work
- ensure a dive plan is prepared by a competent person and complied with so far as is reasonably practicable
- ensure a dive safety log is prepared and kept for each dive, and
- where work is carried out from a vessel, count workers and others before the dive and before leaving the dive site and have the count verified by the diver and a competent person. This is a requirement that has been in place in Queensland over a number of years following a number of incidents where divers and others were left behind at the dive site.

The draft model WHS Regulations for public comment contained a requirement that a standby person must be used if a risk assessment identifies a need for one. This requirement has been removed due to public comment concerns from abalone divers that it would make abalone diving unviable.

The draft model WHS Regulations also includes specific regulations to limit free diving. It is proposed to remove this requirement following lengthy tripartite discussions, particularly about the impact on indigenous communities. Safe Work Australia will continue to research and assess whether specific regulations should be put in place for free diving in the future. No jurisdiction currently has specific regulations concerning

free diving. The removal of these regulations from the final proposal will mean there is no impact on some diving sectors and indigenous communities.

The two competency levels described in the model WHS Regulations were chosen to balance the training levels that currently exist in jurisdictions with the experience in Queensland and SA where training directly contributes to a reduction in deaths, injury and illness. This proposal will ensure divers and persons supervising work have the necessary skills, knowledge and experience. Transitional requirements will be developed to recognise existing qualifications and experience and will include consultation with relevant industry sectors and jurisdictions. This will increase the regulatory burden on businesses in jurisdictions where this is a new requirement; however many sectors meet these competencies now.

Overview of impacts

High risk diving work – 'construction diving work'

The current requirements in all states and territories for construction diving work effectively include compliance with AS/NZS 2299.1. Therefore, the impact of the proposed change on businesses that undertake construction diving work will be minimal. The model WHS Regulations will require high risk diving work, which includes construction diving work, to be carried out in accordance with AS/NZS 2299.1.

General diving work

New South Wales and Victoria do not have specific regulations for general diving work as they currently regulate general diving by requiring PCBUs to meet their general duty of care by complying with AS/NZS 2299. The proposed regulations are consistent with AS/NZS 2299 but do not mandate the same level of detail. Therefore it is likely that businesses in these jurisdictions will not be required to alter existing work requirements and the regulations will not impose any further regulatory burden, including record-keeping requirements. Although the proposed regulation may add to the work health and safety regulatory regime practice, the proposed requirements are not expected to require duty holders to put any new processes into place at the workplace.

Queensland has very specific requirements for general diving work on which these regulations are based so there will be minimal change and impact for duty holders in Queensland.

NT has some of the specific requirements contained in their regulations including medical examinations, competency, training in equipment, purity of air, recompression chambers and operations manuals. There will be a slight reduction in regulatory requirements and potentially a reduction in cost should businesses choose to change their existing practices.

Tasmania has regulations mandating that diving work be carried out in accordance with any relevant approved Code of Practice. There is a Code of Practice for the abalone industry which contains requirements similar to those contained in the proposed regulations.

In WA regulations cover construction diving. All other forms of diving are covered by the general duties of the *Occupational Safety and Health Act 1984*. In WA the Western Australian Fishing Industry Council (WAFIC) is the peak body that represents over 90

per cent of organisations in the fishing, pearling and aquaculture industries. WAFIC and other representative bodies including the WA Pearling Association have developed Codes of Practice or guidelines for their sectors. These Codes of Practice and guidance are based around AS/NZS 2299.1 but are adapted to be specific to each sector and, in some cases, regions off the WA coast. The regulations have been developed to be sufficiently flexible for these sectors to continue to use their Codes of Practice and guidance material largely as they are currently drafted.

For Victoria, the Victorian regulator has estimated the following:

- commercial diving makes up about 30 per cent of the diving industry in Victoria. It is estimated that approximately 90 per cent of this group would already be complying
- environmental/scientific diving makes up approximately 10 per cent of the industry. It is estimated that approximately 40 per cent of this group would already be complying
- oil industry makes up about 5 per cent of the industry. This group would be in full compliance with the new requirements and would be complying under the off-shore regulations, and
- aquaculture diving makes up about 5 per cent of the industry. It is estimated that this group would not currently be complying with the new requirements. The requirement to keep a record of the certificate of medical fitness and evidence of competence is unlikely to result in an appreciable burden for businesses.

Of those divers who enrolled in commercial dive training programmes in SA:

- diving in construction/offshore activities makes up about 25 per cent of this group (which is already regulated)
- aquaculture diving makes up about 60 per cent of this group
- environmental/scientific diving makes up about 10 per cent of this group, and
- diving relating to other occupations accounts for about 5 per cent of this group.

The SA regulator has stated that estimating the proportion of the above areas that would be compliant with model WHS Regulations requirements for general diving is not currently available. However, the SA regulator noted that the model WHS Regulations will cover a greater proportion of the diving industry in SA than current regulations, but that the effort/cost required to comply would be less than that required for construction diving under AS 2299.

It is anticipated that compliance figures for other jurisdictions may be similar to these estimates, with the largest variation dependent on the level of aquaculture undertaken in the jurisdiction. Other jurisdictions have been unable to substantiate these estimates.

For those divers that do not currently meet the minimum competency requirements proposed in the regulations it is estimated that the cost for an individual diver would be between $1000 and $2500 to gain the additional competencies required beyond the basic diving qualifications they would already have obtained to be able to undertake diving work.

There may be a proportionally greater impact of these regulations on small businesses, in relation to the cost of training when compared with the number of workers in the business. Also, many of the diving operations are small businesses.

It is highly unlikely that a not for profit organisation would be involved in carrying out high risk or other diving work because of the technical nature of carrying out work in this way and the risks associated with it. The impact on the not for profit sector should be minimal.

Abalone divers - dive plans and record keeping

Abalone divers in WA and Tasmania raised concerns about requirements relating to dive plans and record keeping. There may be some change for all general diving sectors, including abalone divers, because the regulations require a copy of the:

- risk assessment to be kept until at least 28 days after the work to which it relates is completed, and
- dive plan to be kept until the work to which it relates is completed.

If a notifiable incident occurs in connection with the work to which the assessment or dive plan relates, the risk assessment or dive plan must be kept for at least two years after the incident occurs. Notifiable incidents are events like deaths or incidents requiring hospitalisation that do not happen very frequently, therefore it is likely the impact will be minimal.

Some dive businesses would already be complying with these requirements as a number of Australian Standards including AS/NZS 2299.1 include such requirements.

Dive plan and risk assessment templates are available in AS/NZS 2299.1. WorkSafe Victoria's technical experts estimate that using a template it would take approximately 15 minutes to develop a dive plan and 20 minutes to develop a risk assessment.

6.7 Plant and structures - overview

What is it?

Plant is any machinery, equipment, appliance, container, implement and tool, and includes any component or anything fitted or connected to any of those things. Plant items are as diverse as lifts, cranes, computers, machinery, conveyors, forklifts, and amusement devices.

The model WHS Regulations on plant and structures impose duties upon designers, manufacturers, importers, suppliers and installers of plant directed at ensuring health and safety in respect of subsequent use of plant. They impose duties upon PCBUs that commission plant or structures to comply with designer or manufacturer information and relevant health and safety instructions. They also impose complementary duties on PCBUs involving the management and control of plant and a range of additional control measures for specific types of plant.

The plant regulations provide for the registration of both plant designs and items of plant. A plant design must only be registered once. Plant item registration involves the registration of a specific item of plant and each separate plant item must be registered. It is the responsibility of the person with management or control of plant to ensure that items of plant in the workplace are registered.

The plant regulations contain specific requirements applicable to the operation, maintenance, repair, inspection and testing of an amusement device. An amusement device is equipment operated for hire or reward that provides entertainment, sightseeing or amusement through movement of the equipment, or part of the equipment, or when passengers travel on, around or along the equipment. Given the intended use there is a need to consider health and safety risks for workers and the public.

A structure is anything that is constructed, whether fixed or moveable, temporary or permanent. Although the term structure is generally used for construction regulation, a structure like a scaffold can be constructed from plant. A scaffold is constructed from 'scaffolding', being the plant components that, when assembled, form a scaffold. The plant regulations include scaffolding, given the high risks associated with scaffold erection and use.

What are the current jurisdictional regulations?

The National Standard for Plant was declared by NOHSC in July 1994. It sought to protect the health and safety of people from hazards arising from plant and associated systems of work. Since the declaration of the National Standard for Plant there have been many attempts to ensure that its key elements are effectively adopted and implemented as law nation-wide to achieve consistency in the prevention of plant related injury and death.

A number of jurisdictions have relatively consistent provisions on:

- upstream duty holders, such as designers, manufacturers and suppliers
- plant registration
- the use of plant and workplace risk controls including guarding, and
- controls for specific plant including powered mobile plant and lasers.

These include:

- New South Wales—Occupational Health and Safety Regulations 2001 (NSW), Chapter 5
- Northern Territory—Workplace Health and Safety Regulations (NT), Part 8
- Queensland—Workplace Health and Safety Regulation 208 (Qld) Part 2
- Tasmania—Workplace Health and Safety Regulations 1997 (Tas), Part 4, Division 3
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), Part 3
- Victoria—Occupational Health and Safety Regulations 2007 (Vic), Part 3.5
- Western Australia—Occupational Health and Safety Regulations 1996 (WA), Part 4, and
- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), Part 4.

All of these jurisdictions have adopted the National Standard for Plant either wholly or in part as regulations. New South Wales, WA, SA and NT have adopted regulations that mirror the National Standard for Plant, while other jurisdictions have implemented the National Standard for Plant less consistently. The combination of the specific plant duties for upstream duty holders including designers, and the general duties under all jurisdictional health and safety acts, means that upstream duty holders have largely consistent obligations for plant.

All jurisdictions currently apply some form of control of high risk plant. In all jurisdictions, except the ACT, the controls take the form of the registration of plant items and plant designs based on the list of plant in Schedule 1 of the National Standard for Plant. The registration process in each of these jurisdictions varies slightly due to inconsistency in the implementation of the National Standard for Plant. For example, the period of registration and the fees applied in each jurisdiction vary considerably with NSW and Queensland requiring annual registration and others only where there is an alteration to the plant or change of ownership. Despite this, the intent of registration in each jurisdiction is to ensure that designs meet recognised technical standards and plant items are maintained and safe to operate.

Each jurisdiction has similar control measures in place relating to the design, manufacture, importation, supply, installation and use of plant, with some minor differences in the detail and scope of these requirements. Each jurisdiction requires guarding, suitable operator controls, emergency stop controls and warning devices for plant.

All jurisdictions currently cover scaffolding in their principal regulations under plant, construction and/or licensing provisions. Scaffolding is also covered in a range of other jurisdictional legislation and there is some variance in upstream duty holder provisions as a result. Some states and territories have specific obligations on upstream duty holders in their regulations (SA, WA, NT and the Commonwealth), while others (NSW, WA and SA) include consideration of scaffolding used in demolition work. The ACT utilises the Scaffolding and Lift Regulations 1950. Tasmania does not have any specific work health and safety scaffolding regulations but a WorkSafe Tasmania guide to construction industry occupational health and safety reproduces the employer's general duty to ensure the health and safety of workers and states that '*all scaffolding must comply with AS/NZS 4576:1995 Guidelines for scaffolding*'. Tasmania and WA have regulations that require licensing and registration of prefabricated scaffolds. Certification and regular inspection of scaffolding is also a requirement under Tasmania's building regulations.

Some inconsistency exists in the regulation of amusement devices due to the varied implementation of the National Standard for Plant and the coverage provided by varying jurisdictional public safety legislation. The requirements for amusement devices are broadly similar in their intent. It is generally accepted that SA has the most rigorous work health and safety requirements for amusement devices. Most operators of mobile amusement devices generally register in the jurisdiction with the most rigorous safety requirements to ensure they meet the requirements in every jurisdiction.

Of the other jurisdictions the ACT includes plant safety requirements in a Code of Practice. The Commonwealth generally defer to the local requirements where the plant is located.

What is the problem?

Plant-related incidents can result from inappropriate design, manufacture, installation, alteration, maintenance, repair, use, decommissioning and dismantling of plant. Plant is a major cause of workplace injuries and fatalities in Australia. The risk of injury associated with the use of plant has compelled the Commonwealth, state and territory jurisdictions to enact many measures over the years to reduce both the rate and severity of plant-related incidents. Approximately 13 380 serious compensated claims per financial year arise from the use of machinery and fixed and mobile plant. Over the five financial years from 2002–03 to 2006–07 there were 133 compensated fatalities resulting from the use of machinery and fixed and mobile plant. The total estimated annual economic cost of the estimated 47 300 plant-related incidents annually is $2 billion, which represents a significantly negative impact on the Australian economy.

Nationally there is some inconsistency in the regulation of plant as a result of the varied implementation of the National Standard. This has resulted in the need for businesses to meet multiple jurisdictional requirements including the registration process for plant items and plant designs.

There are differences in the list of plant requiring item and design registration in each jurisdiction, and the fees and registration periods are based on differing principles. This has resulted in the restricted mobility of plant due to the non-recognition of interstate registrations and the need for businesses to register in a number of jurisdictions. The variability of fees also means an increased compliance cost for businesses operating across multiple jurisdictions. Indirect or hidden costs such as the time spent in managing and obtaining advice on variable regulations and the potential cost of duplicating personnel to manage the registration process add to the regulatory burden for industry. These costs are spread disproportionately across duty holders, with smaller employers carrying a greater share of the regulatory burden.

Scaffolding work is historically considered to be high risk work with potentially fatal consequences if the scaffold is poorly constructed, inadequate or if the work is not performed safely. Scaffolds are a common means of providing a safe work platform for working at height. Falls from scaffolds pose a high risk of fatalities or serious and/or disabling injuries. From the period 2000–01 to 2006–07 there were 11 fatalities related to scaffolding work with an average compensation payment of $152 000. It is estimated there are 2100 scaffold-related cases each year. The estimated total economic cost for serious incidents involving scaffolds is $140 million annually. An average case costs $6800 in direct worker's compensation payments and results in 5.5 weeks of absence from work. Although scaffolding is regulated in all jurisdictions, the arrangements vary resulting in a need for businesses to meet multiple jurisdictional requirements.

Due to the potential impacts on public safety the regulation of amusement devices is required to ensure proper maintenance and safe use. The national inconsistency of plant regulation for amusement devices has resulted in difficulties for operators who work across multiple jurisdictions.

What was proposed?

The Consultation RIS and discussion paper

The draft model WHS Regulations released for public comment included requirements for:

- upstream duty holder obligations to provide safe plant including for designers, manufacturers, suppliers and importers
- provision of information between designers, manufacturers, importers, suppliers, installers and persons with management or control of plant at a workplace
- registration of plant items for an unlimited time period with an annual notification of maintenance including an annual fee
- competency requirements for the inspection of high risk plant, inspection of plant items for registration and verification of plant designs for registration
- ensuring that plant has suitable guarding, operational controls, emergency stop controls and warning devices
- specific regulations covering types of scaffolding, its erection and inspection by a competent person before use, and its safe management
- specific requirements applicable to the design, manufacture, operation and maintenance of amusement devices
- control of risks of specific plant including powered mobile plant, mobile cranes and tower cranes, industrial lift trucks, plant that lifts or suspends loads, lifts, scaffolds, pressure equipment, industrial robots, lasers and amusement devices, and
- record keeping for specified types of plant and technical standards used in the design of plant.

The draft model WHS Regulations for plant released for public comment were intended to resolve the national inconsistencies in plant regulation. The regulations do not apply to plant that relies exclusively on manual power for its operation and is designed to be primarily supported by hand (e.g. a hammer). This means that businesses would not need to comply with the registration, maintenance and record-keeping requirements in the regulations for lower risk plant. These types of plant would be covered by the obligations of the PCBU under the model WHS Act to ensure health and safety generally.

The types of plant requiring item and design registration under the draft plant regulations were based on Schedule 1 of the National Standard. The list of plant in the National Standard for Plant was expanded to include self-erecting tower cranes, static concrete placement units with delivery booms and pre-fabricated formwork as these items were assessed as presenting a risk as great as the similar items that already required registration (e.g. tower cranes).

The registration of plant items was intended to apply for an unlimited time period with the requirement for registration holders to provide an annual notice of maintenance along with an annual notification fee. Businesses would be required to apply for registration of a plant item once and ensure that the plant was properly maintained and safe to operate.

Scaffolding is defined as plant under the model WHS Act. Specific regulations covering types of scaffolding, its erection to form a scaffold, its inspection by a competent person before use and safe management are included. These requirements sought to achieve a minimum uniform standard for scaffolding work and scaffolds including regular inspection. Industry typically applies AS/NZS 4576, which requires the regular inspection of a scaffold and states that ‘scaffolds must be inspected a number of times

during use'. New South Wales, WA and SA require inspections at intervals not exceeding 30 days. Queensland includes this same inspection requirement in a supporting Code of Practice. The ACT advised there would be minimal impact in relation to the scaffolding requirements. Although Tasmania does not have any specific work health and safety scaffolding regulations, certification and regular inspection is already a requirement for scaffolding under building regulations and with the current application of the general health and safety duty, there is expected to be minimal impact.

The draft model WHS Regulations for plant contained specific requirements for amusement devices, which were generally consistent with those that currently apply in SA and mirrored the requirements in the National Standard for Plant. Amusement device operators were required to ensure that the devices were operated by a suitably competent operator and that the devices were properly maintained. The regulation required businesses to have their devices inspected annually by a professional engineer.

In support of the draft plant regulations, Codes of Practice will be developed to provide guidance for duty holders on how to manage the risks associated with plant throughout its life cycle. There will be a general plant risk management Code of Practice, as well as a plant duty holders' Code of Practice. Additional Codes of Practice or guidance material will provide further guidance for specific types of plant and for the safe design of plant including cranes, rural plant, amusement devices, industrial lift trucks, guarding plant and heritage plant.

Public comment, final proposal and rationale

Comments received included the following:

Definitions

- The definition of plant should be narrowed through the exclusion used in some jurisdictions of manually operated and/or hand-held plant.

Duties and managing risks

- Concerns were held regarding the impact of importation of second-hand plant and equipment that does not meet Australian safety requirements.
- The inconsistency between the model WHS Act and Regulations may result in a lack of clarity about the requirement for all in the supply chain to create hazard identification and risk control information.
- Include hazards identification in all plant regulations as controlling risks associated with machinery and equipment is difficult if the hazards are not first identified.
- Risk assessment is referred to throughout the draft model WHS Regulations with regard to how a task is performed but not when designing, manufacturing, importing and supplying an item of plant or structure.

Plant item registration

- Annual renewal was an unreasonable cost burden that does not improve safety and the annual fee means new and ongoing compliance costs and administrative impacts.

- Annual renewal meant an increase in compliance costs for corporations.
- Annual renewal meant an additional administration burden for the person with management or control to provide to the regulator an annual notice of maintenance of the plant.
- Regulators will need to coordinate additional annual reporting requirements and further resources will be required to meet this demand.
- Annual renewal would be of little benefit if the plant was not required to be inspected.

Inspections

- The term 'competent person' needs to be defined with regard to the inspection of plant for registration.
- The 10-year timeframe for major inspection of mobile and tower cranes and the timeframe for scaffold inspections are too long.

Scaffolding

- There was confusion about the placement of the scaffolding provisions under the 'Plant and Structures' chapter, which are never referred to as 'structures' in the regulations.
- The timeframe for inspection by a competent person of at least every 30 days is unjustified red tape.
- The terms 'scaffold' and 'suspended scaffold' may capture other items of plant unintentionally (e.g. step platforms or proprietary perimeter scaffolding systems with scaffolds systems that can be raised or lowered by a ratchet system).

Amusement devices

- The proposed model WHS Regulations require annual inspections and may place significant restrictions on businesses.
- The requirements would result in increased inspection times in those jurisdictions where annual inspections by an engineer is not currently required, potentially making it difficult to schedule different professionals and businesses to conduct inspections.
- Concerns were held regarding the range of amusement devices that may be captured by the registration requirements and the competency requirements for plant inspections.

General comments

- The prohibition of the use of certain laser equipment in construction work due to the risk of fire will require a change of equipment and work methods with potential cost implications for businesses.
- Record-keeping requirements do not match other regulations. There should also be consistency across the record-keeping components of the regulations.
- There are additional imposts for businesses and regulators regarding processes such as plant item registration.
- Concerns were expressed regarding scaffolding and amusement devices.

Taking these issues into account, Safe Work Australia considered a number of amendments to the model WHS Regulations to develop a final proposal.

Definitions

Safe Work Australia has agreed to:

- an extension of the definition of structure for construction work so that plant is generally excluded except for such things as the construction of ships and submarines or where outage/overhaul work on fixed plant involves work being carried out by five or more persons conducting businesses or undertakings at any point in time
- the further refinement and clarification of the competent person definitions for specific plant inspections (e.g. for amusement devices, cranes)
- the retention of the definition of plant so that plant that 'relies exclusively on manual power for its operation and is designed to be primarily supported by hand' is excluded from the plant regulations as the regulatory burden of inclusion outweighed the associated risks, and
- a clarification of activities to be excluded from regulations on plant that lift or suspend loads including stunt work, acrobatics and theatrical performances.

Duties and managing risks

Safe Work Australia has agreed to:

- the inclusion of a new overarching 'managing risks to health and safety' section in the regulations and a specific plant regulation so that a person with management or control of plant at a workplace has a clear duty to manage risks to health and safety associated with plant, and
- separate supplier and importer duties so that there is a similar duty on importers as there is on manufacturers, in particular for second hand-plant, for the provision of information.

Plant item registration

The strong support for a shift to a renewal process for item registration has been agreed by Safe Work Australia. Plant item registration will be limited to five years with a renewal fee processed at this time. The requirement for annual notification of maintenance has been removed. There is now a general requirement for all plant to be inspected and maintained in accordance with the manufacturers' instructions (see below). Currently, Victoria has a five-yearly registration renewal. New South Wales and Queensland require annual registration renewal. South Australia, WA, Tasmania, NT and the ACT do not require regular registration renewals but generally require a re-registration if there is an alteration to the plant, relocation or change of ownership.

Safe Work Australia has agreed to retain the proposed schedule of registrable plant on the basis that it includes high risk plant, with an amendment to exclude heritage boilers from design registration requirements. These boilers cannot meet current design standards and must be item registered.

Inspections

Safe Work Australia has agreed to:

- insert a general maintenance and inspection provision applying to all plant. There is a general duty to ensure plant is safe to operate in all jurisdictions and maintenance would be a critical element of meeting this duty. As the positive duty to inspect and maintain is based on the manufacturers' instructions and plant owners would typically need to follow these to keep plant operating, particularly in regard to expensive and/or high risk plant, there is expected to be minimal impact
- major inspection of cranes according to the manufacturer's design life requirements or as recommended by a competent person, or if this is not reasonably practicable, every 10 years, and
- the 10-yearly major inspection of cranes being from date of first commissioning to registration.

Scaffolding

Following consideration of public comment and the current regulatory requirements for scaffolding, Safe Work Australia agreed to retain the scaffold provisions including the inspection requirement, given the high risks associated with scaffold erection and use and to maintain alignment with the technical standards applied by industry. Given the current legislative requirements and that relevant Australian Standard technical requirements typically apply, inspections should already occur at regular intervals not exceeding 30 days.

Amusement devices

Safe Work Australia has agreed that the following amusement devices should be excluded from the registration requirements:

- playground structures
- water slides where water facilitates patrons to slide easily, predominantly under gravity, along a static structure
- wave generators where patrons do not come into contact with the parts of machinery used for generating water waves
- inflatable devices that are sealed, and
- inflatable devices that do not use a non-return valve.

The requirement for annual inspections for amusement devices is retained given the combination of worker and public health and safety risk to be managed. For those jurisdictions that do not require an annual or periodic reporting of amusement devices (Victoria, WA, Tasmania and the ACT) the change will impose an additional administrative burden. Noting that operators will minimise costs by having inspections completed where it best suits (e.g. in a capital city rather than in a remote location), the inspection cost will depend on the type of amusement device and competent person requirements. With a professional engineer generally charging between $150–$300 per hour, an average inspection cost may be around $1000 for approximately four hours work. The competency requirements for plant inspections have been clarified so that

only a competent person who holds appropriate qualifications can conduct the inspection.

General comments

Safe Work Australia has agreed to:

- clarification of lasers that can be used in construction work as per the classes defined in the relevant Australian Standard, which is anything but classes 3B and 4
- clarification of the requirements for roll-over protective structures (ROPS) for earthmoving equipment to exclude smaller items of plant not designed for a seated operator
- limit the referencing of technical standards in regulations and include these in Codes of Practice, although some are retained for definitional purposes, particularly in Schedule 5 (e.g. boiler and pressure vessels)
- the provision of a separate regulation to meet the work requirements of arborists and exclusions from the requirements to use a workbox, and
- more consistent record-keeping requirements across the regulations, including for plant.

The revised model WHS Regulations include:

- a definition that excludes plant that relies exclusively on manual power for its operation and is designed to be primarily supported by hand
- upstream duty holder obligations to provide safe plant, including for designers, manufacturers, suppliers and importers, including the exchange of information and information on second-hand plant
- duties for persons with management or control of plant at a workplace to manage risks and to maintain and inspect plant in accordance with the manufacturer's instructions
- requirements to ensure that plant has suitable guarding, operational controls, emergency stop controls and warning devices
- the registration of selected plant items for a five-year period with a registration renewal then required
- competency requirements for the person who inspects high risk plant, items of plant for registration and verification of plant designs for registration
- specific regulations covering types of scaffolding, its erection and inspection by a competent person before use, and its safe management
- specific requirements applicable to the design, manufacture, operation and maintenance of amusement devices, with an annual inspection and maintenance to be in accordance with the manufacturer's instructions or maintenance manual prepared by a competent person
- control of risks for specific plant such as powered mobile plant, mobile cranes and tower cranes, industrial lift trucks, plant that lifts or suspends loads, lifts, scaffolds, pressure equipment, industrial robots, lasers and amusement devices, and
- requirements for record keeping for specified types of plant and technical standards used in the design of plant that are more consistent across the regulations.

Overview of impacts

The proposed model WHS Regulations for plant will maintain the current standards outlined in the National Standard for Plant and capture some additional registrable plant that has been introduced to the workplace since the National Standard for Plant was published. Static concrete placement booms (not just truck-mounted concrete placing units with booms), self-erecting tower cranes and prefabricated formwork have now been included.

Under the model WHS Regulations plant registration will be recognised nationally. This formal recognition process should result in a reduced registration and cost burden for businesses operating the same item of mobile plant in multiple jurisdictions. The alignment of plant registration requirements nationally will result in consistent obligations to register plant that is of higher risk and to manage the associated risk. For Queensland and Tasmania there will be a reduction in the number of plant items that currently require registration and related administration. The ACT will need to transition existing requirements (e.g. under the Machinery Act and Regulations) to work health and safety arrangements.

Item registration will be for five years, with a renewal then required to enable monitoring of plant and its location. The move to a five year annual registration process significantly reduces costs to businesses in Queensland and NSW that are currently required to pay a fee for annual registration renewal.

In NSW, the current annual fee is generally $65 per plant item. Noting that five-year registration fees are yet to be set by jurisdictions but that they are to be cost recovery based and may remain similar in scale, a fee saving for a single item of plant could be up to $260 over 5 years. For Queensland registration renewal fees range from $47 (service lift) to $1324 (boiler with a heating surface of more than 2000 m^3). Fee savings for a single item of plant will range from $188 to $5296 over five years, depending on the type of plant.

Further savings will be achieved in these jurisdictions in the reduced time to prepare and lodge registration renewals. There will also be a reduction in the regulators' administrative burden from reduced registration processing requirements as a result of moving from annual to five-yearly registration renewal.

There will be minimal change for Victoria as it currently has a five-yearly registration renewal. As SA, WA, Tasmania, NT and the ACT do not require regular registration renewals there may be additional costs for businesses in these jurisdictions from five-year renewal requirements. Given the current requirement in these jurisdictions to re-register if there is an alteration, relocation or change of ownership relating to the plant item, the additional cost may be minimal for a number of businesses depending on how they use their plant. Similarly, businesses in NSW and Queensland that relocate or alter their equipment at least annually will not receive a material benefit from the change from an annual to five-yearly renewal.

Queensland and Tasmania will also have a small reduction in the number of items that are required to be registered including air-conditioning towers and mine winders, which will reduce regulatory impact for businesses with those types of plant. There will be reduced administrative requirements for Commonwealth businesses because registration is recognised in all jurisdictions. In the ACT, which does not have plant item registration, there will be an increase in administrative requirements. However, given

the significant reduction in registration requirements in Queensland and NSW, the overall assessment is a reduction in administrative burden nationally for duty holders from the status quo.

All jurisdictions have scaffolding requirements although these may be contained in non-work health and safety legislation. Given the legislative requirements and that industry currently applies Australian Standard technical requirements, inspections should already occur at regular intervals not exceeding 30 days. The ACT has advised there will be minimal impact relating to scaffolding as the proposed requirements are similar to those already existing. Although Tasmania does not have any specific work health and safety scaffolding regulations, it is expected that the impact for Tasmania will be minor as certification and regular inspection is already a requirement for scaffolding which must be erected and informed by technical standards to meet the general work health and safety duty under the Act.

The inclusion of regulations for amusement devices will have an impact on those jurisdictions that do not currently register devices in the same way as SA. Victoria and NSW currently have different criteria for registering certain devices including inflatable devices. For those jurisdictions that do not require an annual or periodic reporting of amusement devices (Victoria, WA, Tasmania and the ACT) the change will impose an additional administrative burden. The exclusion of certain devices and structures from registration will have the effect of reducing some of the regulatory burden expected in those states. Given that most owners of mobile or portable amusement devices already register their equipment in the jurisdiction with the most stringent requirement (SA), the additional cost burden should only extend to any costs for annual inspection. Noting that operators will minimise costs by having inspections completed where it best suits (e.g. in a capital city rather than in a remote location), the inspection cost will depend on the type of amusement device and competent person requirements and is estimated, on average, to be around $1000 for each inspection of each item of plant. This could be a significant impost for small operators, such as carnival operators, who have a number of items.

A RIS prepared by Access Economics in 2006 considered a number of revisions to the National Standard for Plant. This RIS projected that a revision that achieved a consistent approach across all jurisdictions would result in lower costs to businesses.

In an economic impact analysis undertaken for the National Standard for Plant it was considered that:

> *… uniform plant regulations would eliminate unnecessary costs of complying with differing State regulations; remove restrictions on competition between firms based in different States; reduce inefficiencies in important inputs to production such as the movement of plant, labour and capital between states and territories; reduce the need to unnecessary firm structure based on individual jurisdiction's regulations and enhance technological innovation. It was estimated that there may be a reduction of 24 per cent in the level of plant-related accidents.*
> *Overall, the direct work health and safety benefits expected from employers complying with the National Standard are estimated at $1 468.7 million undiscounted and $876.1 million when discounted over 10 years. In addition, there will be substantial indirect benefits. These may range from $1 468.7 million to $7 810.1 million undiscounted, or from $876.1 million to*

$4 658.8 million discounted. Furthermore, there may be a further $100 million savings in social security payments.

It is also considered that greater flexibility for designers will be a benefit but it is difficult to quantify the impact on the cost of future designs or the safety outcomes achieved.

The most significant benefit of the proposed model WHS Regulations for plant is the move to a five-yearly annual plant item registration process. This will mean reduced administrative requirements for both Commonwealth and Queensland employers.

The proposed regulations are expected to result in uniform registration arrangements and coverage of safety for workers nationally. This also provides a benefit by reducing confusion around differing regulatory requirements.

6.8 Construction work

What is the risk?

The constantly changing nature of construction work distinguishes it from other types of workplaces. Structures change in height and breadth, excavations are made and filled and high risk plant and hazardous substances are used at various stages of this work. Most tasks involve manual work. Different hazards and risks can emerge on a daily basis and sometimes instantly. These particular features of the construction industry contribute to the high levels of risk and are reflected in high claims figures in the industry.

The personal and economic costs of workplace incidents occurring in the construction industry are high. This industry has an annual average of 13 800 compensated cases where workers have had one week or more absence from work. A typical compensation case costs $6600 in direct workers' compensation payments, totalling $400 million annually.

The construction industry also represents a significant proportion of workers' compensation costs, with an estimated total of 49 900 cases per year. The total annual economic loss is estimated at $2.36 billion.[1]

What are the current jurisdictional regulations?

All jurisdictions currently require risks associated with construction work to be managed so far as is reasonably practicable by eliminating the risk or, if that is not reasonably practicable, by minimising the risk so far as is reasonably practicable.

Because a national approach has been taken to regulation in this area under the National Construction Standard a number of jurisdictions have relatively consistent provisions on:

[1] Report on Work-Related Injuries 2005-06, 6324.0 Australian Bureau of Statistics, 20 December 2006 pp 3,5 http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/4C1F7A19EF4AEEA9CA2572490018107D/$File/63240_2005-06.pdf

- designer duties for structures and in some cases corresponding 'client duties' (Queensland and WA only)
- SWMSs for 'high risk construction work', and
- principal contractor duties and in particular certain coordination duties for 'construction projects'.

These include:

- Commonwealth—Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), Part 12
- New South Wales—Occupational Health and Safety Regulation 2001 (NSW), Chapter 8
- Queensland—Workplace Health and Safety Regulation 2008 (Qld), Part 20
- Victoria—Occupational Health and Safety Regulations 2007 (Vic), Part 5.1
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), Division 12 of Part 3
- Northern Territory—Workplace Health and Safety Regulations (NT), regulation 133A.

Key differences between these jurisdictions include:

- the meaning of 'construction work' and in particular the treatment of maintenance work and the application to fixed plant
- the threshold for principal contractor duties. This is expressed as a monetary threshold in NSW ($250 000), Victoria ($250 000) and Queensland ($80 000), rather than as a minimum number of workers on-site as per the National Construction Standard
- the circumstances in which a principal contractor must be engaged being broader in NSW. The monetary threshold identified above is not the only trigger for 'principal contractor' duties
- designer/client duties only prescribed in construction-specific regulations in Queensland and WA
- certain co-ordination duties applying to principal contractors in Queensland and the Commonwealth (e.g. amenities and housekeeping), and
- additional site security requirements applying to construction workplaces in NSW.

Of the other jurisdictions:

- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), Division 10 of Part 6, establishes requirements for safety supervisors
- Tasmania—Workplace Health and Safety Regulations 1998 (Tas), Part 4 Division 11, makes provision for 'responsible officer' appointments, and
- ACT—Work Safety Regulation 2009 (ACT), Part 9 makes provision for general construction induction training. The National Construction Standard has been adopted in the ACT as the Work Safety (National Standard for Construction Work) Code of Practice 2010 (ACT).

What is the problem?

There is a National Construction Standard but differences in implementation mean there is no true national approach to regulation in this area.

Significant differences relate to:

- how ‘construction work’ should be defined
- when principal contractor duties should apply, and
- whether client duties should apply.

Differences may hinder cross-border construction projects.

Harmonisation in this area at the regulatory level would provide the same protection for workers across all jurisdictions and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

The draft model WHS Regulations released for public comment were based on the National Construction Standard, but also had regard to how jurisdictions have implemented this National Standard in their regulations. In summary, the draft model WHS Regulations provided for:

- designer/client duties in relation to ‘structures’
- managing risks to health and safety arising out of construction work
- SWMSs for ‘high risk construction work’
- appointment of ‘principal contractors’ for ‘construction projects’—that is, a construction project that involves construction work—if the cost of the construction work is $200 000 or more, and
- coordination duties for principal contractors including requirements for the preparation of work health and safety management plans (WHS management plans) to coordinate construction projects and requirements to coordinate facilities and other matters requiring coordination on-site.

The proposed regulations applied to or in relation to ‘construction work’ (as defined), meaning certain kinds of work carried out on ‘structures’. The term ‘structure’ is defined under the model WHS Act as anything that is constructed, whether fixed or moveable, temporary or permanent and including buildings, masts, towers, framework, pipelines, transport infrastructure and underground works (shafts or tunnels), any component of a structure and part of a structure.

SWMS were proposed to document processes for identifying and controlling health and safety hazards and risks of ‘high risk construction work’.

SWMS would be required to describe the controls to be used for carrying out ‘high risk construction work’ safely and how they would be implemented. ‘High risk construction work’ was defined to include certain high risk activities including but not limited to work on trenches, shafts and tunnels and work involving demolition, asbestos, explosives and tilt–up or precast concrete.

Under the draft model WHS Regulations a SWMS would have to be prepared before 'high risk construction work' begins and must:

- list the type of high risk construction work being done
- state the health and safety hazards and risks arising from that work
- describe how the risks will be controlled, and
- describe how the risk control measures will be put in place, monitored and reviewed.

The work must then be done in accordance with the SWMS.

WHS management plans were proposed as high level documents for larger construction projects which contain the key information about work health and safety. The most important role of these plans would be in coordinating site safety information and ensuring the accessibility and currency of the information.

The proposed model Code of Practice for facilities for construction sites set out the minimum standard of facilities including change rooms, meal rooms, toilets and sanitation, washing, showers, drinking water, and safe keeping of tools and personal belongings.

Public comment, final proposal and rationale

Public comment focussed on key threshold issues including the scope of 'construction work', the proposed threshold for principal contractor duties and the proposed application of principal contractor duties to all construction industry sectors including the housing construction sector.

Scope of 'construction work'

Comments included:

- the meaning of 'construction work' is too broad as it picks up sectors that are not traditionally considered to fall within the construction industry
    - in particular, the proposed application of the provisions to maintenance work on 'fixed plant' such as electricity generating plant and manufacturing plant is strongly opposed
- in relation to the exclusion for 'testing, maintenance or repair work of a minor nature' it is submitted the exclusion should be extended to cover:
    - *routine* testing, maintenance or repair work, and
    - 'minor' installation work of essential services (see regulation 6.1.1(2)(e)).

Trigger for principal contractor duties

Comments included:

- the proposed $200 000 trigger for principal contractor duties is poorly conceived, too low and lower for example, than the threshold that currently applies in NSW and Victoria

- some support for the proposed threshold (ACTU, CFMEU and others) but a variety of alternative monetary thresholds are proposed by employer stakeholders including: $250 000, $300 000, $500 000 and $1 million, with or without regular indexing
- a threshold based on the number of workers on-site is more appropriate than a monetary measure as this provides a risk-based approach and overcomes any variations that may occur between jurisdictions based on different average building costs, and
- blanket exclusions are proposed for the housing construction sector or alternatively in relation to the construction of single-storey residential dwellings or other exclusions based on the Building Code of Australia.

Safety function of SWMS

Comments included:

- criticism of SWMS as being an administrative control and commonly perceived as 'more paperwork'
- content requirements for SWMS and WHS management plans should be as simple as possible to ensure that these kinds of control plans are understandable and actually used by workers on the ground
    - requirements for SWMS leave little room for adjustments to respond to unforeseen circumstances
- further guidance should be provided on how SWMS work where complex subcontracting arrangements are in place.

To reduce regulatory impact it is proposed that a standard SWMS template may be prepared and published in a Code of Practice or other guidance material.

An alternative to adopting aspects of the National Construction Standard in regulations would be for these jurisdictions to use non-regulatory measures such as Codes of Practice, information, and targeted activities to assist compliance.

Some jurisdictions have noted that non-regulatory approaches have already been attempted in construction, and have produced unsatisfactory outcomes. The Victorian regulator reports that despite significant efforts over some years (involving the production of guidance material, awareness raising and targeted enforcement activities), there has been a lack of universal uptake by industry of SWMSs and construction induction training. It notes that 'Health and Safety Co-ordination Plans'—re-badged WHS management plans under the proposed laws—are common in certain industry sectors but this is because many public sector clients insist on them as part of contracts.

Role of principal contractor on construction projects

Comments included:

- principal contractor duties may constitute a costly de-facto requirement for full-time supervision at construction workplaces
    - housing construction sector should be excluded from these requirements

- additional co-ordination duties proposed for principal contractors force them into a 'policing role' which is not supported.

Prescribing specific controls—construction work

Comment included:

- unions generally support more specific controls be included at the regulatory level rather than in a Code of Practice.

Site security requirements apply to construction workplaces

Comment included:

- It is proposed that site security requirements should be a PCBU duty rather than a principal contractor duty, consistent with general health and safety duties (regulation 6.4.8(3)).

Code of Practice – facilities

General comments included that:

- the Code of Practice relating to construction facilities is unnecessarily prescriptive and not clear or practical
- prescriptive requirements are problematic and inconsistent with current jurisdictional requirements. For example the number of toilets required is more than that required in Queensland and NSW but less than that required in Victoria
- a risk assessment approach to determine appropriate alternative arrangements is preferred
- the regulatory requirements outlined in the draft Code of Practice would increase the cost of amenities for duty holders. For example, requirements for connecting hot and cold water will cost $300 each time the site shed is moved to a new job. The requirement to hire a meal room for the duration of a project may cost an additional $2000.

Requirements for SWMS and principal contractor duties are generally supported consistent with the current National Construction Standard and the underlying analysis for that National Standard, subject to the following proposed amendments.

Scope of 'construction work'

The draft definition of 'construction work' is based on the National Construction Standard, but also takes into account how that definition has been adapted to fit into regulatory frameworks, particularly in NSW, Victoria, Queensland and WA. Current definitions are not extracted here because of their length.

The proposed definition is broadly consistent with the current position in a number of jurisdictions that have adopted the National Construction Standard and is arguably most closely aligned with the Victorian model. The Victorian model covers certain maintenance, subject to an exception for 'routine or minor testing, maintenance or repair work performed in connection with a building or structure'. The Queensland model however does not refer to maintenance activities at all.

There is an argument that 'regulatory creep' in this area has meant that work not traditionally considered to be construction work has been inappropriately captured under construction regulations. This concern has been raised by a number of industry sectors, particularly the manufacturing sector, which includes electricity generation.

It has also been submitted by a number of employer stakeholders that risk control measures developed specifically for the construction industry should not be extended to other industries without sound reasons for doing so. It is also submitted that the proposed regulations are a poor fit for non-construction industries as requirements for principal contractors and related duties have no intuitive application. This outcome is considered to be problematic because the duties have been specifically formulated for the traditional construction industry due to the high risk nature of the work, including the temporary nature of many construction workplaces.

In response to these comments, amendments are proposed to ensure that the regulations do not apply generally to work carried out on plant except where the work involves the coordination of multiple contractors, which gives the workplace the same risk profile as a traditional construction workplace.

Some concerns have been expressed around the scope of the proposed exception for 'testing, maintenance or repair work of a minor nature' and it is noted that the proposed exclusion should be extended to cover:

- *routine* testing, maintenance or repair work, and
- 'minor' installation work of essential services (see regulation 6.1.1(2)(e)).

It is proposed that further guidance about the scope of the exclusion for 'testing, maintenance or repair work of a minor nature' will be provided in Codes of Practice and guidance material. Given the diversity of construction activities that exist further prescription around this area is not practicable in regulations.

The proposal to extend the proposed exception in the manner sought is not supported. The proposal is inconsistent with the policy position in the National Construction Standard. It is also considered that extending the proposed exception as proposed would introduce ambiguity and give the exception an unintentionally wide scope. For example, if 'routine' activities were to be picked up there is an argument that most maintenance and testing activities would be excluded regardless of the risks involved.

Trigger for principal contractor duties

The proposed trigger for principal contractor duties is a monetary amount of $200 000 which is lower than the threshold that applies in NSW and Victoria. Stakeholders are divided over the level of this threshold.

Based on public comment it is proposed that the threshold be increased to $250 000 to reflect the current policy position in NSW and Victoria. The revised figure would be subject to review as part of the five-yearly reviews of the model work health and safety laws.

The monetary threshold is intended to be a proxy for the complexity of a construction project. It is considered that the proposed revised threshold is appropriate in the context of national consistency and achieves a fair balance between a regulated solution and fair work health and safety protection across construction industry sectors.

The intention is to exempt the smallest construction workplaces where coordination problems are not a significant issue.

It is noted that several jurisdictions including the Commonwealth, WA and NT apply the threshold under the National Construction Standard—that is, five persons working or likely to be working on a construction site.

Safe Work Australia has considered the submissions that both kinds of thresholds, both monetary and based on a head count, are workable. On balance it was considered that the dollar value for a construction project is a preferable threshold as it is transparent and unambiguous. It is the type of threshold currently used in NSW, Victoria and Queensland.

Safety function of SWMS

SWMS have a clear safety function in providing workers with SWMS to follow and a corresponding entitlement to follow them. Concerns that content requirements for SWMS will make them cumbersome and unusable are noted but not agreed. It is considered that the performance-based nature of this duty will allow either a short document or more detail, whichever is more appropriate depending on the circumstances.

Greater coordination will be required on larger sites with complex subcontracting arrangements in place. It is envisaged that guidance material will be developed to further explain practical ways of meeting the proposed requirements in the regulations.

Concerns about the flexibility of SWMS in the context of dynamic construction workplaces are noted. It is considered that further work can and should be done to explain ‘best practice’ for preparing SWMS to ensure they are practical and effective. For example, guidance could be provided about framing statements around ‘working safely’ rather than ‘working to rule’ or ‘rule compliance’ if appropriate.

Submissions for exemptions e.g. for the residential housing construction sector are noted but not supported. The object underpinning the National Construction Standard is to create a uniform set of requirements across the industry and nationally. Exempting certain sectors from the requirements would be inconsistent with this commitment. In reaching this decision regard was had to the flexibility provided by the performance-based approach to regulation.

Role of principal contractor on construction projects

An exemption from principal contractor duties for the residential housing construction sector is not supported.

As explained above the proposed policy is risk-based not sector-based. The larger the site, the greater the potential for hazards and risks. Larger sites such as those of major project builders engage more people at any one time as well as overall and a greater number of trades.

Larger sites are also more likely to use heavier plant and have more workers operating at heights. This increases the possibility of breakdowns in the understanding of hazards and risks and the measures required to control those risks.

Coordination of work to ensure management of risk is further complicated by staggered commencement and conclusion of individual stages of a construction project, high turnover of works in the construction industry and the temporary nature of construction workplaces. A risk control for one site will not necessarily work for the next.

Role of principal contractor on construction projects—residential housing construction

For this reason concerns raised by a number of stakeholders in the residential housing construction sector that a PCBU 'producing housing projects that are regularly similar in building process and impose a lower risk due to the regularity of the work, do not need and would not benefit from [the proposed control measures]' is not agreed.

Concerns raised by the residential housing sector that the requirements may require principal contractors to maintain a full-time presence on housing sites are noted. That is not however what the proposed regulations state. It is envisaged that sector-specific guidance material will be developed to explain what is required by the relevant provisions in a practical sense.

Concerns that additional coordination duties proposed for principal contractors at regulation 6.4.8 converts coordination duties into full-time 'policing' duties were noted. However this characterisation of the duties is not agreed.

It is considered that the relevant provisions provide more specific guidance about how to comply with the general duty to consult, cooperate and coordinate under clause 46 of the model WHS Act. It is anticipated that specific guidance material will be developed with practical examples of how these duties apply in different kinds of construction workplaces.

Prescribing specific controls—construction work

Union stakeholders would prefer the content around some additional specific controls for the industry to be included in regulation rather than a Code of Practice.

It is considered that the proposed regulations strike the right regulatory balance. In general the proposed policy is to draft regulatory requirements as performance-based requirements where possible and add specific controls where there is only a single well-accepted and widely-applied measure used for controlling specific risks.

Where there are options for controlling specific risks it is considered that more expansive advice can and should be provided in Codes of Practice or other guidance, including advice that can be tailored to specific circumstances.

Site security requirements apply to construction workplaces

It is considered that site security requirements should be a PCBU duty rather than a principal contractor duty consistent with general health and safety duties (regulation 6.4.8(3)).

In re-drafting this requirement careful consideration was given to the scope of the duty and it is proposed that the duty be qualified by what is reasonably practicable.

This will ensure that duty holders take a risk-based approach to determining the level of site security required at each construction workplace.

Code of Practice – facilities

In response to public comment it was considered that the best approach to developing this Code of Practice is to incorporate the key principles for the provision of facilities in the draft *Code of Practice: Managing Risks for Construction Work* and provide specific examples that explain how PCBUs can determine what facilities should be provided at their workplace. This approach will also provide an option to develop additional industry-specific guidance material.

Overview of impacts

The requirements in the general construction model regulations are consistent with the current National Construction Standard. The National Construction Standard has been implemented in the work health and safety regulations of a number of jurisdictions including the Commonwealth, NSW, Victoria, Queensland, WA and NT. Designer/client duties as required by the standard however, have not been implemented uniformly in these jurisdictions. The ACT has implemented the National Construction Standard under a Code of Practice. Regulatory impact will be lower in these jurisdictions relative to the other jurisdictions.

Jurisdictions that have not implemented the National Construction Standard in regulations

The regulatory impact will be higher in those jurisdictions that have not implemented the National Construction Standard in their regulations—that is, SA and Tasmania. Regulatory impact will also be higher in the ACT which has given the National Construction Standard Code of Practice status in that jurisdiction.

Key changes will include mandatory requirements to prepare SWMS for 'high risk construction work' and also principal contractor duties to coordinate construction projects, including the preparation of WHS management plans. This will impose some additional compliance costs on effected businesses in these jurisdictions.

Some estimated costs of these requirements are published in the Victorian RIS - the Proposed Occupational Health and Safety Regulation 2007 and Equipment (Public Safety) Regulations 2007 and may be relevant in this context.

The Victorian regulator estimates that:

- it is likely to take three to four days to develop an initial SWMS template
- once developed it is likely to take 10–30 minutes to tailor a generic SWMS for a specific project
- the average cost of one hour including set-up and on-costs is considered appropriate.

Trigger for principal contractor duties

Currently NSW and Victorian work health and safety laws trigger principal contractor duties to prepare WHS management plans and certain other duties for 'construction projects' costed above $250 000. In Queensland, the relevant monetary threshold is $80 000. Calculations for costing 'construction projects' vary across these jurisdictions.

Other jurisdictions including the Commonwealth, WA, NT and the ACT rely on a trigger of five or more workers at the workplace, which is consistent with the National Construction Standard.

It is proposed that the trigger for principal contractor duties under the model work health and safety laws be set at $250 000, consistent with the current position in NSW and Victoria. This trigger imposes the following requirements:

- the duty to 'appoint' a principal contractor for the construction project—a default appointment will apply if this is not done
- the principal contractor duty to prepare a WHS management plan for the construction project, and
- additional coordination duties as set out in the proposed regulations.

As this is the current threshold in NSW and Victoria, no regulatory impact arises.

In Queensland the monetary threshold will increase from $80 000 to $250 000. Increasing the threshold means that fewer sites will be covered by the regulations. This will reduce the regulatory impact on Queensland businesses.

Businesses in WA, NT and the ACT will change how they assess if the requirements are triggered from calculating the number of workers on a project to calculating the project cost.

In these jurisdictions the proposed change may mean that more construction work falls within the definition of 'construction project' for which a principal contractor must be appointed, and in relation to which additional coordination duties will apply. Increases in regulatory impact are difficult to determine because it is not clear how many duty holders already voluntarily apply these controls for the relevant kind of work.

Some stakeholders in WA, NT, the ACT and the Commonwealth disagree with the proposed change to their current threshold, particularly the shift away from the 'five or more workers' trigger for principal contractor duties to a monetary threshold. They submit that the proposed approach is not risk-based and inconsistent with the National Construction Standard. Concerns have also been expressed that the proposed increase in the monetary threshold from $200 000 to $250 000 will only make a minor difference to the projects that are captured within the threshold test.

Overall, the change to the trigger will have minimal impacts on businesses in NSW and Victoria as these jurisdictions currently apply the proposed trigger of $250 000, and it will reduce compliance burden in Queensland, which has a lower monetary threshold. However, the impacts on the other jurisdictions that have a threshold based on the number of workers on–site will involve a trade-off. Although a monetary threshold is clear and relatively easily estimated, it is arbitrary and less relevant to the underlying reason for the requirement than a worker based trigger, which provides a more risk-based approach. Inconsistency with the National Construction Code could also be considered undesirable given it already regulates in this industry on a national basis.

Record keeping—SWMS, WHS management plans etc.

There may be additional regulatory impact arising from requirements to prepare and in some circumstances keep copies of SWMS and where applicable WHS management

plans. SWMS describe what controls will be used to do high risk construction work safely and how they will be implemented.

Based on evidence from Victorian WorkSafe inspectors, it is estimated that it will take two hours to prepare an initial SWMS. Given the repetitive nature of SWMSs and over time the access to available generic base documents, the average time taken to prepare these statements is likely to be lower. During focus group discussions held in developing the current Victorian regulations, stakeholders indicated that it may take three to four days to set up an initial SWMS template, but once this has been prepared, it may take just 10–30 minutes to tailor generic statements for specific projects. WorkSafe Victoria therefore considered an average cost of one hour (which includes average set-up and variable costs) to be appropriate.

SWMS and WHS management plans must be generally kept for the duration of the relevant construction work or, if a notifiable incident arises out of the work covered by any of these instruments, for two years.

Requiring the prescribed information for the duration of the relevant construction work is considered to be consistent with the nature of the duty. There is no point in requiring the information to be obtained if it is not made available to all relevant persons on the ground for the duration of the work. This type of record-keeping requirement is an important part of ensuring safety outcomes.

The two-year record-keeping requirement is proposed to ensure that all relevant information relating to 'notifiable incidents' as defined under the model WHS Act is kept and available to investigators for an appropriate period of time. The two-year record-keeping requirement will only apply in a small proportion of cases where a 'notifiable incident' arises out of the relevant work.

Requirement to appoint principal contractor

Jurisdictions including WA and the Commonwealth do not include 'appointment' provisions for principal contractors. These jurisdictions may experience some increased regulatory impact as a result of the introduction of appointment provisions under the proposed laws. These provisions are considered to be essential in ensuring certainty about the identity of the principal contractor for a construction project for purposes of the proposed work health and safety laws. Although the proposed process involves taking an additional step there is no requirement for arrangements to be documented. This permits businesses to satisfy obligations in the most cost-effective way.

Principal contractor duties—additional duties

Victoria does not currently include additional principal contractor duties comparable to those proposed in draft regulation 6.4.8. In their recent RIS process it was noted that the regulator did not believe that these kinds of duties 'would add a great deal to the general duties under the OHS Act 2004'. For that reason regulatory impact is not considered to be significant.

Site security for construction workplaces

Not all jurisdictions currently include express requirements for site security at construction workplaces.

The proposed duty for adequate site security at construction workplaces is not an absolute duty to have all construction sites fenced regardless of safety outcomes. The duty would only apply so far as is reasonably practicable. This means that in determining what must be done to comply with the proposed requirement, all relevant factors may be taken into account including the nature of the construction work being carried out, its attendant hazards and risks, and the location of the site, for example the proximity of the construction workplace to schools, shopping precincts and other places frequented by children. It is proposed that site security requirements should be a PCBU duty rather than a principal contractor duty, consistent with the general health and safety duties of all relevant PCBUs.

It is difficult to quantify the regulatory impact of the proposed requirement as current work health and safety laws either expressly or impliedly require adequate site security. Many jurisdictions also have more detailed and prescriptive requirements under local or building laws.

6.8.1 Excavation work

What is it?

Excavation work is inherently dangerous and regarded as high risk construction work. Excavation failures occur quickly and this limits the ability of workers to escape, especially if the collapse is extensive or is a trench.

The speed of an excavation collapse increases the risk associated with this type of work and the consequences are significant as the falling earth can bury or crush any person in its path. This can result in death by suffocation or internal crush injuries.

The magnitude of the consequences, particularly in relation to trench collapse, highlights the need to protect workers and other persons working at or near excavation sites.

Without careful planning and management an excavation site can be hazardous to all persons in the vicinity of the construction work. Particular hazards identified in relation to excavation work include:

- the depth of the excavation
- the nature of the strata including any previous disturbance and adjoining excavations (soil variations creating the potential for the sides to collapse)
- the presence of water (from other sources)
- vibration which may increase the potential to collapse
- adjoining buildings and any load close to the edge of the zone of influence
- the exposure time
- the presence of existing underground services, and

- chemical gases.

Information about incidents arising from excavation work is usually consolidated within construction industry incident data. This means there is no data available that specifically reports on injuries or fatalities arising out of excavation work.

What are the current jurisdictional regulations?

All jurisdictions currently require risks associated with excavation work to be managed so far as is reasonably practicable by eliminating the risk, or if that is not reasonably practicable, to minimise the risk so far as is reasonably practicable.

In addition to requirements for managing risks, excavation work may be further regulated by requiring notification of certain high risk excavation work and also by prescribing additional specific controls.

Notification requirements for prescribed excavation work

- Victoria (minimum three days notice)—Occupational Health and Safety Regulations 2007 (Vic), regulations 5.1.26–5.1.27
- South Australia (minimum 24 hours notice)—Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 416
- Northern Territory (minimum seven days notice)—Workplace Health and Safety Regulations (NT), regulation 26.

The intention is that only high risk excavations are notifiable, although different approaches are taken as follows:

Notifiable Excavations		
Victoria	**South Australia**	**Northern Territory**
'Shaft', 'trench' or' tunnel' if: —the excavation will be of sufficient dimensions or depth to allow the entry of a person —there will be a risk to the health or safety of any person from the excavation. Exemptions apply, including if the excavation has already been notified (via an applicable permit) under specified building laws.	Excavation work if an excavation formed by the work is more than 1.5 metres high when measured from the bottom of the excavation and: —the excavation is capable of permitting the entry of a person —there is a possibility that a person involved in the performance of the work, or in the vicinity of any excavation or excavation work, could be injured from a fall or dislodgment of soil or rock. Exemptions apply, including work carried out by a public authority in an emergency.	Excavation work requiring shoring under the regulations.

Specific controls—excavation work

A number of jurisdictions have specific controls in their regulations for excavation work:

- New South Wales—Occupational Health and safety Regulation 2001 (NSW), Part 8.5
- Northern Territory—Workplace Health and Safety Regulations (NT), regulation 145
- Queensland—Workplace Health and Safety Regulation 2008 (Qld), Subdivisions 8, 9 of Division 3 of Part 20
- South Australia—Occupational Health, Safety and Welfare Regulations 2010 (SA), Division 5 of Part 6
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), Subdivision 6 of Division 9 of Part 3.

These provisions generally cover requirements for managing risks in relation to excavations including hazard identification and risk assessment, shoring in excavations, measures to protect persons at risk due to excavations (including the risk of mobile plant or materials falling into excavations), measures to protect the stability of buildings near excavations and safe means of access to and egress from excavations.

The Queensland provisions appear to provide the most detailed requirements for the kinds of risk control measures that must be used in the prescribed circumstances.

SWMSs for excavation work are dealt with under the part dealing with construction work generally.

Specific controls—'Dial before you dig' etc.

A number of jurisdictions require information to be obtained about the location of underground electric cables before carrying out excavation work. These include:

- Occupational Health and Safety (Safety Standards) Regulations 1994 (Cth), regulation 10.09
- Occupational Health and Safety Regulation 2001 (NSW), regulation 64(2)(d)
- Occupational Health, Safety and Welfare Regulations 2010 (SA), regulation 155
- Workplace Health and Safety Regulations (NT), regulation 126(2), and
- Workplace Health and Safety Regulation 2008 (Qld), Part 20.

The Queensland requirements are the most comprehensive, requiring duty holders, including principal contractors for construction projects, to:

- find out from appropriate sources what 'underground services' (i.e. not just electric cables) are at or near the location where the work is to be done that could create a risk if contacted or damaged
- obtain 'prescribed information' about each underground service from an appropriate source
- ensure the information is recorded in writing, and

- give the information to each relevant person who is to do excavation work at or near the location of the service.

Record-keeping obligations also apply for the duration of the relevant construction work.

What is the problem?

There is no national approach to regulating risks to health and safety arising out of excavation work.

Jurisdictions may rely on notification requirements for certain high risk excavation work, specific controls around high risk excavation work for example trenching, or a combination of both. Most jurisdictions also have a 'dial before you dig' or similar duty although the scope of this duty varies across jurisdictions.

Further harmonisation in this area would provide the same protection for workers across all jurisdictions and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

Subject to certain exclusions, the draft model WHS Regulations released for public comment proposed that five days notice be required of certain high risk excavation work involving a 'trench', 'tunnel' or 'shaft' if:

- an excavation to be made by the proposed work is more than 1.5 metres high (when measured from the bottom of the excavation), and either:
    - the excavation is capable of allowing a person to enter, or
    - there is a possibility that a person who is involved in carrying out the work or is in the vicinity of the work or an excavation could be injured by a fall or by the dislodgement of soil or rock.

Unlike the equivalent Victorian provision, five days notice was proposed rather than three days.

Notification was not required if the excavation to be made by the excavation work was:

- a mine or a bore to which the relevant local water laws apply
- made for the purpose of rescuing a person or the carrying out of any other emergency response by an emergency service
- made for the purpose of carrying out other emergency work, or
- made use of as a place of burial or interment of the dead.

In making this proposal consideration was given to the rationale for the equivalent Victorian requirement. This is published in the Victorian Regulatory Impact Statement for the proposed Occupational Health and Safety Regulations 2007 and Equipment (Public Safety) Regulations 2007.

The draft model WHS Regulations also proposed that current relevant 'underground essential services information' be obtained and considered prior to commencing excavation work (regulation 6.3.8).

Public comment, final proposal and rationale

Following consultation it was decided that the notification for prescribed high risk excavations be omitted (regulation 6.3.9). Other changes included imposing additional specific controls around high risk excavation work and amending the 'dial before you dig' duty to make it workable in practice.

Proposed notification requirement for certain excavation work

Comments included that:

- the proposed notification requirement would impose 'a significant regulatory burden which would not appear to add any value to safety'
- the proposed notification requirement is unworkable given the dynamic nature of excavation work, and
- if retained, the notification requirement should be amended for greater consistency with the equivalent Victorian regulation which for example has a shorter notice period and does not apply if notification has occurred under building permit laws.

Consistent with the public comment it is proposed that the notification of high risk excavation work be omitted (regulation 6.3.9).

To ensure there is no lessening of safety standards, it is proposed that specific controls around excavations be included in the model WHS Regulations as outlined below.

Specific controls for certain high risk excavations

Comments included that:

- specific controls for high risk excavations should be considered in lieu of notification requirements.

Given the risks of excavation work, it is proposed that the general duty to manage risks be expressly stated to apply in relation to the risks arising out of excavation work. This would not lead to any increased regulatory impact as it is simply a re-statement of the duty that applies in relation to all construction work.

In addition, it is proposed that specific controls be prescribed to deal with trenches that are at least 1.5 metres deep, consistent with equivalent regulations that currently apply in Queensland. The proposed regulation is drafted as a performance-based requirement and is considered to be a straight-forward application of the general duty to manage risks.

'Dial before you dig'

Comments included that:

- 'underground essential services information' may not always be available or reliable so further consideration should be given to qualify the duty to obtain this.

To address concerns about the availability and reliability of 'underground essential services information' it is proposed that the duty be qualified so that duty holders must take all reasonable steps to obtain this information. If they find out no relevant information is available then no further steps need to be taken under the relevant provision, although it would be expected that an additional risk assessment would need to be carried out in these circumstances.

Overview of impacts

Proposed notification requirement for certain excavation work

Removal of the requirement to notify of excavation work means that the level of regulatory impact anticipated in the Consultation RIS will not occur. For NT, SA and Victoria which currently have excavation notification requirements, there will be a reduction in regulatory burden.

Specific controls for certain high risk excavations

Additional specific controls around certain kinds of excavations are supported as providing specific guidance on what must be done to carry out the relevant excavation work safely.

As similar provisions are currently made in a number of jurisdictions and the controls are a straight-forward application of the general duty, the regulatory impact is considered to be neutral for NSW, Queensland, SA and NT.

Victoria, WA, Tasmania, ACT and the Commonwealth do not currently prescribe regulatory requirements for supporting the sides of trenches similar to those proposed in revised regulation 306(3).

The proposed regulation lists the only acceptable methods but allows duty holders to choose the most appropriate method for their site. This allows businesses some flexibility in meeting the requirements.

The proposed requirements are supported to ensure there is no decrease in current standards in this area.

'Dial before you dig'

The proposed 'Dial before you dig' requirement is supported as a straight-forward application of general health and safety duties under the model WHS Act.

The proposed requirement could be perceived as increasing regulatory impact in those jurisdictions that do currently have comparable duties in their work health and safety regulations (i.e. jurisdictions other than Queensland).

Although costs may vary across service providers the common 'Dial before you dig' service is a free service that covers most utilities and provides the location of gas, telecommunications, water and other services. To determine the location of underground services before excavation commences all that is required is to call Dial Before You Dig on 1100 or visit their website at www.dialbeforeyoudig.com.au. Notification periods vary.

The Dial Before You Dig website notes that it passes information on to the underground utility owners and they will respond directly with the cable and pipe location information, usually within a period of two days.

The increased safety benefits of prescribing this requirement in regulations are considered to greatly outweigh any increase in regulatory impact.

In making this assessment consideration was given to the additional steps (and costs incurred) that would need to be taken to carry out excavation work safely if the relevant information about 'underground essential services information' was not available or not obtained.

The potential costs of not carrying out this check were also noted, including large costs if in the course of excavation damage is incurred to underground electricity power lines or gas pipelines and implications for coverage under insurance policies, such as public liability, if enquiries are not made and damage is incurred.

'Dial before you dig'—record-keeping requirement

There will be increased regulatory impact associated with the record-keeping requirement for 'underground essential services information' obtained by duty holders. It is proposed that a copy of this information be kept for the duration of the work or for two years if a notifiable incident arises out of the excavation work.

Requiring the prescribed information for the duration of the work is considered to be consistent with the nature of the duty. There is no point in requiring the information to be obtained if it is not made available to all relevant persons on the ground for the duration of the excavation work. This type of record-keeping requirement is an important part of ensuring safety outcomes.

The two-year record-keeping requirement is proposed to ensure that all relevant information relating to 'notifiable incidents' (as defined under the model WHS Act) is kept and available to investigators for an appropriate period of time. The two-year record-keeping requirement will only apply in a small proportion of cases where a 'notifiable incident' arises out of the relevant work.

6.8.2 General construction induction training

What is it?

General construction induction training provides persons entering or re-entering the construction industry with basic knowledge of the requirements under work health and safety laws, common hazards and risks at construction workplaces and information about risk control measures.

General construction induction training generally means the approved unit of competency CPCCOHS1001A 'Work safely in the construction industry'. Not every jurisdiction (e.g. WA) specifically references this course.

The National Construction Standard aims to protect persons from the hazards associated with construction work.

The *National Code of Practice for Induction For Construction Work* (National Code) provides guidance to persons working in the general and residential construction sectors on the types of induction training that may be needed to provide construction workers with an awareness and understanding of common hazards at construction workplaces and how they should be managed. The National Code was developed to enable a consistent approach to construction induction across Australia and to allow mutual recognition of training across jurisdictions.

The National Code is currently given effect in work health and safety regulations or Codes of Practice in every jurisdiction.

It should be noted that site-specific construction induction training is beyond the scope of this part.

What are the current jurisdictional regulations?

The National Code is currently adopted as follows:

- Commonwealth—Occupational Health and Safety (Safety Standards) Regulation 1994 (Cth), regulation 12.24
- New South Wales—Occupational Health and safety Regulation 2001 (NSW), Part 8.2
- Victoria—Occupational Health and Safety Regulations 2007 (Vic), Division 3 of Part 5.1
- Queensland—Workplace Health and Safety Regulation 2008 (Qld), Subdivision 4 of Division 2 of Part 20; Subdivision 3 of Division 3 of Part 20; regulation 337
- Western Australia—Occupational Safety and Health Regulations 1996 (WA), Division 11 of Part 3
- South Australia—On 15 August 2008 South Australia adopted the National Code as an Approved Code of Practice. An Approved Code of Practice provides practical guidance for meeting safety obligations under the law. It should always be followed unless there is another solution that achieves the same or a better standard of health and safety
- Tasmania—On 19 August 2009 a Code of Practice *Induction for Construction Work* was gazetted and approved for use in Tasmania. This Code of Practice sets out the requirements and timeframes for induction training for the construction industry and also calls up the National Code of Practice
- ACT—Work Safety Regulation 2009 (ACT), Part 9, and
- Northern Territory—On 31 October 2009 the NT Code of Practice for Induction for Construction Work (the Code) commenced as an approved Code of Practice in NT. The Code provides practical guidance to employers in the construction industry to assist in fulfilling their obligations around worker induction. The Code includes arrangements for workers in the construction industry to complete the approved unit of competency CPCCOHS1001A 'Work safely in the construction industry'. The National Code is incorporated into the NT Code.

Commonwealth laws prohibit duty holders from directing or allowing a person to carry out construction work on a construction site unless the person has completed 'a course of occupational health and safety induction training relating to construction'. Nothing

further is provided in this respect because the Commonwealth does not administer its own general construction induction card scheme but relies on those of the states and territories.

General construction induction training is generally required for those carrying out 'construction work'. As this definition differs between jurisdictions, the scope of general construction induction requirements also differs accordingly between jurisdictions.

Other key differences between jurisdictions are described briefly below.

In Victoria regulation 5.1.20 clarifies that general construction induction requirements do not apply to:

- visitors to the workplace who are accompanied at all times by a person who has received general construction induction training, and
- persons temporarily at the workplace to deliver plant, supplies or materials.

In Victoria a temporary 28-day exemption applies for new entrants to the industry where their employer has ensured that an application for general construction induction training has been made and paid for during the 28-day period. This is subject to certain supervision and monitoring requirements (regulation 5.1.23).

In Victoria it is an offence for a person to refuse to accept a general construction induction card (regulation 5.1.24).

In Queensland general construction induction requirements do not apply in relation to construction work that includes work to repair a structure that is fixed plant, a ship or a submarine (regulations 272, 300).

The National Code indicates that there may be activities that are not construction work but are related to construction work where general induction training may be necessary. It suggests the person in control of the construction project or work should determine this by examining:

- the nature of the work to be carried out and the level of risk associated with those tasks
- the circumstances in which the work will be undertaken, including the parts of the site that the person is required or permitted to access, the stage of construction during the period of such access and the level of direct interaction with the construction process, and
- the level of supervision.

This guidance applies directly in those jurisdictions that directly reference the National Code including SA, Tasmania and NT.

In the ACT a person commits an offence if they are on a construction site and do not have a general construction induction training card (regulation 167).

This does not apply if:

- the person who has received the relevant training has applied under ACT or a corresponding law for a general construction induction training card but a decision has not been made on the application

- the person is a visitor to the construction site and is, at all times while on-site, accompanied by another person who has been inducted, or
- the person is temporarily on-site to deliver plant, supplies or materials.

How is general construction induction training delivered?

General construction induction training is delivered through Registered Training Organisations (RTOs). In some jurisdictions (including NSW) the RTO must also be approved by the regulator, in addition to registration requirements.

How long is the construction induction training valid?

General construction induction training lapses if the card carrier has not carried out construction work for any consecutive period of two years or more in NSW and Victoria.

The National Code indicates that general induction training may need to be repeated when the person with control of the construction work decides that there is a need for re-training. It suggests this can be determined through supervision, incidents, risk management or when a person re-enters the industry after an extended absence (e.g. two consecutive years). This guidance applies directly in those jurisdictions that directly reference the National Code including SA, Tasmania and NT.

Do records need to be kept?

In NSW a principal contractor must keep a copy of any relevant statement of general induction training or a statement that the principal contractor is satisfied that the training has been undertaken for three years after the project is completed. An employer must also keep an equivalent record until three years after the employee has ceased to be employed by the employer.

In Victoria an employer must make a record containing details of any general construction induction training card in relation to each person employed to carry out construction work and retain the record for the duration of the person's employment (regulation 5.1.25).

In the ACT an employer who engages a worker to carry out work on a construction site must record certain details about the worker's general construction induction training (e.g. unique identifying number for the card) and keep the record for five years from the later of:

- the day the construction work is completed, and
- the day the worker stops working for the employer.

What is the problem?

There is a National Code on construction induction training requirements but differences in implementation mean there is not a true national approach.

This hinders cross-border construction projects particularly in regards to mutual recognition of general construction induction training across borders.

Significant differences relate to who must be trained. In general persons carrying out 'construction work' must have general construction induction training. Because the

scope of 'construction work' varies across jurisdictions, so too do requirements for general construction induction training.

Harmonisation in this area at the regulatory level would provide the same protection for workers across all jurisdictions and lessen confusion around regulatory requirements across workplaces and jurisdictions.

What was proposed?

The draft model WHS Regulations released for public comment established the framework for the following general construction induction training requirements:

- persons who propose to carry out construction work must have undertaken general construction induction training
- if a person has not carried out construction work for the preceding two years then their PCBU must ensure they re-take the training before carrying out construction work
- PCBUs must ensure these requirements are met including by sighting construction workers' general construction induction cards as appropriate. If a worker does not have the required general construction induction training then the worker's PCBU must ensure the worker is provided with this training.

The draft model WHS Regulations made provision for the administration of a general construction induction card scheme including mutual recognition of the cards across borders. These provisions were drafted to leave administrative arrangements—including who issues the card—up to individual jurisdictions. Issues including the further accreditation of RTOs were considered to be jurisdiction-specific so accommodation was made for this, as appropriate.

Transitional provisions were proposed to recognise current general induction cards held by workers and to make it clear that re-training would not be required for all construction workers on commencement of the new laws.

Public comment, final proposal and rationale

Requirements for general construction induction training

Comments included that:

- general construction instruction training does not lead to better safety outcomes, and
- general construction induction training may be irrelevant to the work carried out by a proportion of workers who are required to have the training. General construction induction training requirements should not apply to work that is not normally considered to be 'construction work'.

Requirements for general construction induction training are supported consistent with the current National Code and the underlying analysis for that Code of Practice subject to the following proposed amendments.

An alternative to adopting aspects of the National Code in regulations would be for regulators to use non-regulatory measures such as Codes of Practice, information and

targeted enforcement activities. Under this approach regulators would rely primarily on a Code of Practice to provide practical guidance to duty holders on how and when to provide general construction induction training.

This alternative is not acceptable to those jurisdictions that have already translated the National Code into their regulations rather than Codes of Practice. For example the Vic RIS 2007 observes that '[n]on-regulatory approaches have already been attempted in construction, and have produced unsatisfactory outcomes. Despite significant efforts by [the regulator] over some years (involving the production of guidance material, awareness raising and targeted enforcement activities), there has been a lack of universal uptake by industry of … construction induction training'.

Based on the experiences of these jurisdictions, maintaining general construction induction training requirements as regulatory rather than Code of Practice requirements is supported.

In reaching this assessment consideration was given to the need to ensure that effective mutual recognition schemes may be put into place. This is only possible if the requirements for general construction induction are regulated with appropriate checks and balances to ensure the integrity of the scheme.

Scope of proposed general construction induction requirements

Concerns about the scope of the proposed definition of 'construction work' are noted and are addressed in the part dealing with construction work generally.

Proposals to narrow the meaning of 'construction work' will narrow proposed general construction induction training requirements correspondingly. This means for example that the proposed requirements would not apply to work on 'fixed plant' except in the circumstances explained in proposed regulation 290 of the draft model WHS Regulations. The intention is to address 'regulatory creep' in this area and ensure that general construction induction training remains meaningful and relevant to those being trained and their PCBUs.

It is noted that proposed Chapter 11 of the model WHS Regulations provides further scope for exemptions.

Closer alignment with current Victorian requirements

Comments included that:

- clarification about the application of the proposed requirements to visitors to construction workplaces is required, similar to the Victorian provisions, and
- provision should be made for temporary exemptions, similar to the Victorian provisions.

It is considered that the persons that must have general construction induction training is sufficiently clear and that any further guidance on this issue should be provided for in relevant Codes of Practice or guidance material.

Provision for temporary exemptions for new entrants to the construction industry is not supported as it is considered that these are the workers who will most need and benefit from general construction induction training.

Scope of proposed general construction induction requirements—permanent employees

Comments included that:

- general construction induction training requirements should not apply to a PCBU's permanent employees.

It is noted that the National Code does not distinguish between workers engaged as employees and those engaged as contractors in the manner proposed. Permanent employees may be as mobile as contractors and work at multiple temporary construction workplaces. For that reason the submission that proposed general construction induction training requirements should not extend to permanent employees is not supported.

Further clarification around duty holders for the duty to ensure a worker has been trained

Comments included that:

- there is some confusion about the scope of regulation 6.5.2(1), particularly the scope of the proposed duty of PCBUs to their contractors or other workers within their management or control.

It is proposed that regulation 6.5.2(1) be amended to clarify that PCBUs must not direct or allow workers engaged by the PCBU to carry out construction work unless the requirements for general construction induction training are met.

Other kinds of construction induction training—site- and task-specific

Comments included:

- opposing views as to whether induction requirements should extend to cover site-specific and task-specific construction induction training.

Further provision for construction induction training requirements including site- and task-specific construction induction training was not supported for inclusion in this part of the regulations. It is considered that these requirements can be variable and are better provided for and explained in a Code of Practice.

Overview of impacts

Requirements for general construction induction training are supported as consistent with the current National Code and its underlying analysis. The National Code has already been implemented in all jurisdictions either at the regulatory or Code of Practice level (noting the Commonwealth's position as explained above). Regulatory impacts will vary depending on how that has occurred.

A more consistent approach to construction induction training should remove any current barriers to mutually recognising the training across Australia, leading to a benefit for those organisations and workers that work across more than one jurisdiction. Consistency can only be guaranteed by making general construction induction requirements regulatory rather than Code of Practice requirements.

Removal of the current temporary exemption available in Victoria for new starters could have a negative impact for Victorian PCBUs due to delays in starting new workers. While the training itself can be completed in a day, there may be a wait until the next available course, which could be several days or even weeks. This brings Victoria in line with all other jurisdictions and would also bring about potential improvements in safety outcomes for young and inexperienced workers who are most at risk on construction sites.

Scope of general construction induction training requirements

Strong concerns have been expressed about workers being required to undergo general construction induction training that is of no relevance to their work. Proposed changes to the definition of 'construction work' (explained in more detail elsewhere), taken together with the scope for exemptions in proposed Chapter 11 of the regulations, are intended to address these concerns.

Regulatory impact—shift from Code of Practice to regulatory requirements for some jurisdictions

There may be some regulatory impact for those jurisdictions including SA, Tasmania and NT that have implemented the National Code in Code of Practice material rather than by way of regulations.

In these jurisdictions duty holders will have to comply with the regulatory requirements and will no longer have the flexibility of seeking and implementing measures with equivalent or better safety outcomes.

The NT regulator has advised that there has been a significant uptake of general construction induction training in the NT which it considers is evidence that the impact is minimal.

It is considered that a regulations-based scheme is preferred over a Code of Practice-based scheme. An important benefit of a regulations-based scheme, with its checks and balances, is that it may be designed to maintain the integrity of the general construction induction card scheme by allowing regulators to intervene and take appropriate action in the event of fraud. This is an essential part of establishing any mutual recognition scheme.

There are currently around 877 000 card holders who have completed induction training for construction work.

The cost for the issue of a construction induction card is provided below, noting that where the cost is included in training the card is issued by the organisation providing the training and not by the regulator.

State/Territory	Cost
Victoria	$27
New South Wales	$30
Queensland	Included with the cost of the training course
South Australia	Included with the cost of the training course
Western Australia	Included with the cost of the training course
Tasmania	$10
Australian Capital Territory	$30
Northern Territory	Included with the cost of the training course

Overall compliance costs do vary but this is a result of local economic factors rather than regulatory variation. Businesses in all jurisdictions face costs for the following components:

- course costs—for example from $67–$170 and upwards depending on the service provider and whether the card is issued by the provider or the regulator
- cost to issue the card—ranges from $0 where this is already included in the course cost to $30 where the card is issued by the work health and safety regulator
- costs to the business for replacement labour for workers taking time off work to undertake the course—one day's work. Based on the average weekly wage of $1212 ($34.62/hour) for a construction worker, this could cost the duty holder approximately $242 per day, and
- costs of checking that workers engaged to carry out construction work have general construction induction training, primarily by sighting their general construction induction training card. This is negligible as it is completed during employment or workplace inductions.

In terms of course costs, the cost may currently be higher for small businesses as larger businesses may be able to access package deals and streamlined training arrangements for their workers.

Compliance costs will vary across jurisdictions and may be broken up into the following components:

- course costs—for example from $67–$170 and upwards depending on the service provider
- costs of workers taking time off work to undertake the course, and
- costs of checking that workers engaged to carry out construction work have general construction induction training, primarily by sighting their general construction induction training card.

Only new entrants to the construction industry and those re-entering the industry after a two-year hiatus will be required to undertake general induction training. This means that costs associated with the training may be considered to be a 'one-off' cost. This also means that the proposed training requirements will have a proportionately greater regulatory impact on those businesses that engage a greater proportion of new entrants to the industry.

Increased costs associated with shifting general construction induction training requirements from Code of Practice to regulatory requirements are difficult to estimate because a proportion of duty holders could be expected to be already providing the general construction induction training requirements as per the Code of Practice requirements, and others would still be required to meet the relevant standards by providing the prescribed training or ensuring equivalent or better training outcomes. The NT regulator however indicates that there has been significant compliance with Code of Practice-based requirements for general construction induction training, which means that regulatory impact could reasonably be expected to be minimal in that jurisdiction.

In terms of course costs the impact of the proposed requirements on small businesses may be higher than for larger businesses, which may have access to package deals and streamlined training arrangements for their workers.

The impact on not for profit organisations is anticipated to be negligible as they do not operate extensively in the construction industry.

Regulatory impact—workers re-entering the industry after a two-year break

Jurisdictions that do not currently require re-training after workers have a two-year hiatus from the construction industry will also have increased regulatory impact with the introduction of the two-year rule. This change is expected to be offset by improved safety outcomes as workers who have been out of the industry for a prolonged period are brought up to speed with current industry work health and safety standards.

Taking into account the nature, duration and costs associated with this kind of training (noting the PCBU's duty to ensure this training is provided), the proposed requirement is not considered to be an unacceptable barrier to re-entry into the industry.

A refresher course is not proposed because of the short nature of this kind of training—currently four to eight hours, depending on the service provider and jurisdiction.

Record-keeping requirements associated with general construction induction training

The proposed laws will not prescribe record-keeping requirements in this area e.g. a record of evidence that a duty holder has sighted a construction worker's general construction induction training card. Further guidance about what is required to demonstrate compliance may be explained in a Code of Practice or guidance material.

As record-keeping requirements are currently prescribed in NSW, Victoria and the ACT, there may be a material positive regulatory impact by permitting businesses in these jurisdictions to satisfy obligations in the most cost-effective way.

Regulatory impact—regulators

The proposal means that there will be increased regulatory impact on regulators in SA, Tasmania and NT as these jurisdictions do not currently prescribe general construction induction training as a regulatory requirement. The impact however will vary depending on how each jurisdiction wishes to administer the underpinning card scheme. For example it would be possible for arrangements to be put into place for the general construction induction cards to be issued by the RTO providing the training, similar to arrangements that currently apply in Queensland and WA.

Regulatory impact is considered to be minimal for NT where the regulator advises that RTOs will continue to administer the card scheme, similar to arrangements that apply in Queensland and WA.

6.9 Hazardous Chemicals

6.9.1 Chemicals

What is the risk?

Many chemicals have hazardous properties and therefore have the potential to harm the health and safety of people, property or the environment. Chemical hazards regulated under work health and safety legislation can be separated into two broad groups: those presenting hazards to health and those presenting physical hazards.

The effects of exposure to chemicals in the workplace are wide-ranging and can vary from immediate effects such as mild skin irritation following dermal exposure or severe acute poisoning following inhalation, to long-term effects such as cancer that develops many years after the exposure incident. Risks from dangerous goods are generally immediate, including ignition of a flammable liquid or gas or explosions of highly reactive substances such as organic peroxides. These can have effects on the safety of people, property and the environment.

Chemicals are used in many situations in workplaces and in work activities. Examples include ingredients or intermediates used in the manufacture of human pharmaceuticals, cleaning agents used in office kitchens or restaurants, pesticides, paints and solvents as stock on shelves in a hardware store and agricultural chemicals being applied or used on farms or other workplaces.

What are the current jurisdictional regulations?

All jurisdictions currently regulate workplace use of hazardous substances and dangerous goods. In several jurisdictions dangerous goods are regulated through specific dangerous goods legislation rather than under work health and safety legislation. All current jurisdictional legislation is based on standards and Codes of Practice developed by NOHSC, and provides obligations on manufacturers, importers and suppliers to classify chemicals and prepare labels and material safety data sheets (MSDSs). Existing regulations also provide obligations on employers or PCBUs to manage risks, as well as other specific provisions to notify the regulator in certain circumstances (e.g. for use of scheduled carcinogens, where health surveillance is required or where dangerous goods exceed certain quantities).

Jurisdictional hazardous substances and dangerous goods regulations utilise NOHSC material as the basis for hazard classification for hazardous substances and the Australian Dangerous Goods (ADG) Code for classification of dangerous goods. Labelling and MSDS requirements also follow NOHSC publications. There is a high level of consistency between current regulatory arrangements for workplace chemicals across jurisdictions.

What is the problem?

Hazardous chemicals in the workplace can be classified as both hazardous substances and/or dangerous goods. The separate regulatory regimes in Australia are based on systems developed in the EU and by the United Nations respectively and then adopted in National Standards and Codes of Practice developed by NOHSC. Both systems have been in operation in Australia for over 25 years. The majority of hazardous substances are also dangerous goods and vice versa. As a result chemicals are subject to classification and labelling requirements of both regimes. This can result in conflicting hazard communication and information about the hazards of the chemicals, and creates uncertainty for manufacturers and users of the chemicals in terms of complying with the different systems and ensuring that chemicals are handled safely in the workplace.

The United Nations' GHS was developed to allow for a single system for classifying and communicating the hazards of all chemicals. The implementation of the GHS in the EU and other countries including New Zealand, means that Australia is faced with either maintaining a unique system of classification and labelling for workplace chemicals or modifying the existing system to take advantage of the improvements and advances of the GHS. If the former was the case, all manufacturers and importers of workplace chemicals into Australia would be required to reclassify and relabel chemicals to suit Australian requirements. A review of the workplace chemicals framework by NOHSC proposed that a single regulatory system be developed for both hazardous substances and dangerous goods.

The implementation of the classification and labelling approaches from the GHS was considered the key issue in the proposed revisions to the workplace chemicals frameworks in the *Regulatory Impact Statement: Proposed Revisions to the National OHS Framework for the Control of Workplace Hazardous Substances and Dangerous Goods* (2009 Chemicals RIS).The majority of other provisions relating to workplace chemicals were consistent with those in existing state and territory regulations for workplace chemicals, given that these are based on NOHSC regulatory instruments for hazardous substances and dangerous goods. The 2009 Chemicals RIS identified a number of problems with the existing chemicals regulatory systems. These are summarised below:

- the two sets of regulations for hazardous substances and dangerous goods are often inconsistent, resulting in unnecessary complexity and the potential for duplication of effort for industry in complying
- there are increased costs involved in trading with countries using the GHS for classification and labelling of chemicals
- there are increasing costs to Australia in maintaining its own unique classification system once the EU had fully adopted the GHS
- GHS trade benefits will be foregone if Australia does not implement the GHS

- not adopting the GHS into the workplace chemicals framework will prevent further progress towards removing regulatory barriers to trade between Australia and NZ for workplace chemicals including the Trans-Tasman Mutual Recognition Arrangements, and
- agricultural and veterinary (agvet) chemicals labelling sometimes does not include hazard information for critical hazards like carcinogenicity.

What was proposed?

The Consultation RIS and discussion paper

The model WHS Regulations were drafted to implement the previous policy agreement to merge requirements for hazardous substances and dangerous goods into a single regulatory instrument, and adopt the GHS as the basis for chemical hazard classification, labelling and safety data sheets. This decision was supported by the *Regulatory Impact Statement: Proposed Revisions to the National OHS Framework for the Control of Workplace Hazardous Substances and Dangerous Goods*.

The policy approach for the majority of provisions in the model WHS Regulations is consistent with previous policy agreements made under the NOHSC framework. The draft model WHS Regulations for hazardous chemicals include requirements for:

- importers and manufacturers—relating to classification, safety data sheets, the disclosure of ingredients, and packing and labelling of hazardous chemicals
- suppliers—relating to safety data sheets, packing and labelling of hazardous chemicals and restrictions on supply of certain hazardous chemicals that are carcinogenic
- owners, builders and operators of certain pipelines
- identifying hazards and controlling risk associated with hazardous chemicals, including requirements for the storage and handling systems for hazardous chemicals, labelling containers and pipework, safety data sheets, warning placards, registers and manifests of hazardous chemicals
- control measures for hazards associated with ‘hazardous atmospheres’ and the accumulation of flammable and combustible material
- health monitoring in certain circumstances
- prohibitions or restrictions on the use of certain hazardous chemicals, for example certain carcinogens, and
- information, training and supervision.

For both dangerous goods notification and scheduled carcinogen authorisations, the policy intent in the model WHS Regulations closely aligns with policy agreed in previous NOHSC instruments for scheduled carcinogens and workplace dangerous goods.

The proposed chemicals regulations reflect the policy decision made by Safe Work Australia in July 2009 on the National Standard for the Control of Workplace Hazardous Chemicals. The policy decision was to use this standard as the basis for the chemicals part of the model WHS Regulations. Jurisdictions agreed to adopt this as part of the harmonisation process rather than as a separate reform.

Transitional arrangements are proposed to minimise costs and allow businesses to move to the new classification and hazard communication requirements.

The scope of the hazardous chemicals framework was developed in consultation with the Safe Work Australia tripartite membership over several years. This commenced well before the development of model WHS Regulations. Key considerations in determining the scope of adoption of the GHS were:

- alignment with the scope of existing hazardous substances and dangerous goods storage and handling regulations
- maintenance of equivalent standards of health and safety for workers between the existing and new regulations, and
- minimising costs to business.

The 2009 Chemicals RIS was agreed by the Office of Best Practice Regulation in early 2010 and was developed on this basis.

The draft Code of Practice *Labelling of Workplace Hazardous Chemicals* provides guidance on labelling chemicals supplied to or used in the workplace that are classified as hazardous under the model WHS Regulations in accordance with the United Nations' GHS.

The draft Code of Practice *Preparation of Safety Data Sheets for Hazardous Chemicals* provides guidance for manufacturers and importers of hazardous chemicals on how to prepare a safety data sheet (SDS) and the type of information that should be provided under each section of an SDS.

Public comment, final proposal and rationale

Comments included concerns about:

- differences in Australia adopting the GHS compared to international approaches, particularly the EU
- the confusion and burden with the requirement to classify to both the GHS and ADG Code classification criteria for the dangerous goods related hazards, as well as confusion over use of terms for hazardous chemical and dangerous goods
- inappropriate coverage of class 9 dangerous goods in the chemicals regulations
- the need to align coverage of combustible liquids more closely to GHS, instead of the Australian-specific coverage of C1 combustible liquids
- the perceived increased burden regarding requirements for SDSs (rather than MSDSs) and labelling of individual sample bottles
- changed labelling requirements for agvet chemicals and recognition of Australian Pesticides and Veterinary Medicines Authority (APVMA) risk assessment for workplace agvet chemical labels
- incompatibility between the GHS and parts of the WA dangerous goods regulations, and also its transport regulations
- the shift from the current Dangerous Goods Act in the NT being a hurdle, but one which will result in less administrative burden for firms and regulators in the long run

- jurisdictional differences between notification for dangerous goods at placard versus manifest threshold levels
- how to fit all GHS information on small containers
- recognition of consumer product and therapeutic goods labelling as meeting workplace requirements
- recognition of therapeutic goods labelling as meeting workplace requirements. Labelling of clinical-use products was raised as a particular issue by industry
- the lack of clear and agreed transition arrangements and the need for these to be consistent across jurisdictions
- the timing of the adoption of some provisions, the impact that restrictions on use of some chemicals for spray painting may have on industry, and the lack of quantitative data on the extent of use of proposed restricted chemicals in spray painting *[The Consultation RIS did seek details of industry use of these chemicals in spray painting but a nil response was received]*
- in relation to the notification of dangerous goods, the lack of consideration given to justifying on a cost-benefit basis the need to retain existing notification requirements, and
- the need to re-notify the regulator every 12 months of changes to manifest threshold quantities of dangerous goods.

Classifying to both GHS and ADG criteria

In response to concern over the requirement to classify to both the GHS and ADG Code classification criteria Safe Work Australia agreed to amend the regulations to remove the requirement to classify to the ADG Code. This addressed other identified issues including the confusing relationship between hazardous chemicals and the ADG Code, removal of coverage of class 9 dangerous goods from the scope of the chemicals regulations and simplification of the exemptions from that part of the regulations.

GHS hazard categories

Safe Work Australia also agreed to change the regulations so that instead of referring to dangerous goods classes and categories, the equivalent hazard classes and categories under the GHS were included. This will have no real impact on the regulation requirements since there is a direct correlation between hazard classes and categories under the GHS and ADG Code in almost all cases. It is intended to correct confusion around the differing terminology currently used (hazardous chemicals versus dangerous goods).

There are some significant benefits in reduction of red tape including in Queensland where the model WHS Regulations will result in the Australian Dangerous Goods Code no longer being referenced as the basis for chemical classification for storage and handling of dangerous goods, the abolition of the flammable and combustible liquids licensing regime and the repeal of the Queensland *Dangerous Goods Safety Management Act 2001.*

Adoption of the GHS

In response to comments that the proposal under the model WHS Regulations is significantly different to that adopted in European regulations, analysis of the EU legislation and the proposed model WHS Regulations shows this is not the case. Of a total of 92 categories in the GHS (excluding environmental hazards which are outside the scope of the model WHS Act), the model WHS Regulations adopt 85 categories whereas the EU is adopting 87 categories.

Three categories are adopted by the EU but not under the draft model WHS Regulations (flammable gas category 2, aspiration hazard category 2 and eye irritation category 2B). One category is adopted under model WHS Regulations but not by the EU (flammable liquids category 4). Two categories are not covered by either the EU or the model WHS Regulations (acute toxicity category 5 and skin irritation category 3).

Classification of C1 Combustible Liquids

It was agreed to amend coverage of combustible liquids by the hazardous chemicals regulations by adopting GHS flammable liquid Category 4 instead of the Australian specific classification for C1 combustible liquids. The model WHS Regulations have been changed to reflect this. Liquids captured under Category 4 Flammable Liquids, having flashpoints <93 °C include all C1 liquids, including diesel that pose the greatest fire risk in workplaces. This change also resolves the issue that imported materials that meet the Australian-only criteria for C1 combustible liquids may not be labelled or have safety data sheets.

Age restrictions

Although limited public comment was received on this issue, it was identified that the draft WHS Regulations could unintentionally impose severe restrictions on who could supply hazardous chemicals. As originally drafted the regulations would prohibit workers under the age of 16 in retail stores and supermarkets selling common household products that are dangerous goods like aerosols, methylated spirits, drain and oven cleaners, and some household pesticides. The model WHS Regulations were amended to clarify that the age restriction on supply of hazardous chemicals that are dangerous goods only applies to the *dispensing* of hazardous chemicals that are flammable liquids (under GHS) or flammable gases into containers provided by the purchaser.

Labelling of consumer products

In response to concerns raised over recognition of consumer product labelling and the overlap with other regulatory systems Safe Work Australia agreed that chemicals that are scheduled poisons under health laws should be exempted from workplace labelling requirements where they are demonstrably consumer/household only products (used incidentally in workplaces), and where they are “dual use” products—those that are marketed for both workplace and consumer markets in identical packaging and labelling—provided they were labelled in accordance with the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). It was also agreed to amend the exemptions and exclusions to clarify the intended coverage of food and beverages so that food and beverage products in a package and form intended for consumption are exempted from coverage.

The final proposed regulation on this issue was developed after significant consultation with relevant Commonwealth government departments and industry.

Labelling of therapeutic goods intended for human consumption

In response to concerns raised over the extent to which workplace labelling laws would apply to therapeutic goods registered under therapeutic goods laws, Safe Work Australia agreed that the model WHS Regulations would be amended to reflect the intended coverage as follows:

- for therapeutic goods as defined under the *Therapeutic Goods Act 1989* (Cth) that are in a package and form intended for human consumption or administration to a consumer, SUSMP and Therapeutic Goods Administration (TGA) labelling requirements are deemed acceptable
- therapeutic goods that are not in a form intended for patient use, including bulk ingredients used by compounding pharmacists in preparing end-use products, must meet workplace labelling requirements. A key aspect of exempting this particular type of product was that in workplace situations most workers handling the chemicals would be doctors and nurses who are qualified in their use and have received specific training, and
- for bulk chemicals used in compounding, only workers would be handling the chemicals and normal workplace exposures could occur, thus triggering the need for workplace labelling.

Industry has also sought an exemption from workplace labelling requirements for a small group of therapeutic goods known as clinical use products. Clinical use products are disinfectants and cleaning/sterilising agents that are registered by TGA for use in a clinical environment on the basis that they have been shown to meet certain performance claims in relation to their performance in sterilisation. Registration of the products essentially allows the manufacturer to make the claims about the performance of the product when used in a clinical environment. If the product is then also a Scheduled Poison, it would be subject to labelling under the Scheduled Poisons regime. This is separate to the registration process. The assessment does not consider worker health and safety.

Industry has requested exemption on the basis that they are currently exempted from compliance with workplace labelling and that they are assessed and registered by the TGA. There is no TGA legislation that restricts their use to any particular group of trained people or regulates their safe use in any other way. The products could be used by hospital orderlies and scrub nurses. From a safety perspective, they appear to fall in the same category as any other workplace chemicals that are also Scheduled Poisons. Under current arrangements these would require workplace chemical labelling. This is contrary to industry interpretation of the legislation.

The NOHSC labelling Code of Practice for hazardous substances (1994) states that therapeutic goods as defined by the *Therapeutic Goods Act 1989* (Cth), when packed and sold as end-use products, should be regarded as appropriately labelled. The labelling Code of Practice also states that substances that are covered by the SUSDP (SUSMP) but which are packed and sold solely for dispensary, industrial, laboratory or manufacturing purposes should only be labelled in accordance with the NOHSC Code of Practice. Similar text is included in the SUSMP to define whether that labelling

system or workplace labelling applies. Since clinical use products are known to be only used in workplaces by workers, only workplace labelling currently applies.

The final proposed regulation on this issue was developed after significant consultation with relevant Commonwealth government departments and industry. It is worthwhile noting that the application of workplace labelling requirements will not influence any other aspect of labelling of therapeutic goods, such as efficacy, that are covered under TGA laws.

The overall outcome of considerations about this issue is that the work, health and safety labelling requirements will continue to apply to those workplace hazardous chemicals used in clinical settings where those chemicals are not in a form intended for patient use i.e. the status quo would be maintained. These chemicals would continue to be assessed for efficacy under TGA processes that assess sterility performance. This outcome ensures that all workers, including those in clinical settings, are afforded the same level of information about the hazard of the workplace chemicals as other workers. An exemption would mean that workers in this setting would not receive the same level of hazard information on labels as other workers in the economy.

Labelling generally

Some submissions identified that it is difficult to fit all hazard and precautionary information on labels, particularly small labels. The chemicals regulations as originally drafted required every hazard and precautionary statement to appear on labels. The regulations were also amended so that the labelling principles in the GHS can be more effectively applied, for example by using the order of precedence for precautionary statements to reduce the amount of information on labels where appropriate, having regard to the level of hazard. Guidance on labelling is provided in the labelling Code of Practice.

MSDS vs SDS terminology

Requirements in the model WHS Regulations that prescribe when to prepare a SDS and who should prepare one have not changed from existing requirements, which are based on nationally agreed NOHSC material and on the requirements of the GHS. Compliance with existing laws will ensure compliance under the model WHS Regulations.

Use of the term safety data sheets aligns with the internationally developed and accepted term and was also considered as part of the 2009 Chemicals RIS. This simple change in terminology should not result in any additional costs to manufacturers, importers or other duty holders under the regulations, particularly noting a five-year transition time for updating classifications and SDS will apply. It is already a requirement to update SDSs at least every five years so changes can be incorporated in the scheduled revision of these documents.

Transitional arrangements

The suite of transitional arrangements for the model WHS Regulations have yet to be finalised and will vary across jurisdictions depending on what is currently regulated and how. However Safe Work Australia has previously agreed to a five-year transition arrangement whereby chemicals classified and labelled to both the new GHS requirements and existing requirements (the current Approved Criteria) will be

acceptable for five years. At the end of the five-year period only GHS classifications will be acceptable. This transition period was considered as part of the 2009 Chemicals RIS and aligns with the-five year period for review of safety data sheets.

Agricultural and veterinary (agvet) chemicals labelling

The draft model WHS Regulations require workplace agvet chemicals to be labelled with information for all intrinsic hazards to bring into alignment requirements for labelling of agvet chemicals with all other workplace chemicals. The agvet labelling provisions incorporate a compromise position by excluding the requirement for pictograms and signal words. Under existing requirements, labels approved by the APVMA reflect the outcomes of a risk assessment and in some cases may omit information on some intrinsic hazards, like warnings of cancer risk. These risk-based labels are recognised as meeting existing workplace labelling requirements.

There has been significant consultation aimed at resolving the policy differences between interested government agencies from the workplace, agriculture and public health portfolios, worker representatives and industry stakeholders over several years. Despite significant efforts to reach agreement there remains disagreement on the approach to labelling of agvet chemicals. Work health and safety regulators and worker representatives strongly support the approach in the model WHS Regulations, while industry and government portfolios for health and agriculture are opposed to the changes. No change to the policy agreed in the National Standard for the Control of Workplace Hazardous Chemicals (2009) (Hazardous Chemicals National Standard) has been made in the model WHS Regulations on this issue.

Notification of dangerous goods

Notification requirements for hazardous chemicals exceeding threshold quantities already apply in most jurisdictions and so consideration was not given to complete removal of the notification requirement as part of the harmonisation process. Re-notification is also required periodically although the frequency is variable. The regulations were amended to address stakeholder concerns so that re-notification is not automatically required every 12 months, but rather in circumstances where there is a significant change in the level of risk from storage, handling or use of the hazardous chemicals requiring notification. This change is expected to reduce the regulatory burden on both regulators and industry and so addresses the concerns raised.

Health monitoring

The model WHS Regulations provisions for health monitoring for hazardous chemicals reflect the existing requirements for health monitoring in all jurisdictions that are based on the NOHSC hazardous substances requirements and the Hazardous Chemicals National Standard. No significant change in costs will be incurred as a result of requirements under the model WHS Regulations.

Prohibitions for chemicals in spray painting

The Consultation RIS sought information on the extent of use of those chemicals proposed for restriction in spray painting use. No information was provided by industry so the restrictions have been retained. The lack of comment is seen as confirmation that their use in spray painting is very limited and any impact on industry and regulators will be negligible.

Overview of impacts

A RIS was conducted on the proposed changes to workplace hazardous chemicals regulations. The chemicals regulations were based on implementing the GHS and indicated a net cost at least over the next decade. Since then Safe Work Australia has revised the general, labelling and SDS regulations. As a result all hazardous chemicals regulations now show a small net benefit over the 10-year timeframe of this analysis. Firm costs are based on the survey, public consultations and submissions. Benefits are solely based on the survey.

The 2009 Chemicals RIS, which was confirmed to have met COAG requirements in 2010, considered the following options in the economic assessment and compared the net benefits of Options 2 and 3 with Option 1, and Options 2A and 3A with Option 1A, with emphasis on Option 3, where:

- **Option 1: Maintain the status quo.** The existing regulations for workplace chemicals would be maintained in their current form with no changes.
- **Option 2: Consolidation without GHS.** Review the existing workplace chemicals framework to produce a consolidated standard and supporting Codes of Practice for workplace hazardous substances and workplace dangerous goods without implementation of the GHS.
- **Option 3: Consolidation with GHS.** Review the existing workplace chemicals frameworks for dangerous goods and hazardous substances to produce a consolidated standard and Codes of Practice for workplace hazardous chemicals that implements the classification, SDS and labelling principles of the GHS.
- **Options 1A, 2A and 3A: Revised label requirements for agvet chemicals.** Labels on agvet chemicals would be required to include hazard information for all hazards and this information would be incorporated into the APVMA approved label as part of the normal registration process.

For the purposes of the impact analysis the RIS considered GHS implementation commencing in 2012, with full implementation by the end of 2016. A CBA was used to assess the net benefits of those items where there was data to support quantitative estimates of costs and benefits. This applied to the one-off costs of training, the costs of reclassifying, relabelling and revising SDS for implementation of the GHS, and the ongoing benefits or cost savings to the industry from international trade as a result of implementation of the GHS.

The CBA also allowed for risk assessment cost savings arising from consolidation of regulations for dangerous goods and hazardous chemicals but used less precise data. There was no data suitable for estimating the health and safety benefits of the GHS and consolidation. Potential savings were calculated on the basis of credible estimates and were included in the analysis for the purposes of illustration.

The results of the net benefit analysis of Options 2 and 3 relative to Option 1, and Options 2A and 3A relative to Option 1A, for the period 2012 to 2036 in the 2009 Chemicals RIS are summarised in the following table. These results were based on best estimates of the underlying parameters, together with illustrative estimates of benefits for health and safety.

**Net benefit analysis for Options 2/2A and 3/3A relative to Option 1/1A, 2012 to 2036,
$ million measured in 2009 dollars**

Cost Item	Option 2 consolidation	Option 3 GHS	Options 2A & 3A Agvet labels
CBA			
One-off costs (training etc.)	-29	-57	-0.7
CLS for continuing products		-97	-4.2
CLS for imports		156	
CLS for exports		17	
Risk assessment (consolidation)	34	34	
Total CBA	**5**	**53**	**-4.9**
Estimated health and safety impacts (illustrative)			
Consolidation	28	28	
GHS		21	
Dual regulations during phase-in		-12	
Revised agvet labels			5.4
Net benefit	**33**	**90**	**0.5**

Source: Access Economics (2010 p 83).

The total CBA results indicate a net present value (NPV) out to 2036 of $5 million for Option 2 and $53 million for Option 3; Option 3 was therefore the preferred option on the basis of its greater NPV, followed by Option 2 and then Option 1. Incorporation of potential health and safety benefits into the calculations increased all the NPVs and reinforces the finding that the NPV of Option 3 exceeds those of both Options 1 and 2.

The benefits for Option 3 are driven mainly by reductions in the costs of re-classification, labelling and safety data sheets for imports. The RIS noted that the results of the CBA and the net benefit analysis would still apply, with little change, if the commencement date and implementation period changed by a year or two.

The RIS noted that most agvet chemicals are workplace chemicals and are included in the analysis of Options 2 and 3 compared with Option 1. The separate issue of revised regulations for the labelling of agvet chemicals is addressed in Options 2A and 3A compared with Option 1A. The CBA generates an NPV of -$4.9 million, although this was considered to be an overestimate. While also noting that the reductions in health and safety costs are difficult to estimate, it was noted that for Option 3A, a saving of $0.5 million a year in health costs would be sufficient to achieve a net benefit and it was expected that improved hazard warnings would almost certainly generate such a result.

On the basis of the net benefit analysis the RIS recommended Option 3 as the preferred option. The RIS noted Option 2 was also preferred over Option 1. The CBA conclusions noted that the net benefit analysis does not provide unambiguous support for implementation of the GHS by Australia when sensitivity analysis, based on uncertainties in the data, is taken into account. Nearly all stakeholders support implementation of the GHS and consolidation of the regulations for dangerous goods and hazardous substances, provided that its content is aligned with Australia's major trading partners in chemicals and it is implemented no earlier than Australia's major trading partners. It also noted that many industry concerns over consistency of implementation in the jurisdictions would be addressed through consistent implementation of the model WHS Regulations in 2012.

In relation to labelling of agvet chemicals the RIS noted that work health and safety regulators, many individual chemical companies and unions support the inclusion of comprehensive hazard warnings on labels for agvet chemicals and recommended that the current exemption from work health and safety labelling for agvet chemicals be discontinued.

The impact on not for profit organisations is consistent with the impact on other businesses engaged in work requiring hazardous workplace chemicals. If these organisations are carrying out work with hazardous workplace chemicals, for example in clinical settings, they are already required to meet the requirements for handling and storage of hazardous chemicals in the workplace. The organisations will be required to comply with work health and safety regulations for hazardous workplace chemicals in the same way as other businesses.

Manufacturers and importers of workplace chemicals will be required to classify and label hazardous chemicals and communicate the hazards for employees and workers. Small businesses that use those chemicals in the workplace must be provided with the hazard information for the chemicals. If small businesses reformulate chemicals they will be required to classify and label in accordance with the work health and safety requirements using the information provided in the GHS. The 2009 Chemicals RIS identified that small and medium sized enterprises (SMEs), which are estimated to account for about 45 per cent of chemicals production, were expected to have higher unit costs for training and CLS. This generates higher training costs, higher CLS costs for pre-2012 products that continue to be used after 2016, and lower CLS costs for imports and exports from GHS countries. If training and CLS costs were 10 per cent higher for SMEs than for large businesses, then the benefit of the reductions in costs for imports ($7.0 million) and exports ($0.8 million) would exceed the increases in costs for training ($2.5 million) and CLS ($4.4 million) in 2016, so that the NPV to 2036 would be just $0.9 million greater than if all businesses were large. Given some uncertainty about the sizes of the cost increases for SMEs, but recognising that their effect on the overall results is very small, they were not allowed for explicitly in the CBA.

The RIS also formed the view that overall there were likely to be small improvements for SMEs because of less confusion about the regulations. Work health and safety regulators in jurisdictions also believe that there would be better understanding of the chemical hazards, especially chronic hazards such as carcinogenicity, reproductive toxicity and specific target organ hazards, and hence slightly improved health and safety over the longer term.

Despite the availability of previously agreed national material, some jurisdictions have not implemented all of the previous policy decisions in NOHSC hazardous substances

and dangerous goods instruments. Some jurisdictions will need to make changes to their regulatory approach for workplace chemicals to align with the proposed model WHS Regulations. Some key changes include introduction of notification and authorisation processes for use of scheduled carcinogens which may increase the regulatory burden on businesses. For some jurisdictions the system of notification for certain hazardous chemicals that are dangerous goods above specified quantities, rather than licensing or registration, will also be a change.

Some jurisdictions will have to impose restrictions on use of chemicals for spray painting. This change was included as part of the latter harmonisation process and not previous nationally agreed approaches.

New South Wales and WA have advised that adoption of the GHS involves changes in areas including modification of labelling requirements and extension of some requirements to pesticides, while workplace labelling of drugs and poisons is a new requirement as these were previously exempt in NSW.

Queensland has advised that its regulations already provide for GHS labelling and SDS as proposed in the model WHS Regulations. Several other jurisdictions have done the same. Queensland has indicated that the model WHS Regulations on emergency plans has a new requirement that the duty holder gives a copy of an emergency plan to the primary emergency services authority and adopts any recommendations provided by the primary emergency services authority. Emergency plans are not needed for all chemicals, just when certain workplace hazardous chemicals reach a threshold level and this is unchanged from the existing arrangements. Businesses in Queensland are already required to have an emergency plan, so the increase in requirements is limited to them sending that plan to the emergency services authority.

Although there are practical changes across the jurisdictions the model WHS Regulations for chemicals reflect policy agreed in 2009 after consideration of the 2009 Chemicals RIS. This RIS was very closely aligned with policy agreed in existing NOHSC instruments for hazardous substances, scheduled carcinogens and dangerous goods. The National Policy has been adapted as part of the national harmonisation process and jurisdictions have been waiting for the progression of the harmonisation process in order to implement it. The 2009 Chemicals RIS demonstrated a net benefit for the proposal.

Topic specific impacts

Some aspects of the proposed regulations that introduce other changes for jurisdictions are described below.

Restrictions on use of certain carcinogenic substances

The chemicals regulations restrict use of certain listed carcinogenic substances. The carcinogenic chemicals restricted for use are based on the NOHSC *National Model Regulations for the Control of Workplace Hazardous Substances – Part 2 – Scheduled Carcinogenic Substances*. Although the NOHSC instrument was declared in 1995 the ACT, Queensland, SA and Tasmania have not given effect to this instrument. Victoria has imposed a licensing system for use of scheduled carcinogens. As a consequence the ACT, Queensland, SA and Tasmania will need to introduce a notification and authorisation process for use of scheduled carcinogens. This may increase the regulatory burden on businesses. This process involves writing to the regulator and

providing information on the address, names of chemicals used, number of employees and the risk management measures that will be put in place to prevent exposure. Records will need to be kept and retained for 30 years after the authorisation ends. Against this it needs to be recognised that many, especially small, businesses will have a lifespan shorter than 30 years so there may be practical difficulties in accessing records kept in those cases. The PCBU will also be required to provide in writing to a worker at the end of the engagement a statement detailing the carcinogenic chemicals used, the times the worker may have been exposed and whether future health assessments should be undertaken.

In NSW a single notification is currently required for each address, not for each employer at that address, and a template Carcinogenic Substances Form is provided so that notifications can be done by mail, fax or email. Although this increased regulatory burden has not been quantified, Victoria indicated in their RIS in 2007 that they received a total of eight notifications during 2004–05. This figure, if indicative of similar notification activity in other jurisdictions, suggests that the impact nationally will be limited.

The benefit of notification is that the regulator can refuse to permit uses and practices that are known to be harmful. The number of instances of this cannot be predicted, but the community cost of health related injury and disease that could result from exposure to known high risk carcinogens is high, so avoiding a single cancer case can have a large benefit.

Victoria will need to remove its licensing system which will reduce the regulatory burden on the regulator and businesses.

Restrictions on use of certain substances for specific uses

The regulations restrict the use of certain substances for specific uses that were not part of existing NOHSC instruments. Specifically these relate to abrasive blasting (see discussion below) and spray painting. Only three jurisdictions (NSW, Tasmania and NT) impose restrictions on the use of chemicals for spray painting and as a consequence the restriction will impose an increased regulatory burden on businesses in Victoria, Queensland, WA, SA, the ACT and the Commonwealth. Nevertheless, the chemicals proposed for restriction in spray painting are not considered to be extensively used in Australia and the restrictions are not considered to impose a significant impact on business. Information on the extent of use of these chemicals in spray painting in Australia was sought in the Consultation RIS.

The model WHS Regulations restrict the use of polychlorinated biphenyls (PCBs). PCBs are already restricted for use in workplaces in the Commonwealth, WA and NT under work health and safety laws and the proposed chemicals regulations reflect the restrictions in those jurisdictions.

PCBs are persistent organic pollutants and are listed in Annex A of the Stockholm Convention on Persistent Organic Pollutants. The Australian government is a signatory to the Stockholm Convention and is therefore committed to eliminating the production and use of PCBs. Australia has banned the production of PCBs and is phasing out the use of PCBs consistent with Australia's National Implementation Plan and PCB Management Plan. Restriction of the use of PCBs in the model WHS Regulations will therefore present no regulatory impact.

Removal of dangerous goods licensing in some jurisdictions

Consistent with the previously agreed national policy approach in the Dangerous Goods National Standard the draft regulations do not include any licensing requirements for dangerous goods. Instead, where threshold quantities of dangerous goods are exceeded, the model WHS Regulations require notification to the authority.

Currently some jurisdictions utilise a licensing or registration system for storage and handling of dangerous goods (i.e. licensing in WA, NT, SA and Queensland and registration in ACT). These licensing and registration systems are not applied consistently across these jurisdictions. Some licensing systems capture all dangerous goods and others capture only a limited number of dangerous goods classes.

In those jurisdictions that have licensing or registration this will mean a considerable regulatory change. The costs and benefits of this change have not been quantified, however the experience in NSW and Victoria of moving from a licensing to a notification regime suggests that such a change would not have an adverse effect on work health and safety but it may place greater responsibility on the PCBU. It is also expected that the transition to notification will free up resources for the regulator and reduce the compliance burden on businesses.

Though the terminology differs from jurisdiction to jurisdiction, it is considered that if notification is at one end of the spectrum (requiring the provision of a list of chemicals and their quantities) and licensing is at the other end of the spectrum (involving third party accreditation, licence fees and inspections) then the compliance costs are much lower for notification than for a licensing regime. In Victoria it was estimated that there were up to 100 000 facilities that could possibly have been affected by the dangerous goods regulations in 2001, but that 30 000 of those used dangerous goods in very small quantities. NOHSC (2001) estimated that there were 100 000 facilities that would be covered by the Dangerous Goods National Standard. Based on jurisdictional estimates, there could be tens of thousands of facilities nationally that would exceed the threshold limits for dangerous goods. The proposed model WHS Regulations mean that those facilities will be subject to notification requirements and not to a licensing regime, thus reducing costs on industry and on the regulator without compromising health and safety.

Thresholds of hazardous chemicals (that are dangerous goods) triggering placarding, manifests and notification

The regulations incorporate a revised table of placarding and manifest threshold levels for hazardous chemicals that are dangerous goods (Schedule 11), based on the agreed approach from the 2009 Hazardous Chemicals Standard. This change was developed to simplify the existing requirements which were seen as being complicated, difficult to interpret and therefore difficult to comply with. The Schedule 11 table has also been amended to reflect GHS hazard classes and categories, rather than the equivalent dangerous goods categories, in order to reflect a separate decision described further below. The quantities requiring placarding and manifests have not changed from the public comment version of the regulations. The revised table does not substantially change threshold levels from agreed levels in the NOHSC Dangerous Goods National Standard. However, there are some changes and this will mean that businesses will need to reassess whether placards, manifests or notifications are required at their workplace. Costs associated with this reassessment have not been quantified. They are expected to be negligible on the basis that reassessment and re-

notification of storage quantities is already required every one or two years in most jurisdictions.

In the nationally agreed approach to notification for dangerous goods, the notification threshold is set at the manifest threshold level. Two jurisdictions (ACT and Tasmania) require notification at the lower placarding threshold level. By aligning the notification requirement at the higher manifest threshold, fewer businesses would be required to notify the authority, resulting in a reduced regulatory burden in those jurisdictions.

Queensland has identified that the abolition of the flammable and combustible liquids licensing regime and the repeal of the Queensland *Dangerous Goods Safety Management Act 2001* will reduce red tape for business and regulators. At present, there are some 4000 such licences across Queensland. These all require inspections by local governments. Notification for facilities with large quantities of dangerous goods will still remain as the risks and consequences associated with the large facilities warrant ongoing regulation. It is estimated that this would apply to approximately 2500 larger facilities. The benefits of red tape reduction for more than 1000 facilities would be realised immediately in small businesses and on regulators.

Since the thresholds for dangerous goods requiring placards, manifests and notification to the regulator are based closely on existing thresholds, no significant impact is expected in most jurisdictions.

Classifying to both GHS and ADG criteria

The removal of the requirement to classify to both the GHS and ADG Code classification criteria is expected to reduce the administrative burden on business. This is mainly as a result of being able to work within a single set of regulations and not across different regulatory frameworks. Guidance is being developed to assist in this process which will further reduce costs for industry. Classification of hazards is an intrinsic part of the overall hazard communication process, as the classification determines the information for labels and SDSs as well as the controls that are necessary for workplace chemicals. The 2009 Chemicals RIS indicated that industry supported the view that consolidation of regulations for dangerous goods and hazardous substances would lead to less confusion and hence improved health and safety, although the effect would be small.

The removal of class 9 dangerous goods from the scope will simplify the regulations. It will have little impact as many of those goods were already exempted from coverage by this part of the regulations. Most references to dangerous goods have also been removed from the regulations and this is also expected to reduce confusion for duty holders.

GHS hazard categories

The change in reference from dangerous goods classes and categories to the equivalent GHS hazard classes and categories is not expected to have any impact as there will be equivalent coverage as under existing systems. It is anticipated that there will be less confusion in understanding the scope of the regulations.

Queensland has identified that there are some significant benefits in reduction of red tape including where the model WHS Regulations will result in the Australian Dangerous Goods Code no longer being referenced as the basis for chemical

classification for storage and handling of dangerous goods. The consolidation of requirements for the classification of hazardous workplace chemicals into a single set of regulations is expected to reduce confusion for businesses.

Adoption of the GHS

The proposed scope of adoption of GHS under the model WHS Regulations is very similar to that in Australia's major trading partners, including the EU. Despite any differences between major trading partners, there will be greater alignment overall than currently exists, thereby reducing costs for industry. The costs and benefits to GHS adoption were considered as part of the 2009 Chemicals RIS.

Classification of C1 combustible liquids

The reduced coverage of combustible liquids from C1 to GHS category 4 is expected to reduce regulatory burden on businesses through reduced compliance requirements with various requirements such as placarding and manifests, while not diminishing safety, as the highest risk combustible liquids are still captured. This change was not considered as part of the 2009 Chemicals RIS. C1 combustible liquids are the lowest hazard of this group of substances. The current requirement is for substances with flash points up to 150 ^{o}C to be covered by work health and safety requirements. The new regulations will exclude chemicals with flash points between 93–150 ^{o}C, which will significantly reduce the number of chemicals covered by these requirements. A search of a commercially available MSDS database was undertaken to estimate the number of chemicals that would be excluded from hazardous chemicals provisions through adoption of GHS category 4 flammable liquids and removal of C1 combustible liquids. Of the approximately 2700 chemicals with a flash point entry, around half of these did not specify sufficient data to make an assessment about whether it would be included or excluded as a result of the proposed change. A quarter of the substances would remain captured by the regulations and a quarter would be excluded from the regulations. For those substances excluded from the regulations, manufacturers will not have to label chemicals or prepare an SDS under the model WHS Regulations.

Age restrictions

Four jurisdictions impose age restrictions on activities relating to the storage and handling of dangerous goods. These restrictions apply to one or more of the following activities:

- the sale, storage and handling of dangerous goods
- supervising a person involved in the storage and handling of dangerous goods
- 'self-service' fuel dispensing
- supervising and controlling the operation of 'self-service' fuel dispensing units, or
- dispensing LP gas.

The age limits applying to these activities varies across those four jurisdictions. In NSW a person must be 18 years old to control and supervise the operation of a 'self-service' fuel dispensing unit. A person who sells fuel must take all practicable steps to ensure a self-service fuel dispensing unit is not operated by a person less than 16 years of age. In WA a person must be 15 years old to store or handle dangerous goods unless they are being supervised by an operator or employee who is 18 years or older. In SA a

person must be 18 years old to dispense LP gas. In the NT persons selling or handling certain dangerous goods must be 16 years old and a person must be 18 years or older to control and supervise a self-service fuel dispensing unit.

Despite the variable regulations on this matter in jurisdictions the regulation is not expected to have a significant impact. Dispensing flammable and combustible liquids and gases is extremely hazardous if undertaken by inexperienced people due to the high risk of a fire or explosion occurring. For those jurisdictions that currently do not have a minimum age for dispensing dangerous goods, or have an age set below 16 years old, it is not clear how many businesses currently use workers below the age of 16 for that work. It is expected that the number will be very small. In those circumstances the business will need to make other arrangements to ensure that the minimum age is observed. For example in service stations in the NT that are staffed with a single worker, if that worker is below 16 then it will not be possible to dispense LPG without an older worker being on site. On the benefits side those jurisdictions that currently have a minimum age of 18 for those functions will now be able to use younger workers for that function with possible cost savings.

Labelling of consumer products

The proposed approach to recognition of consumer product labelling is not expected to result in significant impact on businesses as the regulation largely reflects what is occurring under current regulations. The regulations and supporting guidance on labelling are expected to provide greater certainty for businesses manufacturing these products.

Labelling of therapeutic goods intended for human consumption

The proposed approach to labelling therapeutic goods is not expected to result in a significant impact on businesses as the regulation largely reflects what is occurring under current regulations. Therapeutic goods in an end-use form intended for consumption are regarded as meeting workplace labelling requirements where they meet TGA requirements. Other therapeutic goods intended for clinical uses are demonstrably workplace chemicals already and should already contain information aimed at protecting worker safety.

These labelling changes, though not considered separately in the 2009 Chemicals RIS, were considered with respect to costs and benefits of reclassification and labelling and SDS requirements, along with all other workplace chemicals. Average GHS classification and labelling costs were estimated to be $500 per hazardous chemical, plus printing. The variable costs of printing labels and SDSs are not included because it is assumed that the transition period of five years is a sufficient time for stocks to be exhausted. The fixed costs of printing labels are essentially zero for labels printed in-house but there is a printing plate cost of $200–$300 per label for external printing.

There is no proposed change to existing requirements beyond the reclassification to GHS requirements and then subsequent labelling changes.

Labelling generally

The costs of labelling were considered as part of the 2009 Chemicals RIS and are not reconsidered in this RIS. Refinements to labelling requirements in the model WHS Regulations following public comment, including to allow some precautionary

statements to be omitted from labels and reference to hierarchy and precedence principles in the GHS, should assist industry to comply with the new labelling requirements.

MSDS vs SDS terminology

No significant impact is expected from changes to terminology from MSDS to SDS or in provisions relating to when an SDS is required, since these arrangements very closely reflect current requirements. The change in terminology from MSDS to SDS should not result in any additional costs to manufacturers, importers or other duty holders under the regulations, particularly as there is a five-year transition time for updating classifications and SDS will apply. SDS are required to be reviewed every five years and industry has indicated that five years is suitable for the transition period.

Transitional arrangements

Transitional arrangements for reclassification, relabelling and preparation of new SDS to meet GHS requirements were considered as part of the 2009 Chemicals RIS and are not reconsidered here. A five-year transitional period was proposed to minimise costs and maximise benefits.

Agricultural and veterinary (agvet) chemicals labelling

The proposed change to labelling of workplace agvet chemicals will require information on some intrinsic hazards to be included on labels. The APVMA has indicated that the additional information being sought through this policy change, including statements of carcinogenicity, is the responsibility of the manufacturer/registrant and will not be assessed by them. Manufacturers and importers are already required to classify hazardous workplace substances and provide that information for the SDSs so there are no additional costs associated with determining the same classification information for labels. Labels will also need to include hazard and precautionary statements required for physicochemical hazards where these are not already included on labels. This applies to all workplace chemicals, not only agvets. There are already requirements to determine the physicochemical hazards for all substances transported in Australia under the ADG Code, so this hazard classification information will not be an additional impact to meet work health and safety requirements. Like all other manufacturers of workplace chemicals, agvet chemical manufacturers will be required to reclassify their products and prepare new safety data sheets within the five-year transition period. This requirement already exists under current workplace regulations. With this new classification information available, manufacturers will need to amend their labels. APVMA requires that additional statements placed on labels do not mislead the reader about the safety of the chemical or contradict or detract from other information on labels required by the APVMA.

The APVMA requires that instructions on labels and in other media be clear, easily understood, up-to-date and enforceable. It requires that information on product use be up-to-date and accessible through the most efficient media. It also requires that the national registration authority not be required to determine those instructions for which it does not have direct responsibility.

A Consultation RIS was recently developed in the agriculture portfolio as part of consideration of a national scheme for the assessment, registration and control of use

of agvet chemicals. These reforms are separate to recent changes to APVMA labelling requirements.

Health monitoring

The model WHS Regulations for health monitoring for hazardous chemicals are consistent with existing requirements under hazardous substances regulations in all jurisdictions. No significant change in costs will be incurred as a result of requirements under the model WHS Regulations.

6.9.2 Lead

What is it?

Exposure to lead by ingestion or by inhalation as a dust, fume or mist can result in a range of health effects depending on the level and duration of exposure. There are still many occupations that involve lead exposure including:

- motor vehicle assembly (radiator repair)
- panel beating
- vinyl manufacture
- battery manufacture and recovery
- soldering
- lead mining and smelting
- lead alloy production
- glass
- petroleum
- plastics
- ammunition
- explosives
- printing
- publishing
- ceramics, and
- paint industries.

According to the NDS in Australia there are around 30 reported cases of over-exposure to lead per year of which there are eight compensated cases per year. A typical case involving lead or lead products costs $6000 in direct workers' compensation costs and a total of
$80 000 in indirect workers' compensation costs per year. Exposure to lead remains an issue in Australian workplaces, particularly in the mining of lead containing ores. In the period from January 2000 to December 2005, WorkSafe Victoria received 182 notifications from 20 workplaces regarding removal of an employee from a lead risk job. It is believed that there is significant under-reporting of lead risk jobs in all jurisdictions.

What are the current jurisdictional regulations?

In 1994, NOHSC published the *National Standard for the Control of Inorganic Lead at Work* (the National Standard) to be used by jurisdictions as the basis of regulations to manage the risk of exposure to lead at work. The National Standard was developed to complement the *National Model Regulations for the Control of Workplace Hazardous Substances*, also published by NOHSC in 1994 and used as the basis for hazardous chemicals regulation across jurisdictions. The National Standard reiterated a number of the general provisions of the National Model Hazardous Substances Regulations and set out more specific requirements to control lead at work. The National Standard was intended to be adopted without limiting the generality of the provisions of the model hazardous substances regulations. The National Standard was accompanied by the *National Code of Practice for the Control and Safe Use of Inorganic Lead at Work.*

All Australian jurisdictions have either adopted the provisions in the National Standard in its entirety or implemented some or most of the key elements into their regulations.

- New South Wales addresses lead-related issues in Part 7.6 of Chapter 7 (Hazardous Processes) of the Occupational Health and Safety Regulations 2001.
- South Australia makes provisions relating to lead in Division 4.3 of Part 4 of the Occupational Health, Safety and Welfare Regulations 1995.
- Western Australia addresses lead in Part 5 of the Occupational Health and Safety Regulations 1996 (Hazardous Substances).
- Tasmania has adopted the National Lead Standard in its entirety into its consolidated Workplace Health and Safety Regulations 1998 , directing that a lead process at the workplace must be undertaken in accordance with the *National Standard for the Control of Inorganic Lead at Work* (regulation 68).
- Queensland retains all provisions dealing with lead, including MSDS and risk assessment provisions, as a separate self-contained part (14) of the Workplace Health and Safety Regulation 2008.
- Victoria addresses lead risk work in Part 4.4 of the Occupational Health and Safety Regulations 2007.
- Northern Territory has adopted from the National Standard the health monitoring regime for workers undertaking lead risk work and the prescribed blood leads for removal of workers from work and return to work in their Workplace Health and Safety Regulations.
- The Commonwealth has developed a Code of Practice for managing lead risk work based on the National Standard and accompanying Code of Practice.
- The ACT has adopted the National Standard under its *Work Safety Act 2008*.

What is the problem?

There is inconsistency in that some jurisdictions address matters in Codes of Practice and there is also variation in the level of detail. The seven jurisdictions that have lead regulations have adopted the health monitoring regime and prescribed blood levels set out in the National Standard, which is the core of the regulations relating to lead risk work. There has been inconsistency over the extent of inclusion of other elements of the National Standard, although a number of jurisdictions have chosen to use provisions under the broader hazardous substances regime, such as for exposure

standards. Some jurisdictions have amended their regulations since first incorporating lead risk work provisions and have therefore refined the elements over time. There are some minor differences around the role of medical practitioners in the process and the requirements for notifying regulators of lead risk work and of exposures exceeding the prescribed levels.

Western Australia has adopted the majority of the National Standard including requirements for biological monitoring and removal from lead risk work. The scope of the control measures for lead is different with a distinction drawn between construction work and general work involving lead.

New South Wales has adopted the main parts of the National Standard including risk control, health surveillance, removal of workers from lead risk work and provisions regarding pregnant or breastfeeding workers.

The Commonwealth has requirements for biological monitoring as part of the hazardous chemicals requirements. The remainder of the National Standard has been implemented in a Code of Practice on the safe use of inorganic lead in Commonwealth employment.

Victoria and Queensland have comprehensive lead regulations and have adopted the National Standard in its entirety. Queensland covers matters such as labelling and the preparation of SDSs for lead, as well as specific control measures for lead and blood lead removal levels.

Northern Territory has implemented biological monitoring and removal requirements under the National Standard. The regulations do not contain specific control measures for the use of lead in the workplace. SA has not adopted the health monitoring regime and prescribed blood levels set out in the National Standard in its regulations. Instead the regulations include more specific control measures around the layout and design of lead workplaces and require the monitoring of airborne contaminants. As stated above, the ACT has adopted the National Standard under its *Work Safety Act 2008*.

The main purpose of developing lead regulations under the model WHS Regulations is to continue the emphasis on working with lead as being of a particularly high risk requiring additional controls over those required for hazardous chemicals generally.

Without regulation workers could be exposed to lead with the potential for secondary exposure for workers' families. While there are general legislative duties, there is a need for more specific duties to ensure safe management of lead in the workplace. In particular there is a need for more specificity by way of regulations to ensure that appropriate information is provided on lead risk work and the health of workers involved in lead risk work is monitored to manage health issues that could arise.

What is proposed?

The proposed model WHS Regulations for lead are based on the lead-specific provisions of the *National Standard for the Control of Inorganic Lead at Work*. They extend the proposed model WHS Regulations for hazardous chemicals in relation to the management of lead exposures to persons undertaking lead risk work. The proposed regulations define a lead process and define lead risk work as work carried out in a lead process that may lead to blood lead levels exceeding a prescribed amount. The blood lead levels prescribed mirror those set out in the National Standard.

The proposed regulations require that a PCBU that carries out a lead risk process must provide information about the lead process before a worker is engaged or commences the lead process.

The proposed regulations set out a range of controls covering:

- containment of the lead process
- requirements for cleaning
- prohibitions on eating, drinking and smoking in a lead process area
- provision of changing and washing facilities
- provision for laundering, disposal or removal of contaminated personal protective equipment, and
- reviewing control measures.

A PCBU must identify where lead risk work is carried out and must notify the regulator within seven days that lead risk work is being carried out.

Health monitoring must be provided to workers before commencing work, one month after commencing work and then at set intervals thereafter depending on the category of worker and the level of lead in blood measured previously. The monitoring must be carried out under the supervision of a medical practitioner. In relation to health monitoring, the proposed regulations provide details of the information:

- to be provided to the medical practitioner by the person conducting the business or undertaking
- to be obtained from the medical practitioner after monitoring has been undertaken
- to be provided to the worker, and
- to be provided to the regulator if the monitoring indicates that a worker has exceeded the prescribed blood lead levels.

The PCBU must pay the cost of the health monitoring.

A worker may make a declaration to refuse blood lead monitoring.

Where a worker has blood levels that exceed the prescribed amount they must be removed from the lead risk work and not return until their blood lead level has reduced to a prescribed amount.

The PCBU must retain health monitoring records for a period of 30 years.

Public comment, final proposal and rationale

Working in lead risk work

There was support that the regulations include that workers must be informed of the need and type of health monitoring before commencing work. It was commented that the duty to give information about health risks of lead process must be amended in order that all persons applying for a position that is likely to involve exposure to lead is informed at the time of their application. The ACTU stated that a PCBU should advise a prospective worker they will be working with lead and provide information regarding

health risks and monitoring requirements when working with lead, such as those found in current Victorian regulations. A prospective worker may then make an informed decision when applying for a position.

In response to public comment it is proposed to impose a duty on a PCBU to inform a worker or a person who is likely to be engaged by the business to provide information on the health risks associated with exposure to lead and the needs to health monitoring. This is consistent with the broader provision of information duty under the model WHS Act and has been included to emphasise the need to provide this information.

Health monitoring

A number of submissions were received relating to health monitoring. Employer groups were concerned that workers may refuse to undertake health monitoring. They argued that a PCBU would be in breach of the regulation as they would not be able to meet their obligations to provide a safe, risk-free workplace in circumstances where they cannot determine whether a worker needs to be removed from lead risk work or not.

Ai Group expressed that its preferred position would be to insert a provision into the regulations that requires workers to participate in biological monitoring. If this is not possible the current proposed approach was seen as the best option for PCBUs that includes lead risk work.

The ACTU did not support the right of workers to opt out of blood lead level monitoring, citing concerns that unscrupulous employers could push workers to opt out.

Regulations 7.2.9(2) and 7.2.13 were drafted in response to concerns that a PCBU will be in breach of their duty to provide health monitoring to a worker if the worker refused for any reason to participate in blood lead level monitoring.

Many comments were received that having blood lead level monitoring is a necessary requirement to ensure the health and safety of workers carrying out lead risk work and therefore there should be no right of refusal.

It can be argued that a worker's refusal to participate in blood lead level monitoring is in breach of their duty in clause 28 of the model WHS Act (e.g. failure to comply with reasonable instruction or to take reasonable care). From a health and safety perspective a worker should not be entitled to refuse the monitoring.

The refusal of a worker to undergo monitoring may mean that in order for a PCBU to comply with its duty of care the PCBU would be required to take some action, which could include removing the worker from lead risk work as a precaution. If there is no suitable alternative work for the worker to perform, this may lead to an industrial or discrimination dispute. It has also been submitted that expressly providing in the model WHS Regulations that a worker may refuse blood lead level monitoring may prevent a PCBU from removing them from the lead risk work because it would infringe on their statutory right to refuse.

One option submitted by both union and industry groups is to include a specific regulation requiring a worker to submit to blood lead level monitoring. Such a requirement would not overcome the complex issues regarding the consequences of a worker's refusal to submit to monitoring.

Employer groups have also asked that the model WHS Regulations be clarified to allow a PCBU to terminate a worker's employment if they refuse to submit to blood monitoring. Such a regulation would have undesirable overlap with contractual duties, anti-discrimination and industrial relations laws.

A preferred option is that the model WHS Regulations are silent about a worker's ability to refuse blood level monitoring and any refusal can be dealt with under the general duties contained in the model WHS Act, anti-discrimination or industrial relations laws. It is proposed that the right to refuse be deleted.

Notification and record keeping

The requirement for a PCBU to notify the work health and safety regulator in writing that lead risk work is occurring and about the type of lead risk work within seven days was considered too onerous for businesses that regularly undertake lead risk work. This is a one-off notification that enables regulators to be aware of where lead risk work is being carried out to enable them to target prevention and compliance activity to areas where it is most needed.

The lead regulations require that workers' health monitoring reports are kept for a period of 30 years. This record-keeping requirement will be maintained in the lead Part of the model WHS Regulations. A 30-year record-keeping period can be justified on the basis of the late onset of disease. Reports have indicated heavily exposed lead workers showed deaths from kidney disease after 30 years of work.

Prescribed blood lead levels

There were a number of submissions including from employer groups and unions for the blood lead levels proposed within the draft model WHS Regulations to be reviewed as soon as possible to reflect the latest toxicological information and current practicability standards.

Safe Work Australia has commenced a program of work to review both the blood lead levels and the lead exposure standard, taking into account current toxicological information, overseas trends and revised classification information for lead. It is anticipated this work will be completed in 2012.

It is proposed that this provision will apply where lead processes, within the meaning of the model WHS Regulations, are carried out at a workplace. It will impose duties upon a PCBU at a workplace to provide information to workers and prospective workers about a lead process, to control risk of lead contamination using specified measures, to identify and notify the regulator of lead risk work and provide health monitoring of workers in respect of lead risk work.

Duty holders under the Part may also have health and safety duties under sections 19, 20 or 21 of the Act, or duties under Part 5 Division 2 of the Act to consult with workers about matters in this Part. Part 7.1 – Hazardous Chemicals of the model WHS Regulations would apply in addition to this Part. Schedule 14 to the model WHS Regulations would also apply. There are additional regulations about management of risk in Part 1A.1 – Risk management and about provision of information in Part 1A.2 – General workplace management.

Overview of impacts

South Australia does not currently regulate blood lead levels in relation to managing lead risk work. As this would be a new regulated requirement it would be expected that impact would be greatest in this jurisdiction, however this has not been indicated as being a compliance cost estimated by regulators and stakeholders.

Based on preliminary information collected to inform the review of blood lead levels and exposure standards being undertaken by Safe Work Australia, it is estimated that there are 20 000 workers undertaking lead risk work across Australia. Using population ratios this estimates that there would be 1500 lead risk workers in SA. Of these, approximately 900 work either directly or indirectly for one business that currently undertakes lead monitoring of its workers. Assuming that the remaining 600 workers predominantly work in small to medium enterprises that do not currently undertake blood lead monitoring, and based on a cost of $100 per person for measuring the blood lead level, it is estimated that the total cost of both the initial and a second test after one month will be $120 000.

Requirements for ongoing testing depend on the level measured in the previous test, with retesting required at six-month, three-month and six-week intervals. Based on an average three-monthly testing interval for all workers the ongoing cost in SA would be $240 000 per year.

The requirement to notify the work health and safety regulator that lead risk work is occurring and to advise of the type of lead risk work in writing within seven days will impose an additional requirement in some jurisdictions. The impact will be minimal in the majority of jurisdictions as they already have requirements to advise regulators of lead risk projects. It will be a new requirement in WA, NT, ACT and the Commonwealth.

There will be some impacts from the requirement for a PCBU to inform a worker or a person who is likely to be engaged about potential health risks associated with exposure to lead. Although all jurisdictions impose a duty on employers to provide information to employees regarding lead risks, only Victoria, WA, Tasmania and the Commonwealth currently require that applicants for work be advised about health risks associated with exposure to lead. Consequently the measure will impose an additional requirement on employers in NSW, Queensland, SA, NT and the ACT.

The Commonwealth has adopted the monitoring requirements under a lead Code of Practice that has been developed from the NOHSC Standard. There is likely to be very little lead risk work undertaken by Commonwealth workers. It is therefore anticipated that the impact of the regulation on the Commonwealth will be minimal.

The model WHS Regulations adopt a lower blood lead monitoring level than is currently prescribed in Queensland. The Queensland regulator has assessed the impact as minimal in terms of cost but that it will deliver a higher level of protection for Queensland workers. Other jurisdictions have regulations based on the National Standard or have adopted the National Standard, therefore the impact of the proposed regulations is expected to be minimal.

Many of the requirements in the proposed regulations are based on those contained in the Victorian Occupational Health and Safety Regulations. As the proposed requirements in the model WHS Regulations are largely similar to current provisions

(except in SA as discussed), the impact on small businesses in other jurisdictions is likely to be minimal as they would already be required to comply with similar requirements relating to lead risk work.

Specific impacts on not for profit organisations are anticipated to be minimal, as this type of work is not usually undertaken by such organisations.

6.10 Asbestos

What is it?

The model WHS Regulations for asbestos will provide for the first time in Australia a consistent framework for the management of asbestos materials in workplaces, the removal of asbestos and the licensing and competencies for asbestos removalists and assessors.

What are the current jurisdictional regulations?

Current national policy status

The laws in Australia regulating asbestos are consistent with the International Labour Organisation Convention 162 (1986), which the Australian Government has ratified.

While there is no existing National Standard covering asbestos, there are two NOHSC Codes of Practice – the *National Code of Practice for the Safe Removal of Asbestos* 2nd Edition [(NOHSC:2002, (2005)] (removal Code of Practice) and the National Code of Practice for the Management and Control of Asbestos in the Workplace [NOHSC:2018(2005)] (management Code of Practice). Through these two national Codes of Practice a significant degree of standardisation across jurisdictions has been reached. There is also a Guidance Note on the *Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition* [NOHSC:3003(2005)] .

The *National Standard for the Control of Workplace Hazardous Substances* (NOHSC, 1994) includes asbestos on the NOHSC List of Hazardous Substances. A National Exposure Standard of 0.1 fibres per ml is in place for exposure to all forms of asbestos and mixtures. The National Standard imposes a duty on the person with control to arrange for health surveillance for workers who may be exposed to any chemical listed in Schedule 3 of the Standard. Schedule 3 of the National Standard lists asbestos along with 16 other hazardous chemicals.

In 2003 all states and territories in Australia implemented a ban on the use of asbestos and asbestos products. The Commonwealth also banned the import of asbestos and asbestos products. Already in-situ asbestos was exempted, with the expectation that it would be managed in accordance with the two National Codes of Practice.

Material differences exist across the jurisdictions in respect of application of specific duties or controls but not in terms of the general principles and duties. The Victorian Regulations are the most modern and comprehensive and were used, where appropriate, as a basis for policy development. Specific differences between jurisdictions are discussed further below.

Victoria

Victoria has the most comprehensive legislative requirements under work health and safety laws and has fully implemented national policy with respect to asbestos. Part 4.3 of the Occupational Health and Safety Regulations 2007 prohibits the use of asbestos subject to certain exceptions and contains requirements:

- relating to the control of risk of exposure and determination of an employee's exposure to asbestos
- for the removal of asbestos prior to demolition
- that prohibit the use of certain tools or instruments
- to identify asbestos, and
- to eliminate or minimise risk and review control risk measurers.

There are requirements for an asbestos register, an asbestos management plan and a removal control plan. The regulations also contain unique provisions for removal of asbestos prior to demolition and refurbishment, domestic premises and also in emergency situations.

The regulations also set out detailed requirements for the licensing and conducting of asbestos removal work, waste containment and disposal, decontamination of equipment and for persons issuing clearance certificates and conducting air monitoring.

Queensland

Queensland's Workplace Health and Safety Regulations 2008 provide a framework for the regulation of asbestos-related risk in work environments. The legislation places legal obligations on certain people and details requirements that must be complied with. The regulations give legal standing to the NOHSC Codes of Practice.

The practices, procedures and requirements set out in the asbestos management Code of Practice and the asbestos removal Code of Practice must be complied with in the same manner as a regulation.

Queensland is unique in that the Public Health Regulations 2005 deals with the removal of asbestos in domestic premises and reference the requirements of the work health and safety regulations. The Queensland regulations prohibit the use of asbestos subject to certain exceptions and require that all work be carried out in accordance with the NOHSC Codes of Practice. The regulations do not prescribe in detail requirements for identification, risk assessment or removal and rely on the Codes of Practice. Asbestos is included on the list of substances for which health surveillance is required.

Northern Territory

Northern Territory has adopted the NOHSC Codes of Practice but has not implemented the management Code of Practice requirements to have an asbestos register, to notify others at the workplace if working on asbestos or for a workplace to have an asbestos management plan.

The Work Health and Safety Regulations require that before a building or structure is demolished the person carrying out the demolition must examine the building or structure to determine whether asbestos is present in the building or structure and ensure that, if asbestos is present, it is removed in accordance with these regulations. The regulations contain requirements relating to the manufacture, storage and disposal of asbestos and health surveillance. Northern Territory has a two-tier licensing regime for asbestos removalists but no compulsory training courses or competencies. Northern Territory does not require clearance inspections to be conducted on removal work.

Western Australia

The Occupational Health and Safety Regulations prohibit the use of asbestos except in specified circumstances. The regulations require that identification, risk assessment, removal and disposal are performed in accordance with the asbestos management and removal Codes of Practice and provide for a removalist to be licensed to undertake certain work. The regulations also include health surveillance requirements.

South Australia

The asbestos management and removal Codes of Practice are approved Codes of Practice under the *Occupational Health, Safety and Welfare Act 1986.*

The Occupational Health, Safety and Welfare Regulations prohibit the use of asbestos subject to certain exceptions and place restrictions on work involving asbestos, including that removal cannot be undertaken on asbestos without holding a license. The regulations place duties on owners of building and plant to identify by use of a competent person any asbestos present and if it poses a significant risk to health, to remove the asbestos. It applies duties to employers to ensure that workers are informed of any asbestos related risks, are appropriately trained and carry out work to minimise the risk of exposure to fibres. The regulations also require that no person encapsulate or enclose asbestos insulation without permission of the Director. An employer must also keep records of the work carried out by workers for 40 years. Laboratories that conduct analysis for airborne asbestos fibres during removal must either be NATA approved or one approved by the Director.

New South Wales

The Occupational Health and Safety Regulations require that risk assessment and control measures are carried out in accordance with the asbestos management Code of Practice. The regulations also prohibit the use of asbestos subject to certain exceptions and also specific requirements for health surveillance for workers for whom exposure to asbestos poses a risk to health. The regulations place duties on a controller of a premise to keep a register of asbestos. Part 8.7 of the regulations contain specific requirements for asbestos removal, including information to workers, cleaning, containment and disposal of asbestos, including the need to undertake atmospheric monitoring where a competent person deems it necessary. Analysis of samples must be conducted by a NATA approved laboratory.

Tasmania

The Workplace Health and Safety Regulations prohibit the use of asbestos subject to certain exceptions and require a person with management or control of a workplace to identify and risk assess asbestos in a building structure or mine and to maintain an

asbestos register. The person is also required to take all reasonably practical steps to ensure that any person is not exposed to airborne fibres in excess of the exposure standard. General requirements of the regulations provide for health surveillance. A person removing asbestos must notify the regulator and provisions allow for the licensing of asbestos removalists under a two-tier licensing regime. A Class A license holder is required to maintain a certified Safety Management System.

Australian Capital Territory

Asbestos regulation in the ACT is complicated due to the use of three separate regulatory instruments. The Dangerous Substance Regulations prohibit the use of asbestos subject to certain exceptions and also contain requirements for asbestos registers, asbestos management plans, associated risk assessment and requirements for atmospheric monitoring. The ACT is unique in that the *Construction Occupations (Licensing) Act 2004* contains competency and experience requirements for the licensing of asbestos removalists and licensed asbestos assessors. Although consultants in all states undertake clearance monitoring, the ACT is the only jurisdiction to have a comprehensive licensing and competency approach for people undertaking identification, assessment and clearance of asbestos i.e. licensed asbestos assessors. The Building (General) Regulations require the notification of asbestos removal from buildings by licensed asbestos removal, including written plans for the removal process and the type of tools to be used.

Commonwealth

The Commonwealth has no regulations related to management of asbestos or its removal. The Occupational Health and Safety (National Standard) Regulations prohibit the use of asbestos subject to certain exceptions. The import and export of asbestos and goods containing asbestos is restricted under the Commonwealth Customs (Prohibited Imports) Regulations 1956 and the Customs (Prohibited Exports) Regulations 1958.

What is the problem?

Asbestos is a major occupational health problem in Australia causing asbestosis, lung and stomach cancer, mesothelioma and other related health effects. It is estimated that by 2020 there will be 40 000 diagnosed cases of asbestos-related lung cancer in Australia and an additional 13 000 Australians will have developed mesothelioma. Unlike many occupational diseases, there is a long latency period before the asbestos-related disease manifests. This may extend to 20 or 30 years or, in the case of mesothelioma, as long as 40 or 50 years. Annually there is an average of 100 non-fatal workers' compensation claim cases with a week or more off work and an average of 41 compensated fatalities. A typical non-fatal case costs between $70 000 and $100 000 in direct workers' compensation payments resulting in a total of $28.1 million annually in payments for all asbestos claims.

The incidence rates of asbestosis and mesothelioma appear to be slowing as a result of lower levels of usage. However exposure to asbestos will continue for many years until all asbestos products are eliminated from the built environment. There remains a considerable risk to persons disturbing asbestos products remaining in buildings. Recent research contained in Safe Work Australia's report *Asbestos-related Disease Indicators, August 2010* provides evidence for concern about tradespersons not being fully aware or equipped to protect themselves while working around asbestos products.

In 2009 the ACTU called for a National Inquiry into the hazards posed by asbestos and the incidence of asbestos disease. In response to this a report was provided to the WRMC in 2009 recommending that:

- further work could occur on the training and licensing of asbestos removalists, particularly with regards to the need for standard training and assessment to assist the mutual recognition of licenses, and
- checks be implemented to ensure asbestos auditors are competent and accredited.

WRMC agreed that the Heads of Workplace Safety Authorities and Safe Work Australia would consider the training and licensing of asbestos removalists and asbestos auditors. This policy direction was taken up in the development of the proposed regulations.

Asbestos has a long history of use in Australia and prior extensive use of asbestos-containing material has meant that there are many asbestos products still present in the community. Although there is a prohibition on the use of asbestos, some activities involving asbestos and asbestos-containing material will continue to be present in workplaces and must be regulated because of the significant health and safety risks associated with them.

There is fragmentation in the laws applying to asbestos within and across jurisdictions. In some jurisdictions asbestos management and removal is spread across two or more regulatory instruments under the control of different government bodies, making compliance complex and difficult.

There are different requirements for asbestos removalists to obtain a licence in each jurisdiction and different competency requirements set at jurisdictional level that place barriers to businesses that operate in more than one jurisdiction.

As outlined above some jurisdictions adopt the asbestos management and removal Codes of Practice while other jurisdictions like Victoria provide comprehensive prescription in regulations on all aspects of asbestos management.

Inconsistent regulatory approaches across Australia, including different competency and training requirements, have a high potential to result in different standards of protection for workers, and in particular for those involved in the asbestos removal industry. If the result of these differences is that workers and others may be unnecessarily exposed to asbestos fibres, there is potential for unnecessary increased adverse health outcomes relating to asbestos exposure to continue to occur through the Australian population for many years.

What was proposed?

The Consultation RIS and discussion paper

The draft model WHS Regulations maintained the existing agreed national prohibitions relating to the use of asbestos including the manufacture, supply, sale, transport, storage, removal, use, installation, handling, treatment, disposal or disturbance of asbestos, subject to specified exceptions.

The proposed regulations for asbestos released for public comment:

- prohibit a PCBU from carrying out, or directing or allowing a worker to carry out, work involving asbestos other than in circumstances permitted under the regulations
- impose a general duty upon PCBUs at a workplace to eliminate exposure to airborne asbestos at the workplace so far as is reasonably practicable and if elimination is not reasonably practicable, to minimise exposure so far as is reasonably practicable, and to always ensure that workers are not exposed to asbestos above the exposure standard
- impose duties upon a person with management or control of a workplace to identify asbestos or asbestos-containing material at the workplace and to prepare and keep an asbestos register and an asbestos management plan
- include requirements to manage naturally occurring asbestos
- include requirements to identify and remove asbestos and ensure emergency procedures are developed prior to demolition or refurbishment
- impose duties upon a PCBU about training workers and health monitoring
- require notification to the regulator and other persons of asbestos removal work by the person with management or control of the workplace, asbestos removalists and licensed removalists, and
- require that asbestos removal work be licensed and undertaken by competent workers, with requirements for:
    - Class A asbestos removalist licences for those businesses that remove friable asbestos (including that there is a certified WHS management system in place)
    - competency-based training for asbestos removal supervisors
    - asbestos assessor licences to undertake air monitoring and clearance in relation to Class A removal, and
    - workers who are working for a licensee undertaking the removal work to have completed competency-based training.

Two model Codes of Practice were proposed. The draft Code of Practice on how to manage and control asbestos in the workplace covers the process of identifying the presence of asbestos in the workplace, including those materials that contain asbestos, assessing associated risks and implementing controls to eliminate or minimise the exposure to asbestos. It also sets out what should be included in the asbestos register and plan.

National competency units are being developed to ensure a consistent level of competency is established for the issue of licences and for workers to undertake removal work.

The draft Code of Practice on how to safely remove asbestos provides specific guidance for asbestos removalists on the process of safely removing asbestos. It should be read in conjunction with the draft Code of Practice on how to manage and control asbestos in the workplace.

The two Codes of Practice are largely based on the two existing NOHSC Codes of Practice for asbestos.

Public comment, final proposal and rationale

A number of submissions were received, particularly from unions, on the asbestos regulations and Codes of Practice. A wide range of views were expressed regarding the content of the regulations, with some submissions indicating support for the current draft and others indicating that substantial changes need to be made. The main issues have been summarised below.

Union concerns included that:

- asbestos regulations should be a separate chapter as it is a fibre, not a chemical
- asbestos should also be included as a prohibited carcinogenic substance
- the definition of friable asbestos should be amended to include dust consistent with the management Code of Practice
- exclusion of domestic premises where work is carried out will result in reduction of coverage
- the details of asbestos registers and management plans should be included in the regulations
- the regulations do not adequately cover all workers that work with or may be exposed to asbestos, including those collecting asbestos samples
- the regulations currently allow the PCBU access to workers health surveillance results. PCBUs should only have access to a summary of the results
- the regulations currently allow persons without a licence to remove 10 square metres of non-friable asbestos without any further limitations. The regulations must be amended to include a time limit of one hour per week which is consistent with the Victorian regulations
- the Victorian regulations have action levels set at half the exposure standard. The regulations currently have no action levels set, which needs to be amended, and
- licensed removalists must directly employ all workers engaged in the removal.

The Victorian Trades Hall Council also stated a number of other concerns with the regulations including that:

- the training of workers for licensed jobs is under Division 6 but training of other workers, including those not requiring a license, is under Division 4
- there is no reference to 10 cubic metres of contaminated soil, and
- for removal jobs not requiring a licence, the regulations define Class A and Class B removals but do not specify the exception to requiring a licence and protections for those workers.

Several employer associations commented that the provisions for asbestos should be contained in a separate chapter. Other comments indicated that the record-keeping requirements in this section are too onerous. Some submissions from employer associations indicated that the detail of the management plan for asbestos should be in the regulations, while other submissions indicated that it should be in the Code of

Practice. ACCI expressed concern that the cost of Occupational Health Management System (OHMS) training is not around $2000 as quoted in the Consultation RIS. The starting price for a JAS/ANZ approved auditor to certify an OHMS is around $6000, excluding the system cost and its implementation. ACCI is of the view that the existence of a certified OHMS does not specifically correlate with asbestos removal activities and the requirement should be removed.

It was commented that consideration should be given to whether there should be a cut-off date for the requirement to have and maintain an asbestos register. Concerns were also expressed regarding the appropriate competencies required to undertake identification of asbestos and to issue clearance certificates for asbestos removalists and assessors.

In consideration of the above comments, it is proposed that the following changes are made:

- to insert regulations dealing with asbestos-related work—that is, work with asbestos that is allowed under the prohibitions as long as it is not asbestos removal—to protect workers who carry out work that may involve asbestos exposure, including work carried out at domestic premises
- to reduce unnecessary record keeping by requiring that no register documentation is required for workplaces built after 2003 or where it can be reasonably assumed there is no asbestos in the building. The year 2003 was chosen on the basis that asbestos ceased to be used in the manufacture of building products from around the mid-1980s in Australia, but stockpiled material meant that it could still have been incorporated into buildings after that date. Plant used in buildings may have included asbestos components up until the prohibition in 2003
- to place the regulations for asbestos in its own chapter of the model WHS Regulations to give the duties greater prominence. Duties to classify and label asbestos which are hazardous chemicals provisions will still apply as asbestos is classifiable under the GHS
- for clarity, place requirements relating to naturally-occurring asbestos in their own division
- for clarity, insert a definition of asbestos-contaminated dust or debris consistent with the management Code of Practice
- to clarify the application of the regulations to soils that may be contaminated with trace amounts of asbestos, and
- to amend the competency requirement regarding asbestos assessors.

It is also proposed that a number of minor technical and drafting amendments be made to the asbestos regulations to address some of the minor matters raised during public comment.

It is not proposed to:

- change the level of exposure to provide that half of the exposure standard is not exceeded at the workplace because what is proposed is consistent with the Victorian regulations and consistent with normal occupational hygiene practice. It is proposed that technical amendments be made to the exposure level in relation to air monitoring to align it with similar requirements in the Victorian regulations

- prescribe to contents of asbestos registers, risk assessments, asbestos management plans and asbestos removal controls plans in the model WHS Regulations because such content and level of detail is better suited to the Code of Practice which has to be complied with unless there is a method that provides an equivalent or higher standard of work health and safety than the Code of Practice
- change the requirements that health monitoring reports be provided to the PCBU because restrictions regarding confidentiality are included in the regulations and model WHS Act, or
- to remove the requirement for a Class A removalist to have a certified work health and safety management system which will have significant impact in all states except Victoria. This was viewed by Safe Work Australia as being important to preserve the current high level of management of asbestos removal work in Victoria, Tasmania and SA and to apply a similar standard nationally, considering the risks posed by friable asbestos removal work.

The requirements for competency-based training of licensees and workers are also clarified in the final proposal.

Overview of impacts

There are three changes that will have impacts across jurisdictions:

- strengthened competency requirements for all workers
- requirement for a licensed asbestos assessor to undertake monitoring, and
- clearance of Class A work and the requirement for Class A removal licence holders to have a certified work health and safety management system.

Competency of licensees and asbestos removal workers

The proposed regulations implement the direction from the WRMC to improve the training and competency of licensed asbestos removalists and asbestos assessors. They set out the competency requirements for a licensee and asbestos removal workers. Most jurisdictions currently identify two classes of removal work which correspond to the classes set out in the proposal. Safe Work Australia is finalising four units of competency to support the asbestos regulations which will be available for all accredited RTOs to deliver across Australia, ensuring the improved quality and consistency in removal training. There is an existing unit of competency relevant to Class A removal that is listed on the National Training Information Service that has been reviewed as part of this work. All jurisdictions currently have a requirement that removal workers other than the licensee or supervisor are competent to undertake the work but not all are required to undertake the completion of an approved course. There are approved or accredited courses for all workers in NSW, Queensland, Tasmania, Victoria and WA (for Class A workers only).

Generally these courses are not part of the Australian Quality Training Framework (AQTF) other than in the ACT which has a number of comprehensive accredited courses, so there is very little consistency and no ability to mutually recognise licence holders due to the variability in the training undertaken in each jurisdiction. Based on asbestos removal notifications in Victoria (382 Class A removals and 7600 Class B removals a year) and NSW (447 and 2847) and extrapolating this across Australia, it is estimated that the current annual number of asbestos removals is 1490 Class A

removal jobs and 18 800 Class B removal jobs. New South Wales information also shows that 30 per cent of Class B removal work was undertaken by a Class A licensee. Class A (friable) removals are reducing in some states due to the progressive elimination of friable asbestos from buildings.

Jurisdictions have provided details of the number of asbestos removal licences issued in their jurisdiction. Because there is not mutual recognition of licences, many of the removalists will be licensed in more than one jurisdiction.

The total number of Class A licences across Australia in 2009 was 344. Based on the number of Class A removal jobs undertaken (estimated at 1490 per annum), recognising that Class A removalists may also undertake Class B work, it is estimated there are approximately 200 unique Class A removal licensees that would be operating in Australia at present. This would accord with a licensee undertaking on average around seven Class A removal jobs per year. Given the nature and complexity of such removal work, this would appear to be a reasonable estimate.

The total number of Class B licensees that would correlate with the proposed Class B category in the proposed regulations is more difficult to estimate because of the differing basis for issuing licences across jurisdictions. Based on the number of licensees provided by Victoria of 238 and extrapolating for the rest of Australia, it is estimated there would be approximately 950 unique active Class B removal licences that would be issued under the proposed regulations.

The proposed regulations will require that all workers carrying out asbestos removal work under a Class A or Class B licence will need to undertake competency training to the nationally developed competency standard. The Victorian RIS 2007 considers that asbestos-related activity and the number of license holders renewing declines by 1 per cent per annum.

The four units of competency are still under development. Based on current training costs in NSW, for Class A removalists the estimated costs are $650 for the course cost and the work time cost of two days is $540. For Class B removalists it is $250 for the course cost and the work time cost of one day is $270. For Supervisor training it is $250 for the course cost and the work time cost of one day is $270.

Based on an estimate of six workers engaged by each Class A removal licence (including one supervisor) and three workers engaged by each Class B removal licence (including one supervisor), the estimated cost of training is set out below:

Total implementation cost assuming total workforce retrained*

	Training cost (individual)	Cost per licensee	Cost – total for Australia
Class A removal licence			$1 532 000
Supervisor	$520	$520	
Class A competency training	$1190	$7140	
Class B removal licence			$1 976 000
Supervisor	$520	$520	
Class B competency training	$520	$1560	
Total			**$3 508 000**

* These costs assume that all workers and supervisors across the industry will need immediate retraining to meet the improved competency standards. It is anticipated that with transitional arrangements, which will recognise prior learning, only 10–20 per cent of the workforce will need to undertake the training in full within the first year of implementation. Improved and consistent training of licensees and workers should lead to reduced exposures of workers to asbestos through improved understanding and working methods, thereby lowering the risk of a worker suffering an asbestos-related disease into the future. Consistent training across Australia will support mutual recognition of licences, and will enable much greater portability of skills and opportunities for removalists to work in other jurisdictions without the current barriers.

Licensed asbestos assessor

WRMC tasked Safe Work Australia with addressing the quality of clearance inspections and building audits. This has been addressed by the requirement to have a licensed asbestos assessor conduct air monitoring and clearance for Class A (friable) removal work. Such persons must be competent to do the work through completion of a newly-developed unit of competency, as well as other licensing requirements. This will have a significant impact on all jurisdictions except the ACT which already has licensed asbestos assessors. While there are currently requirements for air monitoring and clearance to be undertaken and there are consultants doing this work, there has not been a requirement for those persons to be licensed. This will impact on regulators who will need to develop a licensing regime for this class of persons, including putting in place guidelines and processes for assessing the experience of persons applying for asbestos assessor licenses. Persons who are currently undertaking this work in jurisdictions that don't require a licence will be required to apply for a licence and to pay a licensing fee. Individuals who do not hold the appropriate tertiary qualifications, and are not 'grandfathered' in for other reasons, will need to undertake the endorsed unit of competency for asbestos assessors or obtain recognition of prior learning. This will be a cost in terms of time for business owners and also in fees to undertake the training.

Based on the estimate of the number of Class A removal jobs undertaken in a year at 1490, and estimating that an assessor would be involved in 25 projects per year, this would require 60 assessors to be licensed across Australia. The course currently being developed for asbestos assessors will be a two-day course. Assuming course costs of $700 salary costs for two days of $540, the cost to be trained to be an assessor would be $1240. The person would also need to apply for a licence, which is estimated at $70

per application based on the current average of issuing licences for high risk work across jurisdictions. In aggregate, it is expected that the total cost is around $85 000 for the requirement for a licensed asbestos assessor to undertake monitoring and clearance of Class A work.

It is likely there will be additional costs for PCBUs who are commissioning asbestos removal work due to the cost of engaging an independent licensed assessor for Class A removal in all jurisdictions except the ACT. It is anticipated these costs will be marginal compared with the overall cost of the removal work, noting that there is already a requirement in most jurisdictions for monitoring and clearance work to be undertaken. The Victorian RIS 2007 estimated the cost of a clearance to be $450 per removal job. If all persons undertaking asbestos assessment are required to undertake training and licensing in the first year it would add approximately $50 to the cost of each Class A removal job.

The benefits of having competently trained people undertaking this work is that during the asbestos removal work and before an area where asbestos removal work is cleared for general use, there will be a higher level of assurance that the surrounding environment and the removal area has not been contaminated with asbestos fibres.

Certified work health and safety management system

The requirement for Class A removalists to hold a certified safety management system will pose a cost impact for current and future Class A removalists in all jurisdictions except Victoria and Tasmania.

Based on the estimate of 200 Class A licensees, of which it is estimated 40 will currently operate in either Victoria or Tasmania and so will have a safety management system in place, 160 will be required to develop and have certified a safety management system.

Based on the costing provided by ACCI of approximately $6000 to obtain certification of a safety management system, the cost of implementing this proposal would be approximately $960 000 across Australia. This would add on average $650 to each Class A removal job assuming the costs were recovered over one year.

Naturally occurring asbestos

Provisions related to naturally-occurring asbestos and asbestos-related work that have been added to the regulations following public comment will not pose more than a minor impact on any jurisdiction, as these regulations simply clarify duties that are already implicit in current jurisdictional regulations. The provisions that have been included related to demolition and refurbishment are not new regulation but were modelled on the Victorian regulations, and the impact is expected to be minor as removal of asbestos is required prior to demolition in all jurisdictions.

Specific jurisdictional impacts

Queensland

In Queensland the demolition and refurbishment provisions are additional to their current regulations; however they are only clarifications of duties which are implicit in the current Queensland regulations and the NOHSC Codes of Practice. It is anticipated

that there will be a decrease in Class B license holders in Queensland under the model WHS Regulations, with the move to business-based rather than individual licensing. Queensland has indicated it is not possible to estimate the scale of this reduction at this stage. This will decrease the burden on businesses and the regulator. The requirement to notify the regulator of removal of both friable and non-friable asbestos (more than 10 m^2) is additional to their current requirements and will be an impact on both licensed asbestos removalists and the regulator. The Victorian RIS 2007 estimates the cost to the regulator of processing a notification as $7.31, with approximately 7800 received in 2005. Assuming 4000 notifications per year in Queensland the cost to the regulator in processing these notifications will be approximately $30 000. The impact of notification on licensed removalists will be minimal since the documentation is already required.

Northern Territory

In NT businesses are likely to be significantly impacted by the model asbestos regulations but with significantly improved safety. The requirement for building registers and management plans have not previously been enforced although the requirements exist by adoption of the NOHSC Codes of Practice. The Victorian RIS 2007 provided estimates of the costs of complying with identification and register requirements. An average cost was assumed to be $2600 initially for each building. The NT regulator has estimated that there are approximately 3800 commercial buildings that were constructed pre-2004. Based on a worst case scenario where all of these buildings would require a register, the maximum cost of compliance with building requirements would be $9.88 million. This is likely to be an over-estimate as it is anticipated some building owners may already have registers in place.

Requirements for asbestos removalists to have asbestos removal control plans and to notify the regulator will be an impact on business. These costs will be passed onto businesses that commission asbestos removal work. There are believed to be a very limited number of removalists in the NT, with many travelling from interstate to undertake jobs. The model WHS Regulations will also impact the regulator who will need to conduct compliance and enforcement activities for registers and management plans and review notifications of removal, although as indicated in the Queensland analysis the cost of processing notifications is trivial.

Western Australia, South Australia, New South Wales and Tasmania

The model WHS Regulations are more prescriptive than are currently the case in all these jurisdictions, although the basic duties all currently exist. Impacts are mostly around competency requirements for asbestos removalists and asbestos assessors and for the regulator implementing new guidelines for assessing license applications. These costs are outlined in the section above.

Victoria

Victoria will be minimally impacted as the majority of the provisions in the regulations are the same as the current Victorian regulations. There are only detailed differences in the model WHS Regulations and the regulator will see minor impacts in implementation of new guidelines for assessing licence applicants for asbestos removalists and their workers. The regulator will have to process licence applications from asbestos assessor applicants and asbestos removalists will have to ensure they meet the competency and training requirements. These costs are outlined above. Transitional

provisions for asbestos removalists will see both business and the regulator impacts spread over a number of years.

Australian Capital Territory

As the ACT has advised it will be retaining its current regime for regulating asbestos there will be no impact in that jurisdiction.

Commonwealth

The Commonwealth has no regulations dealing with the management and removal of asbestos. However, overall impact on individual businesses in that jurisdiction is expected to be minimal due to the makeup of that jurisdiction.

Consolidating all the various costs, the total cost of implementing the model WHS Regulations for asbestos is estimated at about $14 million. Northern Territory is significantly impacted with estimated costs of about $10 million, largely reflecting required compliance with identification and register requirements for asbestos. New South Wales has estimated costs of $1.5 million and Victoria and Queensland estimate around $1 million. Costs for WA and SA are expected at less than $500 000, while businesses in Tasmania and the ACT are expected to incur costs of less than $100 000.

Benefits

The main benefits expected to be derived from the model WHS Regulations are the improved competency and professionalism of the asbestos removal industry, the reduction in exposure to asbestos workers, improved recognition of the hazards of naturally-occurring asbestos, improved information for building occupants and an improved quality of asbestos removal clearance inspections.

Flow-on benefits include reduction in incidents of asbestos-related diseases, particularly amongst those in high risk occupations such as asbestos removal and building renovation and demolition. Compensation for these diseases can be substantial per individual affected and correlate to the financial benefits the proposal can help achieve in terms of avoiding the cause of the compensation claims.

6.11 Major hazard facilities

What is it?

Major hazard facilities (MHFs) are workplaces that store, handle or process large quantities of hazardous chemicals. Incidents at these facilities have the potential to cause serious damage to employees, people in surrounding areas and the environment. They can broadly be described as ‘low probability–high cost’ incidents. The Productivity Commission’s Research Report into Chemicals and Plastics Regulation (PC Report, 2008 p154) stated that controls that are stricter than those generally found in standard occupational health and safety legislation are often used by governments to regulate these facilities.

Over recent years there have been several major incidents at MHFs across Australia. Examples include an explosion at the Longford gas plant in 1998, resulting in the loss

of two lives and injuring eight others and the gas supply to south-eastern Australia being cut off for almost three weeks. Three isolated incidents at the Moomba gas plant between 2001 and 2004 resulted in the death of one person and the injury of three others. There have also been major incidents in Sydney at Seven Hills (1989), St Peters (1990), Coode Island, Victoria (1991) and the Binary Industries factory in Queensland (2005).

What are the current jurisdictional regulations?

Regulations for MHFs are currently in operation in the Commonwealth, Victoria, Queensland, WA, NSW, NT and Tasmania. South Australia was in the process of enacting MHF regulations, but postponed this process to adopt the national model WHS Regulations. The ACT does not have any MHFs or MHF legislation. Offshore facilities are regulated by the National Offshore Petroleum Safety Regulator (NOPSA) under a separate legislative framework.

Seven out of the nine jurisdictions (all except ACT and SA) have introduced MHF regulations based on the *National Standard for the Control of Major Hazard Facilities [NOHSC: 1014 (2002)]* (the National Standard). Western Australia has adopted the National Standard for their high-end gas and chemical processing industry but licences other large facilities under a dangerous goods licensing regime, with no safety case requirement.

Initial scoping exercises undertaken by the Office of the ASCC in 2007 to commence the review of the national MHF material indicated that there are minor inconsistencies in how the states and territories have adopted and implemented the National Standard. These findings were supported in July 2008 with the release of the Productivity Commission's Research Report into Chemicals and Plastics Regulation (PC Report, 2008).

Examples of inconsistencies in adoption of the National Standard across the jurisdictions include:

- discretionary power in classifying a facility (defining what is an MHF) – Queensland and WA regulations include a discretionary provision that allows a facility that meets or exceeds the threshold limits of scheduled chemicals to not be classified as an MHF where a risk assessment indicates that the potential for a major incident is low or acceptable. This discretion is not allowed for in other jurisdictional MHF regulations which conform to the National Standard in relying on the quantum of the hazard as the determining factor for licensing. This means that similar facilities could be classed as MHFs in one jurisdiction and not in another. There is considerable concern from ACCI, as well as Victoria, NT and NSW regulators that do not provide discretion, that this results in different requirements in these jurisdictions and is a departure from the National Standard and its underpinning philosophy.
- minor differences in scheduled materials
- different regulatory scope – for those jurisdictions that have implemented MHF regulations different regulatory structures have been used, with some regulations sitting under work health and safety Acts and others under Dangerous Goods Acts. Some jurisdictions have all requirements contained within the regulations while others have detailed requirements in the regulations as well as requirements in the

Act for the same area of control. Some jurisdictions have exempted industry facilities including mines and ports from the requirements of their regulations, and

- different administering authorities – MHF regulations are administered by different authorities including work health and safety regulators in NSW, Victoria and NT, the Department of Justice in Queensland and Tasmania, and the Department of Mines and Petroleum in WA.

Different licensing approaches are also being used across the jurisdictions. These differences range from terminology (e.g. licensing vs registration vs classification) to different cost recovery structures and different licensing terms.

What is the problem?

Adoption of the National Standard within the jurisdictions has been slow. It has now taken 13 years for 80 per cent of the relevant jurisdictions to have MHF regulations in place in accordance with the National Standard. The ACT and SA have not yet implemented regulations and the National Standard, and a licensing condition is not yet reflected in regulations in NT. There are also minor inconsistencies in the adoption and implementation of the National Standard which have implications for the effectiveness and efficiency of the control of MHFs.

The Benchmark Study of MHF Regulations commissioned by the Office of the ASCC in 2007 highlighted that each jurisdiction is applying the National Standard according to individual requirements including that:

- the percentage of threshold quantities used to classify MHFs are not the same throughout the jurisdictions
- various approaches are being used to emergency planning requirements
- additional scheduled materials are included by some jurisdictions and in others some materials listed in the National Standard are missing
- definitions used have either slightly different terminology, are missing or are additional to the National Standard, and
- timing requirements are difficult to follow in areas that include notification, classification and revisions for existing facilities or for those under construction.

The gap between the National Standard and the various MHF regulations also increases as each jurisdiction interprets the National Standard to fit their own regulatory environment.

“Although the National Standard was drafted in 1996, the tardiness in adopting regulations arguably exposes the affected communities and the environment to unwarranted additional risk. This is not to ignore, however, the commercial, common law and other regulatory incentives that exist for operators to put systems in place to mitigate such risks. Delays in regulation create uncertainty for MHF operators regarding their future regulatory obligations. As a result, operators might choose to defer investment in safety related infrastructure until the compliance requirements have become known.” (*PC Report, 2008*).

The discretionary power in classifying a facility as a MHF and the differences in threshold quantities and materials could result in similar facilities being classified as MHFs in one jurisdiction but not another, placing some operators at a competitive

disadvantage as they would incur compliance costs that their competitors would avoid. The decision by some jurisdictions to exempt industry sectors including mines and ports from the requirements of their MHF regulations would also place some operators at a commercial disadvantage over interstate competitors.

The classification of similar facilities as MHFs in one jurisdiction but not another also increases confusion and uncertainty in compliance obligations for those businesses that operate facilities in multiple jurisdictions.

Harmonisation of MHF legislation across the jurisdictions would eliminate these inconsistencies and lead to a decrease in regulatory burden. Most importantly operational safety will be improved in large chemical plants in SA, with regulations implementing a safety case regime for the first time.

The Consultation RIS and discussion paper

The draft model WHS Regulations addressed the registration and licensing of an MHF and the penalties provided for under clause 41 of the model WHS Act.

The draft regulations for MHFs required operators of facilities that have or are likely to have more than 10 per cent of the prescribed threshold quantity of scheduled hazardous chemicals to provide written notification of that fact to the regulator. Facilities with 100 per cent or more of the threshold quantity will automatically be an MHF. Facilities with between 10 per cent and 100 per cent of the threshold quantity may be determined to be an MHF if, following an inquiry, the regulator considers that there is a potential for a major incident to occur at the facility.

The draft regulations for MHFs set out the duties that apply to the operator of an MHF during the period of registration. The registration period is intended to allow the operator an opportunity to develop its safety case and apply for a licence.

The draft regulations for MHFs also imposed duties on the operator and workers once a MHF is licensed. These duties were directed at ensuring that the operator tests, implements and maintains all aspects of the safety case on which its licence is granted and provides specified information to workers, visitors and the local community. It also imposed certain obligations on workers at a licensed MHF including duties to comply with any risk control or emergency plan provisions imposed by the operator and to immediately inform the operator of any circumstances that the worker believes may cause a major incident.

The definition of a ‘major incident’ proposed in the draft model WHS Regulations was not limited to Schedule 15 hazardous chemicals and would potentially cover all sudden occurrences resulting from an uncontrolled escape, spillage, leakage, implosion, explosion or fire at an MHF which might include a wide range of possible occurrences.

Prior to the development of the draft regulations, the impact of adopting the National Standard was assessed in the MHF RIS. South Australia was in the process of developing MHF regulations but set aside this development pending the outcome of the national model WHS Regulations.

Public comment, final proposal and rationale

The public comment process highlighted the following main concerns about the draft MHF regulations.

Definition of major incident

Comments:

- both the Ai Group and ACCI commented that widening the definition of 'major incident' beyond that in the National Standard would have significant impact and impose substantial costs in all jurisdictions. Both organisations stated that the definition must be linked back to those incidents involving Schedule 15 chemicals. ACCI also commented on the failure to include this issue in the Consultation RIS
- regulators had previously raised that the proposed broader definition of 'major incident' should be consistent with the applicable National Standard and that the proposed regulatory framework is more prescriptive than some jurisdictional laws and will impose significant administration costs, and
- concerns were raised by many employers about the proposed definition of major incident covering a much broader range of incidents beyond major (catastrophic) incidents, greatly increasing the work required by both operators and regulators and diluting the effectiveness of the safety case regime in prevention of major incidents. Comment included that this definition would increase the time, resourcing, work and cost of preparing and assessing the safety case.

Following the significant concerns raised in the public comment process the definition of 'major incident' has been revised to link back to those major incidents involving or potentially involving Schedule 15 chemicals.

Mandatory security plans

Comments included that:

- the proposed requirement for a security plan was an overlap with the Attorney-General's Department work on the Chemical Security Management Framework
- the proposed requirement for a formal security plan is an additional burden on MHF operators, as much work is required to gather existing material developed under corporate security requirements into the mandated format for little additional benefit, and
- the ACCI strongly opposed the mandated security plan.

Following concerns raised in the public comment process the regulations were redrafted with all requirements for a mandatory security plan removed.

Simplification of the authorisation process

- The draft model WHS Regulations released for public comment included a three-stage authorisation process comprising notification, registration and licensing. This process, based on the Victorian regulation model, was criticised as a large regulatory burden and cumbersome for smaller jurisdictions.

In an effort to simplify the administrative processes, the notification, registration and licensing approach has been modified and all references to registration of MHFs have been removed from the regulations. Upon notification regulators must now make a determination of what is and what is not a MHF. Operators of those facilities that are determined to be a MHF must implement risk control measures upon determination. The removal of registration processes has simplified the administrative requirements for both operators and regulators and thereby reduced the potential cost impact on businesses.

Mandatory classification of MHFs (over 100 per cent threshold quantities)

Concerns were received from both the WA regulator and industry that adherence to the draft MHF regulations could lead to a five-fold increase in classified sites in WA (up from the current two dozen) as the regulations did not include a discretionary power in classifying a facility. This is because WA has only adopted the National Standard into regulations and applied it to the top 23 large petrochemical facilities in the state and, uniquely in Australia, retained a dangerous goods licensing regime for its lower-end MHFs. The WA regulator considers that the safety case regime is only suitable for such complex facilities. Other regulators regard a strict adherence to the quantum of the hazard as necessary and do not consider that other factors should be taken into account.

Safe Work Australia considered this issue and the majority decision was that no discretion be included in the model WHS Regulations because such discretion would potentially introduce considerations beyond the hazard posed by the facility and introduce an element of lack of harmonisation, as each regulator makes such determinations for each MHF even though the hazard may be similar. This is consistent with the approach taken in the majority of jurisdictions in their existing MHF regulations.

Flexibility in the licence period

- Concerns were raised by both regulators and industry over the proposed mandatory five-year licence period, stating that there should be some flexibility provided here to alter the licence period.

The regulator will now be able to nominate the expiry date of a MHF's licence to a period of not more than five years in duration.

In conclusion, the revised model WHS Regulations for MHFs:

- require the operator of a facility or proposed facility at which specified quantities of Schedule 15 chemicals are present to notify the regulator
- impose safety duties upon operators of a determined MHF during the determination period about preparation of safety case outlines, hazard identification and risk control, emergency plans, safety management systems, consultation with workers and determination of a safety role for workers
- require MHFs to be licensed, other than in the determination period
- impose complementary duties upon operators of a licensed MHF about safety case outlines, hazard identification and risk control, emergency plans and safety management systems
- impose additional duties to provide information to visitors and the local community

- impose duties upon workers at licensed MHFs, and
- include definitions in Chapter 1 of the model WHS Regulations relevant to MHFs, including *facility*, *major hazard facility*, *major hazard facility licence*, *Schedule 15 chemical* and *threshold quantity*.

Overview of impacts

The model WHS Regulations for MHFs now closely reflect the requirements of the National Standard and the regulations already implemented in the majority of jurisdictions.

Seven out of the nine jurisdictions currently have MHF regulations in place that are based on the National Standard. Of the remaining jurisdictions, the ACT does not have any MHFs and SA was in the process of preparing MHF regulations and preparing industry for their eventual implementation.

The level of impact of implementing model WHS Regulations for MHFs was therefore considered to be low in the states that have implemented the National Standard, considering that there have been minimal changes to the approach of the current National Standard included in the draft model WHS Regulations. The regulations have the most impact in SA which will have MHF regulations for the first time. The regulator has been preparing heavy industry for this for a number of years now in anticipation of implementation. In the NT there is a change in administrative processes but relatively little change for businesses in terms of compliance but a cost for licensing.

The National Standard does not describe a licensing process but the majority of jurisdictions do have some authorisation process (either licensing, registration or classification) with similar administrative processes required. For example, WA requires a small number of facilities to be licensed as an MHF and the rest are subject to dangerous goods licensing requirements. Northern Territory and SA would be the only jurisdictions where the proposed process would be a significant change, since there are currently no regulations implementing the national standard in SA and the model WHS Regulations are more complex than current arrangements in the NT.

The draft model WHS Regulations for MHFs would therefore mean changes in licensing arrangements for MHFs in some jurisdictions and new provisions for others. This would create a standardised licensing approach for businesses.

On this basis, implementation of Chapter 9 of the model WHS Regulations should not be classed as a significant change, except for in SA.

The Economic Impact Assessment conducted for the National Standard for the Control of Major Hazard Facilities found that on average the additional costs arising from implementing the National Standard would be 11.4 per cent of current expenditure, with current expenditure being what is typically spent to meet with legislative requirements or international best practice. For individual facilities this ranged from $49 000 to $1 151 000 depending on the nature and complexity of the facility. South Australia has advised that they expect to have up to 17 MHFs after commencement of the legislation. If the cost estimates above are assumed, the total cost estimate for SA will therefore range between about $850 000 and $19.5 million.

While annual fees will depend on the nature and complexity of the MHF, SA and the NT have yet to set their cost recovery fee structures for MHFs. If annual licence fees or assessment charges from other jurisdictions are considered as a broad indicator of possible licence fees for SA and the NT, then the total cost of annual fees could be about $0.5 million for SA and about $0.25 million for the NT.[2]

Western Australia and Queensland currently have a discretionary power in classifying MHFs above 100 per cent threshold but this power is not utilised in Queensland. No discretion has been included in the model WHS Regulations since other regulators consider that licensing should be based on the quantities of chemicals (i.e. the quantum of the hazard), not on other considerations determined on a case-by-case basis by the regulator.

Western Australia advised early in the policy process that strict adherence to the model WHS Regulations would increase the number of facilities classified as MHFs within that state from 23 to 150. The increase will largely be due to the inclusion of mines under the regime. These are currently regulated in WA under a dangerous goods licensing regime. Western Australia argue that as most of these are remotely located away from population centres, the potential impact of a major incident would be lower than facilities located near population centres and does not warrant the cost of applying the MHF requirements to these facilities.

Western Australia have indicated that it does not intend to adopt this aspect of the model WHS Regulations and to continue licensing facilities that in other states would be MHFs as dangerous goods licensed facilities, and not require a safety case for these. This will result in WA having differing regulatory requirements than all other jurisdictions and will therefore result in no additional costs for implementing these regulations in WA. The harmonisation benefits will be potentially reduced for multi-jurisdiction businesses operating in WA.

These overall costs of additional regulations for MHFs are considered relatively minor in comparison to the potentially devastating consequences of a major incident. For example the 1998 incident at the Esso gas facility in Longford, Victoria resulted in two fatalities, injuries to eight people and more than $2 billion in costs. Applying the safety case regime in the model WHS Regulations to facilities in SA will have a significant risk reduction impact. In 1995 South Korea introduced MHF legislation that, like Australia's National Standard, is based on the European Seveso Directive. Kwon (2005)[3] showed that in the seven years following these reforms injuries in South Korean MHF sites diminished by 58 per cent, fatalities by 62 per cent and near misses by 82 per cent.

There is no anticipated impact on small businesses and not for profit organisations as they do not operate in this regulatory space.

[2] An average licence fee of $30 000 is used for illustrative purposes. There are currently eight MHFs in the NT, with potentially another eight to come on line in the future. For the total costs considered, these additional facilities have not been taken into account.

[3] Kwon HM (2005) "The effectiveness of process safety management regulation for the chemical industry in Korea". *Journal of Loss Prevention in the Process Industries*, 19:13-16

6.12 Matters not covered elsewhere

6.12.1 Administration - fees and charges

Most regulators currently set fees and charges under their work health and safety laws on a full cost recovery basis and this is expected to continue. For example Victoria sets its fees and charges on the basis of full cost recovery as of 2007 and expects those fees will remain the same or at similar levels.

Monetary amounts for fees and charges are not prescribed under the model work health and safety legislation. The intention is for things like licensing fees to be set individually by each jurisdiction, consistent with the principles above. The long-term objective however is to harmonise licence fees.

Fees and charges associated with the issue of high risk work licences are not expected to change. Some concerns have been expressed that licence holders may be motivated to 'shop' between jurisdictions to find the cheapest licence. This should not be the case under the new regulations.

The basis for fee-setting is not expected to change under harmonisation. There are changes for some jurisdictions in the number and types of activities, subject to fees and charges. In addition, jurisdictions may need to revise their administrative processes to align with the requirements of the new regulations. Jurisdictions may choose to reflect these costs in setting administrative fees for these matters.

Deloitte Access Economics consulted with regulators on fees and charges as part of finalising the Decision RIS. Only one jurisdiction—Victoria—provided quantitative information.

For the purposes of this analysis only fees and charges that are expected to change as a result of the introduction of the new laws were considered.

If jurisdictions opt to increase fees and charges by the CPI when they introduce the work health and safety laws, that increase would not be considered to have been brought about by harmonisation.

Conversely however if the model work health and safety laws required additional and more costly steps to be taken to process an application, a consequential increase in fees and charges would be attributed to harmonisation.

The only new charge for every jurisdiction except the ACT relates to asbestos assessor licences. Victoria estimates under full cost recovery these licences will cost the regulator $256 to issue. Other regulators could be expected to incur similar costs. Victoria anticipates around 150 applications, amounting to total costs of around $38 358. Safe Work Australia considers this may be an overestimate due to the estimated amount of friable asbestos removal work currently being undertaken in Australia (see section 6.12).

As Victoria accounts for around a quarter of the nation's workforce, this new class of fees could be expected to cost applicants around $153 433 cumulatively.

Business costs are based on the survey, public consultations and submissions while benefits are solely based on the survey. 'BCR' is the ratio of costs to benefits.

Table 6.2: Cost recovery fees for asbestos assessor licenses

	Task	Time (minutes)	Hourly labour rate
1	Administrative work: reallocating files, checking completeness of application etc.	30	$47.57
2	Reviewing training and/or qualification (subject to final version of model WHS Regulations)	24.375	$47.57
3	Check that they don't hold equivalent licence by corresponding regulator	30	$47.57
4	Review evidence that the applicant is familiar with relevant asbestos industry practice	161.25	$47.57
5	Complete assessment forms	20	$47.57
6	Sign off by Unit Manager	10	$53.45
	TOTAL		$219.50
7	Oncost figure of 16.5%		$36.22
	TOTAL COST		$255.72

Source: Worksafe Victoria. Hourly wage rates are for WorkSafe Victoria. Note last three lines were not supplied by Worksafe Victoria and are Deloitte Access Economics estimates.

The table below lists the items that allow for the setting of a relevant fee.

Subject	Jurisdictions
High Risk Work Licence	The regulations allow for a fee for new applications and renewal applications Reach stackers are a new category and the non-mobile concrete placing boom category has been extended and will attract a new fee in jurisdictions. All other licences are as per the national occupational licensing scheme and are not new to jurisdictions.
High Risk Work Licence Assessors	The regulations allow for a fee for new applications and renewal applications. The fees will replace those under current arrangements in jurisdictions.
Plant	The regulations allow for a fee for plant design registration, plant item registration and plant item registration renewal. Plant item registration will result in a new fee structure for the ACT as it aligns its existing requirements with the proposed model regulations. Registration for concrete placing booms, self-erecting cranes and pre-fabricated formwork will be new fees. Otherwise, the fees will replace those under current arrangements in jurisdictions.
General Construction Induction cards	The regulations allow for an application fee and a fee for the issue of a replacement card. These fees will replace those charged under the various existing arrangements in jurisdictions for the issue of these cards.
Asbestos removal and assessor licences	The regulations allow for a fee for new applications and renewal applications. The removal fees will replace those under the various existing arrangements in jurisdictions. The assessor fees will be a new fee in all jurisdictions except the ACT.
MHF Licensing	The regulations allow for a fee for new applications, renewal applications, a licence transfer fee and a licence cancellation fee. For most jurisdictions the fees will replace those under current arrangements in jurisdictions. The fees will be new for SA and likely to significantly increase over those currently applied in the NT.

6.12.2 Emergency services exclusions

Emergency service workers like all other workers are covered by the protections under the model WHS Act and model WHS Regulations. The regulations recognise however that it may not always be possible to comply with certain notification requirements and requirements for certain things to be documented in emergency situations.

Safe Work Australia agreed that certain notification requirements and requirements for certain things to be documented should be qualified to accommodate emergency situations. This means for example that certain high risk demolition work would still need to be notified in an emergency situation but only as soon as possible, which could be after the demolition occurred. Certain documentation requirements, including requirements for confined spaces entry permits, do not apply in emergency situations.

It is important to recognise however that all other health and safety duties would apply in emergency situations.

6.12.3 Clothing factory registration

New South Wales currently administers a clothing factory registration scheme under its work health and safety laws. Other jurisdictions do not have comparable schemes.

The purpose of the NSW scheme is to facilitate compliance and enforcement activities by ensuring that the regulator knows where these kinds of workplaces are located.

WorkCover NSW advises that:

- there is no discernible difference in the incidence of injury or illness in registered factories compared with the industry average. It is difficult to justify maintaining a registration regime that only applies to one part of the manufacturing industry in one jurisdiction
- an intervention project undertaken jointly by WorkCover NSW and the NSW Office of Industrial Relations in 2006 found that only 37 per cent of clothing factories were registered, limiting the value of the register for enforcement purposes
- in 2008 WorkCover NSW estimated that it would require approximately $378 000 to fund a three-year registration compliance program. As WorkCover NSW no longer uses the strategies that rely on the register there is an argument that these costs are only offset by limited benefits for NSW, and
- there is evidence that the register duplicates the requirements of the Ethical Clothing Trades Extended Responsibility Scheme established under the *Industrial Relations (Ethical Clothing Trades) Act 2001* (NSW). Under that scheme retailers must supply the NSW Office of Industrial Relations with details of their suppliers and manufacturers every six months. The scheme also ensures that the relevant union is provided with this information.

WorkCover NSW advises that its compliance and enforcement policies have shifted since 2001 to become more compatible with the performance-based nature of work health and safety duties in NSW. WorkCover NSW's current policy seeks to engage employers in a partnership to improve workplace safety standards and focuses on providing education, information and assistance.

There is insufficient evidence that special circumstances exist in NSW clothing factories that are not found in other comparable workplaces. WorkCover NSW has not highlighted any particular issues in terms of injury or illness experience that differentiate these clothing factories from other manufacturing workplaces. This means there is little support for an enforcement strategy based on a registration scheme similar to the NSW scheme.

The Textile Clothing and Footwear Union of Australia and Fairwear have strongly criticised the proposed removal of the NSW scheme as detrimental to work health and safety outcomes.

It is considered that the regulatory costs of a national registration scheme based on the current NSW model would exceed any offsetting benefits based on the NSW experience.

Deloitte Access Economics considers that any national registration scheme would have nil or minimal safety benefits on the basis of WorkCover NSW reports that registered factories are not measurably safer than the industry average. Any cost changes under harmonisation would also be minimal because the proposed reform would only affect one part of an industry. In its view any reform in this area should be considered neutral in cost benefit terms.

Safe Work Australia considers that a national registration scheme for clothing factories should not be part of the harmonised laws. That is because the requirement does not meet the requirements of the Inter-Governmental Agreement.

6.12.4 Driver fatigue regulations

The road transport industry typically ranks in the top six most dangerous occupations around the world and has been identified as a priority industry under the National OHS Strategy 2002–2012.

In Australia, the EU and North America road transport accounts for the largest number of work-related fatal injuries and multiple fatality injuries of any industry. In 2006–07 the transport and storage industry reported the highest number of fatalities of any industry in Australia, with 74 of a total 295 work-related fatalities across all industries and a fatality incidence rate of 15.7 per 100 000 workers. This is compared to an all-industries incidence rate of 2.8.

Fatigue is considered one of the main causes of crashes involving heavy vehicle drivers. While fatigue is recognised as a cause of accidents across a number of industries, the nature of road transport work means that the link between fatigue and health and safety risks is particularly pronounced. The driving task demands continuous concentration over an extended period of time and tedium and may result in immediate consequences in the event of lapses. Consequences are also usually high impact and serious as fatigue-related road accidents usually involve impact without braking.

Transport authorities are currently developing integrated strategies to most effectively provide work health and safety protections for the transport industry.

The model WHS Act and model WHS Regulations are not industry-specific and have been designed to cover all industries including the transport industry.

Safe Work Australia intends to work closely with transport authorities on more targeted strategies to protect drivers from risks arising from fatigue. In the short term this may include the development of material for a model Code of Practice on fatigue.

6.12.5 Not for profit organisations

Several public comment submissions expressed concerns about the application of the model work health and safety laws to not for profit organisations.

It should be noted that there are a wide range of not for profit organisations ranging from social clubs to charities and large organisations, with all the outward attributes of commercial businesses.

The proposed harmonised work health and safety laws will provide greater national consistency in this area, protect volunteers in their capacity as workers and contain safeguards to ensure that voluntary participation in community-based activities is not discouraged.

The model WHS Act and model WHS Regulations apply to persons conducting a business undertaking and their workers, whether paid or not. 'Volunteer associations' (as defined) that are not employers are not covered by the model WHS Act and model WHS Regulations.

Organisations that have both volunteers and paid employees will not be classified as 'volunteer associations'. Volunteers in such organisations will need to be afforded the same occupational health and safety rights and responsibilities as paid employees.

In effect, the reforms draw a line between volunteers and employees based on the form of the organisation, capturing organisations that have paid employees as well as volunteers. Alternatively, responsibilities could have been based on the activity the volunteer performs. Consequently, the impacts on organisations of the reform may be quite different even though they perform similar activities, simply because one may employ one person and another is fully staffed by volunteers.

From another perspective, the reforms will result in a 'level playing field' between employees and volunteers. It is difficult to conclude whether such equivalent treatment may be appropriate or not. Volunteers can be quite different within an organisation; for example, they are often like clients with limited access to major parts of an organisation, or can be deliberate risk takers, such as those involved in activities such as leading scouts.

In regard to the impacts of the reform, there are essentially two ways that jurisdictions currently treat volunteers. In the Commonwealth, NSW, Victoria, WA, SA and Tasmania volunteers are treated as persons other than employees and which the employer must ensure are reasonably provided with protection against risks to health and safety, whereas in Queensland, NT and ACT volunteers are effectively treated as employees.

Consequently there should be only minimal impacts from the reforms for those not for profit organisations with both paid and voluntary staff in Queensland, NT and the ACT. Not for profit organisations with both paid and voluntary staff in the Commonwealth, NSW, Victoria, WA, SA and Tasmania will face some additional compliance costs as a result of having to treat volunteers as employees. This is not likely to be a significant

impost in regard to general provisions, such as requirements to provide an environment free of risks and safe equipment, given that such organisations currently have a general duty of care for volunteers as they do for other people that are not employees, and given that such organisations are required to provide these to their paid employees.

There is likely to be relatively large compliance impacts regarding the application of requirements concerning representation, participation and training for volunteer staff. This will place new requirements for not for profit organisations with both paid and volunteer staff in the Commonwealth, NSW, Victoria, WA, SA and Tasmania. Typically, most of the large organisations that have volunteers also have paid employees but it is those with only a few employees yet a large number of volunteers where the impact will be of most concern.

In preparing model work health and safety laws all parties were mindful of the volunteers and volunteer organisations to ensure that model work health and safety laws would not place inappropriate duties on them.

The model WHS Act accommodates volunteers and organisations staffed by volunteers in several ways. For example the model WHS Act provides that volunteers including volunteer directors cannot be prosecuted under the model work health and safety laws unless they fail to take reasonable care for their own health and safety. They must ensure that their actions do not adversely affect the health and safety of other workers or persons and must comply with a reasonable instruction of a PCBU that affects work health or safety.

The application of the regulations to not for profit organisations that only have paid employees will have impacts of a similar nature and level of impact as for other businesses that operate in the same industry sectors. Similar to other businesses, the level of impact will vary across jurisdictions depending on the extent of change in those jurisdictions from their current regulations. While not for profit organisations operate across a wide range of sectors in Australia, they tend not to operate to any great extent in industry sectors such as construction, nor do they tend to operate MHFs, therefore it is not anticipated there will be an impact from the model WHS Regulations relating to these areas of work.

6.12.6 Abrasive blasting

Abrasive blasting is a process that prepares surfaces for other treatments like painting by removing surface contamination such as rust, scale, paint, graffiti or mildew. It is commonly used in shipyards, refineries, automobile industries and on structures. Abrasive material is propelled onto the surface at high speed using air pressure, water pressure or centrifugal force. Blasting can occur in an enclosed space like a cabinet or chamber or in temporary enclosures erected around outdoor sites.

The main hazards associated with abrasive blasting arise from the dust created by the abrasive or surface debris, the chemicals added to water in wet blasting, noise of the equipment, the physical forces of air or water jets and from the blasting plant and equipment.

Incidents caused by abrasive blasting are difficult to quantify because it may be difficult to determine what caused particular injuries.

Six jurisdictions (the Commonwealth, NSW, Queensland, NT, SA and WA) already have either regulations or Codes of Practice on abrasive blasting. *AS 1627.4–2005 Metal Finishing – Preparation and Pre Treatment of Surfaces – Abrasive Blast Cleaning of Steel* establishes an industry standard for the abrasive blast-cleaning of steel. Appendix C of that document sets out safety considerations. It also cross-references *AS 4361.1 Guide to lead paint management – Industrial Applications* which deals with environmental issues relating to containment of debris and to other Australian Standards relating to PPE and air quality. For those jurisdictions without Codes of Practice or regulations these kinds of hazards are generally regulated under hazard-specific regulations including noise, chemicals/dust and confined spaces. The use of blast chambers and ventilation is already covered by the general work health and safety duties so regulatory impact is considered to be minimal.

The draft model WHS Regulations for abrasive blasting released for public comment set out work health and safety requirements for carrying out abrasive blasting including:

- a requirement that, so far as is reasonably practicable, abrasive blasting be carried out using a blasting cabinet or chamber
- if that is not reasonably practicable, alternative control measures to protect workers and others at the workplace from risks arising from abrasive blasting
- requirements for controlling risks associated with ventilation, residue and waste material, and
- requirements for the provision of washing and decontamination facilities.

Public comment included:

- that the proposed requirements increase regulatory impact as for example there are currently no equivalent requirements in Queensland, and
- strong support for the proposed requirements to be moved to a model Code of Practice.

Most jurisdictions currently cover abrasive blasting requirements in Codes of Practice.

Based on public comment it is proposed that Part 4.6 – Abrasive Blasting be omitted from the model WHS Regulations. No change is proposed to restricted blast media provisions. The intention is for guidance on abrasive blasting to be provided in a model Code of Practice.

6.12.7 Mining

Draft model WHS Regulations on mining have been released separately for public comment. The intention is for mining regulations to be included in the package of model WHS Regulations.

These regulations are being jointly progressed by Safe Work Australia and the National Mine Safety Framework (NMSF).

In addition to the model WHS Regulations on mining the NMSF is also developing supporting model Codes of Practice that will provide further practical guidance to duty holders about how work health and safety standards should be met.

At the time the Consultation RIS for the harmonisation of work health and safety regulations and Codes of Practice were released in January 2011 the draft model WHS Regulations on mining were still under development. The draft model WHS Regulations on mining are subject to a separate RIS process.

6.12.8 Notifications

The Issues Paper released for public comment together with the draft model WHS Regulations identified the key proposed notification requirements under the regulations. That paper provided some background information about the purpose of proposed notification requirements.

In summary proposed notification requirements fall into the following broad categories

- notification of certain high risk activities
- self-reporting on compliance issues (e.g. annual notification of maintenance on and safety of certain plant), and
- notification of prescribed incidents (e.g. the most serious adverse results from health monitoring required under the Regulations).

These kinds of notification requirements are included in many current work health and safety laws and typically form part of regulators' compliance initiatives.

More detailed analyses of current requirements and regulatory impact of proposed changes are provided throughout this RIS as appropriate, although further discussion on notification requirements for certain high risk work is provided below.

Notification requirements for certain high risk work

Notification requirements are proposed in relation to a small number of cases involving high risk work that is of short duration but involves significant risk (e.g. high risk demolition work and certain asbestos removal work).

Careful consideration has been given to ensuring that notification requirements are only proposed in circumstances where there is an associated identifiable net benefit.

Notification enables regulators to understand what relevant work is occurring and where appropriate organise workplace visits by inspectors while work is in progress, enabling targeted enforcement rather than reactive inspections after an incident. This may have a compliance cost for hosting inspections but this would be no more than businesses would normally expect from a work health and safety regulator.

Notification will require forward planning by duty holders and provide a clear trigger for meeting work health and safety requirements. Notification requirements are expected to have a benefit by playing an important role in raising and maintaining awareness levels of risks throughout the relevant industry sector and in signalling regulators' views about safe work practices. It is anticipated that this positive obligation to notify planned activities will assist organisations to continuously improve their management of risk and over time lead to improvements in safety and consequent reduction in injury.

Notification requirements for prescribed high risk work could reasonably be expected to have a higher regulatory impact on smaller businesses and undertakings relative to

larger businesses and undertakings. That is because smaller businesses and undertakings may have less sophisticated administrative systems in place to comply with these kinds of requirements.

Nil or minimal regulatory impact may reasonably be expected in relation to the not for profit sector as this sector is not usually involved in high risk work covered by notification requirements.

Other notification requirements

The rationale for other notification requirements is provided in more detail in the relevant part(s) of this chapter.

6.12.9 Record keeping

The Issues Paper released for public comment together with the draft model WHS Regulations identified the key proposed record-keeping requirements under the regulations. That paper provided some background information about the purpose of the proposed requirements.

Records are the means by which duty holders can demonstrate compliance with their duties and obligations under the model WHS Act and model WHS Regulations. Records can be used to assist duty holders to implement and maintain risk control measures and provide useful information when it comes to reviewing work health and safety performance.

There are legal obligations to keep and maintain some work health and safety-related records for specific periods. These record-keeping requirements currently vary across jurisdictions. They may cover for example, specific record-keeping requirements for risk assessments, risk controls, work health and safety training, and in relation to monitoring workers' health. Some regulations also place record-keeping requirements on upstream duty holders such as designers and manufacturers.

Safe Work Australia has examined opportunities to reduce red tape by removing record-keeping requirements where there is no demonstrated net regulatory benefit. Consideration has also been given to the retention period required for certain records.

Safe Work Australia considers that proposed record-keeping requirements are necessary to ensure health and safety outcomes or to allow others to discharge their duties. These records will also assist regulators to monitor compliance.

More detailed analysis is included on these issues on a case-by-case basis in this chapter.

Specific records—to ensure the health and safety of persons

Regulatory proposals requiring the recording or transmission of information are considered appropriate in order to facilitate the discharge of duties by others. This category of records includes risk assessments, SWMS and control or management plans, however described.

These kinds of records are only required in relation to work involving particularly high risk activities including construction work, energised electrical work, work in confined

spaces and diving work. Preparing these kinds of records is considered to be an integral part of managing risks associated with this kind of work and is strongly supported for that reason.

Careful consideration has been given to determining an appropriate retention period for these records.

Because these records are designed for managing risks 'on the ground' it is essential they be kept and made available to relevant workers for the duration of the relevant work. Subject to the qualifications below, this means that these kinds of records will only be required to be kept for as long as they are relevant. There may be a resulting decrease in regulatory impact in this respect in some jurisdictions.

In relation to risk assessments (where expressly required), it is proposed that they be kept for at least 28 days after the work subject to the assessment is completed. This is to ensure that this information is available for inspection under the model WHS Act for an appropriate period after the work is carried out.

It is also proposed that, if a 'notifiable incident' (as defined) arises out of the work subject to these kinds of records, that the relevant record(s) be kept for at least two years after the 'notifiable incident' occurred. This two-year record-keeping requirement is proposed to ensure that all relevant information relating to 'notifiable incidents' is kept and available to investigators upon request for an appropriate period of time. This requirement would only be expected to apply in a small proportion of cases where a 'notifiable incident' arises out of the relevant work.

The Victorian RIS 2007 estimated the total cost of the whole work health and safety regulatory package on an annual basis (annualised over a 10-year period) is estimated to be:

- $819 per year for a typical business not affected by new obligations (3.9 per cent relates to record keeping)
- $911 per year for typical businesses affected by the additional regulatory obligations related to construction, hazardous substances and high risk work (3.5 per cent relates to record keeping), and
- $1111 per year for newly complying businesses (2.9 per cent relates to record keeping).

On average it will cost $31.80 per business for additional record keeping. This provides the total for all record-keeping requirements, therefore the changes in record keeping associated with notifiable incidents are expected to be minimal.

Specific records—risk assessments

Risk assessments are commonly carried out in all kinds of workplaces. As a general principle risk assessments and associated record-keeping requirements have not been included in the model WHS Regulations except where the complexity of the hazard is such that appropriate decisions about control are not likely to be made without conducting a systematic analysis, for example energised electrical work, work in confined spaces and diving work.

This may decrease the regulatory burden on duty holders in most jurisdictions. Benefits would apply equally to businesses operating within a jurisdiction or between two or more jurisdictions.

Additionally this policy shift transfers the emphasis on process (i.e. of assessing risks) to outcomes—that is actually controlling risks—which could reasonably be expected to improve safety outcomes.

Removal of prescriptive risk assessment requirements on common hazards such as manual handling may equate to significant compliance savings for duty holders in most jurisdictions and may represent a significant reduction in the total administrative burden for business. Removal of prescription in this area is expected to involve a considerable change in nearly all jurisdictions other than Victoria, which already regulates in the manner proposed.

Figures about expected cost savings in this area may be extrapolated from the Victorian RIS 2007.

Specific records—long retention periods

It is proposed that long record retention periods (e.g. 40 years for health monitoring records relating to asbestos) be restricted to records related to health surveillance and exposure levels where long latency periods exist for the onset of disease. Such records not only provide information for workers but also benefit the community by making important contextual medical information available and increasing knowledge of certain diseases.

Regulatory impact—summary

Varied approaches are currently taken to record-keeping requirements, including retention periods, between jurisdictions and even within current work health and safety Acts and regulations. Some inconsistency may be attributed to the National Standards and Codes of Practice upon which many current laws are based. As these National Standards and Codes of Practice were developed independently at different points in time it is apparent that different approaches were taken to record-keeping requirements for different hazards.

Overall a net regulatory benefit may be expected, resulting from the rationalisation of record-keeping requirements under the model WHS Regulations, particularly for multi-state businesses.

Net regulatory benefits on small businesses are expected to be different based on anecdotal evidence from public comment. For example the Ai Group comments that multi-state organisations obviously view more clearly the advantages of inter-jurisdictional consistency, while single-state organisations view the process from the perspective of one set of regulations being replaced by a new set of regulations, with the net regulatory burden not offset by the benefits of national consistency.

More detailed analysis on proposed impacts is dealt with elsewhere in this chapter.

7 National impact analysis

The model WHS Regulations were discussed in detail in Chapter 6, including the jurisdictional impacts, both in terms of expected costs and expected benefits. Much of the discussion in Chapter 6 was qualitative in nature. This chapter aims to provide an analysis of the quantitative impacts from a national perspective. Given the nature of the exercise undertaken, exact numbers should be viewed as indicative only and greater weight should be given to the general direction that the numbers suggest is the likely outcome from these reforms.

From an international perspective Australia's work-related fatality rates are above some of the best performing countries. In recent years Australia's incident rates have generally decreased at a greater rate than the incident rates of the best performing countries. More importantly the trend in lower incident rates is evident across all jurisdictions in Australia. Nevertheless, differences in incident rates remain between jurisdictions and industries and Australia aspires to even better health and safety outcomes.

As a small and open economy there is a need for the most efficient work and safety regulations to be considered and implemented at the national level. The need for the Australian economy to remain internationally competitive means that reform should be realised in a least cost manner. Nationally the benefits will be realised by changes that maximise health and safety outcomes while delivering good business practices and community outcomes, better regulation and increased productivity. For example, the proposed national regulation for licensing of high risk work including the operation of crane and forklifts has the potential to increase labour mobility between jurisdictions.

The decision to harmonise work and safety regulations will mean Australia will no longer benefit from competitive federalism where regulatory improvements were driven by competition and innovation between the jurisdictions. COAG has recognised that this benefit only occurs with less than optimal national work and safety regulations and can lead to poorer work and safety outcomes than is desired.

Existing jurisdictional work and safety regulations are broadly similar in design and intent. This in general may mean there is a broadly similar impact on business and the wider community across jurisdictions. It is often difficult to identify the jurisdictional regulations that could maximise health and safety outcomes across all jurisdictions while at the same time minimise compliance and implementation costs. These similarities drive down the overall net benefit as transitional costs are not as easily offset, at least in the short term, given the strong current work and safety performance of all jurisdictions in Australia.

Given the similarities of the existing jurisdictional regulatory approaches, most of the model WHS Regulations are primarily harmonisation in nature. Hence, they are expected to deliver lower compliance costs, especially for businesses that operate across jurisdictions, and minimise regulators' costs while maintaining high standards of work and safety. For example, the proposed model WHS Regulation for hazardous atmospheres is consistent with existing requirements in regulations and Codes of Practice in all jurisdictions. It is expected that there will be no significant impact of the regulation on business practices and that there may be improvement in certainty for

businesses operating in multiple jurisdictions, that are likely to have compliance cost benefits. By their nature, businesses operating across multiple jurisdictions are generally going to be considered big business.

From a small business perspective some of the model WHS Regulations may be seen as a significant burden. For example, in terms of first aid, having trained first aiders and providing facilities on site or alternative access to these will increase costs to small businesses. This is widely expected to occur in NSW, where currently small businesses under 25 employees are exempt. In another example the Victorian regulator has noted its concerns with the proposed requirement for small businesses to implement an emergency evacuation plan. It has stated that the impact is likely to be significant, with preliminary estimates of there being at least 150 000 small businesses in Victoria without an emergency evacuation plan.

In addition for businesses, big or small, that primarily operate in one jurisdiction there may be transitional costs from changing to different regulations. For example, the model WHS Regulations for RCDs propose the requirement for RCDs to be installed in hostile operating environments. As this is not the current practice in Victoria, Tasmania and the ACT, this has the potential to be a significant cost to businesses operating in these jurisdictions, notwithstanding that some businesses may already have RCDs operating on their premises. Also, in SA significant implementation costs are expected of up to $20 million with respect to the proposed regulations on MHFs.

Based on the analysis in Chapter 6, while harmonisation is expected to produce overall net benefits in the long run, given the current jurisdictional regulatory environment there will be varied impacts across business sectors resulting from some of the proposed reforms. This applies at the jurisdictional level and also for specific groups such as small business.

However, it should be kept in perspective that while some of the type of harmonisation and reform model WHS Regulations will result in clear “winners” and “losers”, especially for small businesses, the expected aggregate benefits in terms of lower administrative burden and regulatory duplication, improved efficiency and improved work and safety outcomes are greater than the considerable costs of implementing the model WHS Regulations.

There are also some proposed regulations that are more than harmonising in the sense that they propose new requirements across jurisdictions and are seen as reform in nature. The model WHS Regulations for asbestos will provide for the first time in Australia a consistent framework for the management of asbestos materials in workplaces, the removal of asbestos and the licensing and competencies for asbestos removalists and assessors. These reforms are estimated to cost about $14 million to implement. They will deliver substantial benefits in the long run in terms of reduced risk and exposure to asbestos in the workplace.

7.1 Approach to assessing the national impacts

This chapter analyses the expected costs and benefits of the proposed work health and safety reforms for corporate and small firms, workers and governments. Numeric

results in this chapter are based primarily on survey responses and responses from public consultations and submissions.

CBA is difficult to undertake for work health and safety. This is particularly the case when estimating the prospective benefits from improved safety outcomes as it is often difficult to link changes in safety outcomes with changes in regulatory regimes. For example, fatalities have a low probability of occurring but a major incident can have a significant impact on the reported safety outcomes or measures. There has been a trend decline in work health and safety related fatalities and serious injuries reported in Australia in recent years (see Appendix A). It is difficult to estimate to what extent incremental safety benefits can be realised in light of the change in regulation.

In the absence of a clear change in injury trends that occurs following a change in regulation, it is hard to estimate the impact of regulation even retrospectively due to the multiplicity of factors that also influence outcomes, including the quality of data. Despite the CBA uncertainties and sensitivities, the consultation process involved in this Decision RIS has enabled qualitative estimation of the impacts of changes, together with detailed responses from over 70 firms that are sufficiently well placed to quantitatively estimate regulatory impacts.

The impacts from the change in regulation are mainly from harmonisation. As described in Chapter 6 there are some one-off implementation costs that largely impact on businesses and regulators. There are also expected benefits that are largely due to cost savings associated with the reduction in the administrative burden for businesses and the avoidance of regulatory duplication for governments. The main expected benefits are:

- potential safety improvements as generally harmonisation is being achieved by moving to existing jurisdictional requirements with higher levels of safety
- the avoidance of regulatory duplication for governments, and
- reduction in compliance costs for multi-state businesses with potential improvements in productivity.

Firms that only operate in one jurisdiction are expected to benefit from improved safety as workplace incidents that involve production disruptions—including absenteeism, search and replacement costs for injured workers, and other employer costs—are expected to decrease. These benefits need to be balanced against any additional costs of understanding and complying with new harmonised regulations and Codes of Practice.

For firms operating across multiple jurisdictions, the reduction in current duplication costs needs to be weighed against the expected one-off implementation costs and ongoing costs of compliance.

For governments there is the potential benefit of a reduction in administrative costs (red tape) in moving from nine to one set of regulations. This needs to be measured against the additional costs in the short term, as mentioned above, of changing regulations to the harmonised model.

This chapter estimates the costs and benefits of harmonising work health and safety laws. The *qualitative* impact analysis and survey responses are used when appropriate, noting that the survey results are complementary analysis which indicate

that benefits are greater than costs. The *quantitative* results derived from the survey in this chapter are mainly used to support the qualitative results obtained from public consultations and submissions. While monetary values are derived in the form of NPV and an appropriate sensitivity analysis is undertaken, these results should be treated with some caution given the uncertainties associated with estimating changes in work health and safety benefits.

The online survey was a key element of the quantitative information. In theory, with a true random selection, 30 survey responses are sufficient to estimate population means. However, this survey was not necessarily random[4] and the low response rate further compounds selection issues. Therefore, while the response size may be used to infer national averages, it cannot be reliably used to infer separable stratification by jurisdiction, organisation size or industry.

Survey participants were asked to rank both costs and benefits on a scale of zero (no change), one (minor) and two (significant). These rankings have then been assigned dollar values (see Appendix E).

In general the findings in this Decision RIS are consistent with the findings of the Decision RIS for the model WHS Act which indicated that:

- in terms of reducing compliance costs for businesses, the model WHS Act could reduce compliance costs for businesses and have benefits of around $179 million per annum
- while dealing with multiple work health and safety regimes does impose significant costs on a number of businesses, only a small proportion of businesses are affected
- the costs to multi-state businesses of introducing the model WHS Act were unlikely to be greater than the costs of ongoing changes under disparate jurisdictional regimes were the model WHS Act not to be introduced
- for single-state businesses, most jurisdiction specific changes were considered cost-neutral or cost-saving in aggregate, but individual businesses may experience significant cost increases
- for small businesses, it was considered that having the same set of harmonised laws would provide less complexity and confusion but again some individual businesses may face significant cost increases
- costs to government are not likely to be substantial as jurisdictions are continually improving their training material, compliance and reporting requirements, and that benefits to government were likely to be more significant in the long term, and
- the reduction of red tape and greater certainty for duty holders should allow businesses to focus more actively on health and safety improvements rather than compliance. There would also be more scope for regulators to actively improve safety in workplaces.

[4] The great majority of these surveys were sent to companies that have sufficient interest in work health and safety issues to have enrolled in Safe Work Australia's mailing list.

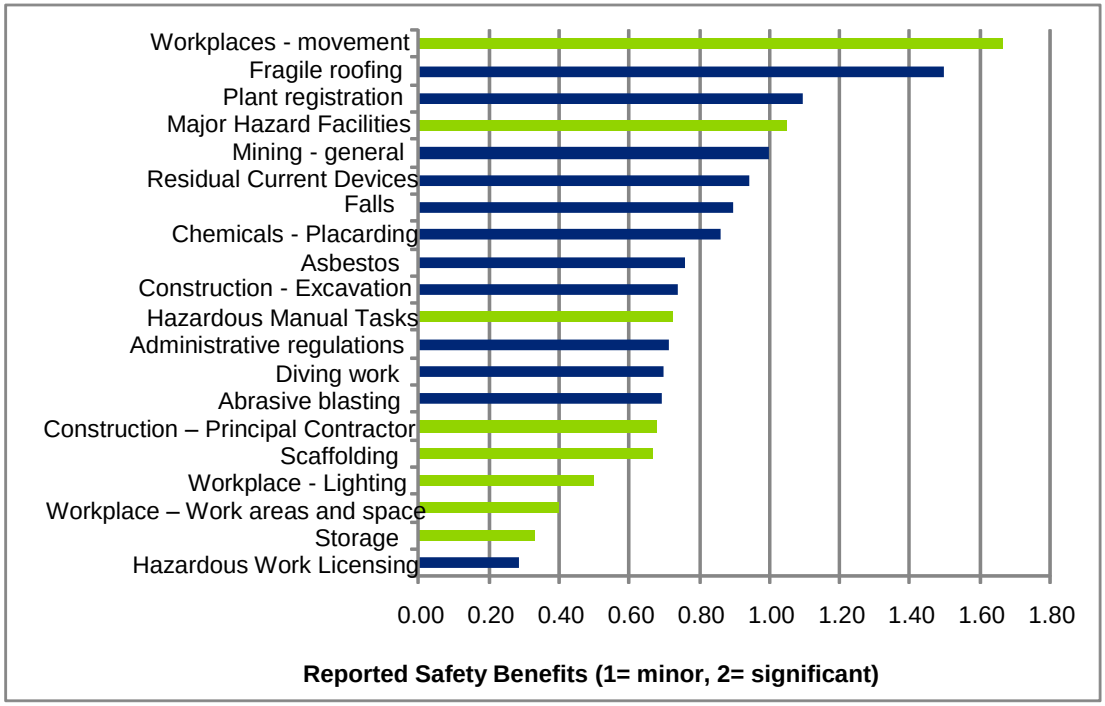
When these reforms are fully implemented the review that is to be conducted in five years will provide a more robust assessment of the benefits of harmonisation.

7.2 Survey overview

There are a number of important observations to be made from the survey that was undertaken to gather information on the costs and benefits of introducing the model WHS Regulations and first stage Codes of Practice. The first is that for every subject area surveyed, respondents reported at least some improvement in safety (Chart 7.1). This is consistent with feedback from consultations, where unions were generally supportive of the harmonisation reforms.

It is important to note that the survey was based on the draft model WHS Regulations as issued for public consultation. The regulations have since been changed in response to that consultation. The amendments are expected to either have no negative effect on the current levels of safety or in some cases increase safety outcomes.

Chart 7.1: Safety benefits reported by survey participants



Note: light green bars indicate “other” subjects nominated by survey participants. While response rates for these subjects are not statistically significant, stakeholder views in terms of safety benefits are indicated and it is noteworthy that they are all positive. This chart indicates that for all regulations addressed in the survey, respondents expected safety benefits.

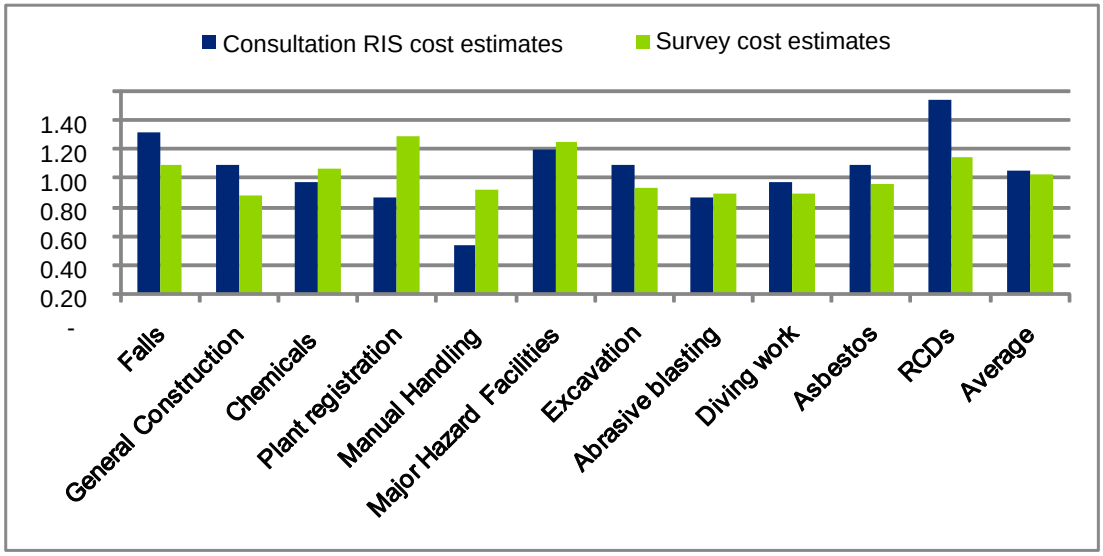
The second observation is that changes in costs reported in the survey were very similar to the changes in regulations estimated in the Consultation RIS. Costs in the survey were assigned a numeric value of zero, one or two, depending on whether participants ranked them as no change, minor increase or major increase. In Table 2 of the Consultation RIS regulatory costs were assigned a numeric value of zero, one or

two, depending upon whether regulators ranked them as minimal change, some change or considerable change.

During consultations participants were asked to what extent they viewed Table 2 of the Consultation RIS as being representative of changes in costs they would face and were also asked to supply alternative numbers where they considered Table 2 was not representative. Survey respondents were asked whether their anticipated costs would be nil, minor or significant and their responses were converted into zero, one or two respectively to enable compatibility with consultation participants' cost rankings in Table 2 of the Consultation RIS. Expected costs were very similar across both groups of survey respondents and consultation participants. The following analysis utilises this view and has revised numeric values where focus group and survey participant changes considered they were not representative of their costs (Chart 7.2 and Table 7.1).

Averaging these regulatory changes across states for each subject yields similar figures to survey respondents' estimates of cost changes for each subject (with the average survey respondent trading across 2.5 states in contrast to the ABS average of businesses trading across 1.04 states). In consultations, participants generally viewed Table 2 of the Consultation RIS as being representative of changes in costs and only wanted numbers changed that they considered were not representative of their costs. On the zero, one, two scale, regulators estimated the average cost across all harmonisation changes as 0.85, whereas survey respondents ranked it as 0.83. The main exceptions were manual handling and plant registration, where survey participants ranked costs more highly than in the Consultation RIS, and RCDs, which they ranked lower. This suggests that there can be some confidence in using regulator estimated costs for areas not covered by the survey. By necessity the survey economised on coverage, as it is accepted that the more questions asked, the fewer responses.

Chart 7.2: Comparison of survey and regulator cost estimates



Note: survey categories were matched as closely as possible to RIS categories, but some are not identical. Principle contractor (survey) vs general construction (RIS); Chemicals placarding (survey) vs general chemicals (RIS); and general asbestos regulations (survey) vs asbestos removal and management (RIS).

Table 7.1: Average compliance costs from Consultation RIS compared to survey costs

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth	Average	Survey
Major Hazard Facilities (MHF)	2		1	2	1		2		1	1.00	1.05
Hazardous Manual Tasks	2		1							0.33	0.72
Falls	1		2	1	2	1	1	1	1	1.11	0.90
Abrasive Blasting		1	1		1	1		1	1	0.67	0.69
Electricity – RCDs	2	2				2	2	2	2	1.33	0.94
Diving Work	2	1		1	2				1	0.78	0.70
Plant Registration		2			2			1	1	0.67	1.09
Construction – General	1	1	1	1	1	1	1		1	0.89	0.68
Construction – Excavation	2		2		2				2	0.89	0.74
Chemicals – General			2	2	2				1	0.78	0.86
Asbestos Removal/ Management			2		2		2		2	0.89	0.76
Average										0.85	0.83

Note: unweighted average used, as given the majority of large firms trade across borders (Productivity Commission, 2004), the relevant metric is how many jurisdictional changes they have to address. Also, to compare like with like, the average survey respondent traded in around 2.5 jurisdictions.

The third observation is that for every subject area participants expected ongoing costs to increase under harmonisation. This does not include universal matters such as risk assessments, notifications and one-off adjustment training for the new regime.

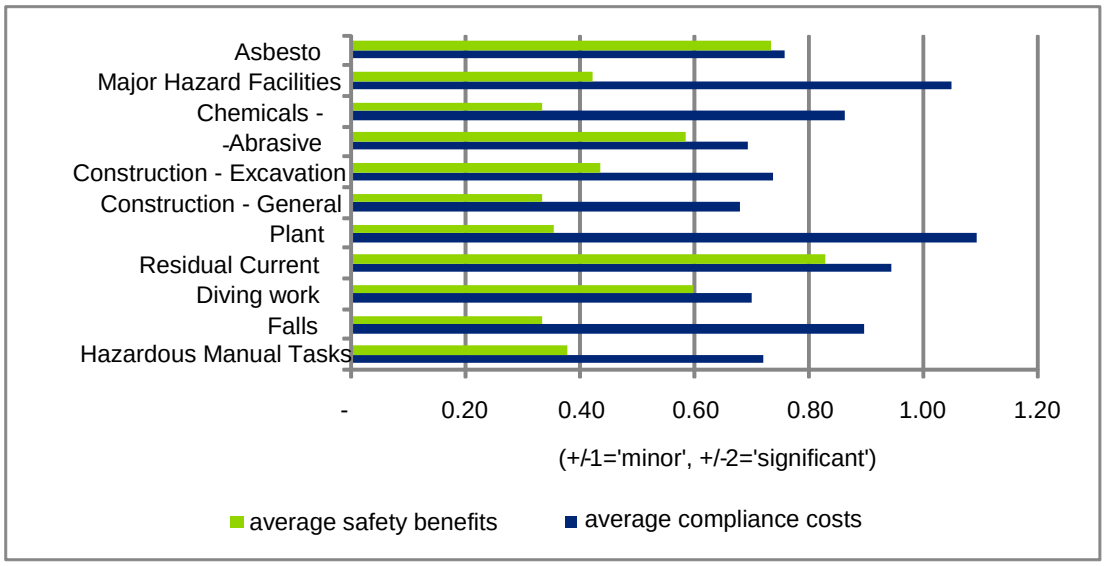
The fourth observation is that, as Chart 7.3 shows, for every subject area business participants expected their compliance costs to increase more than their safety benefits[5]. This accords with feedback from consultations where small and medium enterprises were generally not supportive of the harmonisation reforms.

[5] In the "other" categories nominated by survey participants, benefits greater than costs were reported for fragile roofing and movement.

Businesses may be expected to currently be spending on safety up until the point where their benefits from safety equate to their costs of compliance.

If harmonisation increases a firm's compliance costs more than its safety benefits, then the firm would be worse off from its point of view.

Chart 7.3: Compliance costs and safety benefits to businesses



Source: survey

This chart demonstrates that, from the viewpoint of businesses, foreseen compliance costs are greater than safety benefits when directly attributable to them.

7.3 Treatment of safety benefits to firms, workers, government and society

Safety benefits do not accrue only to businesses. They also accrue to workers, governments and the rest of society (e.g. family, carers and insurance companies). Work by the ASCC (2009) and Access Economics (2004) estimated the total costs of workplace injury and illness to the Australian economy and society, including the distribution of the costs by economic agents. These estimates suggested that broadly one-fifth to one-quarter of the total economic costs apply to employers.[6]

If these workplace injury and illness costs are avoided, then the distribution of the benefits to society are at least four times larger than to firms alone (Chart 7.4). For the purposes of estimating the distribution of work health and safety benefits by group, Access Economics (2004) is used in preference to ASCC (2009) in this report because this provides a more conservative estimate of total financial benefits measured as a ratio to employer benefits.

[6] Workers' compensation premiums were considered as costs to employers in this instance.

It is noted that "willingness to pay" methods for estimating the benefits associated with reductions in workplace injury and illness are preferred for most policy purposes.

They are considered appropriate due to their ability to assign value to time spent outside the workplace and so reflect a more appropriate value of healthy life. However, largely due to data limitations, the impact on the burden of disease has not been estimated in this chapter, however an illustrative example is provided in section 7.3.2 below.[7]

Based on Chart 7.4, approximately two-fifths (41 per cent) of the total safety benefits accrue to workers, just under one quarter (24 per cent) to firms, and slightly over a third (35 per cent) to government/rest of society.

Chart 7.4: Distribution of work health and safety benefits by group

	Employers	Workers	Govt/ Community	Total Financial
OASCC	1.00	2.72	1.83	5.56
Access Economics	1.00	1.71	1.46	4.17
Percent (Access Economics)	24%	41%	35%	100%

Note: benefits to employers include compensation premiums.
Source: ASCC (2009), Access Economics (2004)

Also based on Table 7.2, it is possible to multiply safety benefits to firms by a factor of 1.71 to estimate safety benefits to workers, by a factor of 1.46 to estimate safety benefits to government and by a factor of 4.17 to estimate safety benefits to society.

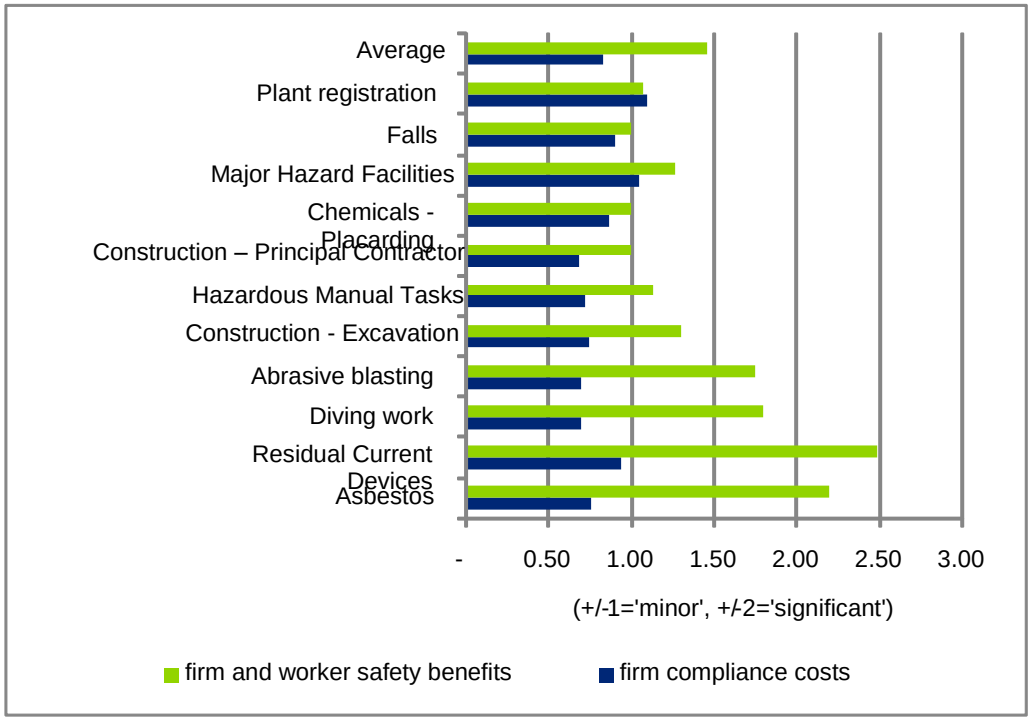
From the above analysis, using a simple model that safety benefits to workers are close to twice as large as to employers, then all except one of the changes reported in Chart 7.3 are beneficial (Chart 7.5). This is before making any allowance for benefits to government and the rest of society or non-financial benefits.

From a societal point of view, the safety benefits of harmonisation exceed the compliance costs, meaning that the model WHS Regulations is expected in aggregate to be of net benefit.

[7] One method to measure the change in the total burden of disease and injury is by using "disability-adjusted life year" (DALY). It describes the amount of time lost due to both fatal and non-fatal events—that is, years of life lost due to premature death coupled with years of 'healthy' life lost due to disability. Using Value of Statistical Life (VSL) or Value of Statistical Life Year (VSLY), changes in the burden of disease can be monetised.

Chart 7.5 is based on costs and benefits of proposed regulations as released for public comment. Safe Work Australia has made a number of changes since then that reduce costs without impacting safety (e.g. plant registration is now five-yearly rather than annually). Costs and benefits based on model WHS Regulations are enumerated below, but this analysis is included here to establish a methodology based on survey data.

Chart 7.5: Costs and benefits to society of surveyed work health and safety changes



This chart demonstrates that from a societal point of view, in some areas benefits outweighed costs significantly.

7.3.2 Illustrative example in reduction of burden of disease

Access Economics (2004), using a VSLY of $150 000, estimated that the Burden of Disease from occupational injuries and diseases was $99 billion for Australia in 2000–01 (Table 7.2).

Table 7.2: Burden of Disease from work health and safety incidents, 2000–01

Severity	Incidents	Cost ($m)
1	186 400	21.5
2	114 965	305.1
3	21 984	31 454.5
4	27 051	58 056.4
5	2620	9371.7
Total	353 020	99 209.1

Source: Access Economics (2004)

In terms of the current analysis, on average, survey respondents reported an expected minor improvement in safety from the model WHS Regulations (0.48 on the 0,1,2 scale). Using the assumption that 5 per cent is significant, this would translate into a 1.2 per cent increase in safety. For example the 131 110 serious incidents reported across Australia in 2007–08 with a 1.2 per cent increase in safety would have translated into 1586 fewer serious incidents.

Over the period to 2020–21, assuming a 1.2 per cent reduction in incidents and trend growth in employment, there could be 10 781 fewer incidents with a range of 5391 to 16 172 to allow for a 50 per cent error margin.

Based on Access Economics (2004), the average Burden of Disease per incident in 2000–01 was $281 030. Updating the OBPR's preferred VSLY from 2007 dollars ($151 000) to current dollars and assuming that the distribution of incidents by severity remains unchanged, the average Burden of Disease per incident would be $320 510 in 2011. On the above estimated reduction in incidents, this means a reduction in Burden of Disease of $2.57 billion in NPV terms over the decade (range $1.28 to $3.85 billion). This range is an illustrative estimate of the expected benefit arising from a reduction in incidents.

7.4 Costs of regulatory changes

Estimating costs and benefits for individual areas not directly covered by the survey is difficult and it needs to be repeated that the analysis below, when converted into dollars, cannot be considered to be definitive.

Having established that survey costs and costs estimated in the Consultation RIS are correlated, it may be reasonable to assume that costs estimated in the Consultation RIS for areas not included in the survey have an acceptable degree of accuracy. This is especially so once revisions to costs as requested by participants during the consultation process have been taken into account (Table 7.3).

Table 7.3: Estimated compliance costs, post consultations

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
General Workplace Management									
General Working Environment:					1				1
Entry, Exit and Movement									1
Work areas and space	1	1	1	1	1	1	1	1	1
Floors and Surfaces									1
Lighting									1
Ventilation					1				1
Heat and Cold									1
Essential Services				1	1		1		1
Facilities	1				1				1
Remote or Isolated Work	1		2	1	1				1
Hazardous Atmospheres		1			1				1
Personal Protective Equipment									1
First Aid							1		1
Emergency Plans	1	2	2				1		1
***Representation and Participation**									
*Health and Safety Reps/Work Groups	2		1		1		1		1
*Issues Resolution			2	1	1		2		1
*Consultation	1		1	2	1				
Hazardous Work									
Noise	1	1			2				1
Hazardous Manual Tasks	2		1	1					
Confined Spaces	1	2							1
Falls	1		2	2	2	1	1	1	1
High Risk Work – licensing				0					
Electrical safety and energised work	1	1			1	1		1	1

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
Electricity – RCDs	2	2		1		2	2	2	2
Diving Work	2	1		1	2		2		1
Plant and Structures									
Plant	2		1	1	2		1	1	
Scaffolding						1			
Amusement devices	1	1	1		1	1	1	1	1
Plant registration		2			2			1	1
Construction									
Construction – General	1	1	1	1	1	1	1		1
Construction – High Risk					1				
Construction – Excavation Notification	2		2		2	2			2
Construction – Induction				2		0			1
Hazardous Chemicals									
Chemicals – General			2	2	2				1
Chemicals – Labelling	2			1	2				1
Chemicals – Safety Data Sheets					2				1
Lead	2		1	1	1				1
Asbestos									
Asbestos removal and management			2		2		2		2
Asbestos removalist licensing	1	1	1	1	2	2	1	1	2
Licensed asbestos assessor	2	2	2	2	2	2	2	2	2
Certified SMS for Class A removal licence	2		2		2		2	2	2
Major Hazard Facilities (MHF)									
MHF	2	1	1	2	2	1	2		1
MHF – licensing			1	2	1		2		1

Key: 2 = considerable increase in costs, 1 = some increase in costs, blank = minimal or no increase in costs.

Note: numbers in red have changed since the Consultation RIS estimates – red zeros indicate change from some increase in costs to minimal or no increase in costs.

Benefits are difficult to evaluate as the Consultation RIS did not contain estimates of safety effects, other than to note that the whole harmonisation exercise had been

designed to ensure that no worker was less safe than before. Safety effects for areas not covered in the survey are estimated as similar to those for areas that are covered in the survey. For example in the hazardous work field the survey provides safety estimates for hazardous manual tasks, falls, abrasive blasting, RCDs and diving, but it does not provide estimates for noise, confined spaces, high risk work licensing or general electrical work. These latter four hazardous work safety benefits are assumed to have the same average safety benefits as the first five hazardous work areas.

7.5 Final expected regulatory costs

Taking into account original estimates of change by regulators, participants' comments during consultations, public submissions and subsequent revisions to regulations by Safe Work Australia the following final rankings of harmonisation costs were produced (Table 7.4 below).

Original estimates of average costs for areas covered by both the survey and regulator estimates in the Consultation RIS were 0.83 for the survey and 0.85 for regulator estimates (Table 7.1). The average cost for the same areas from Table 7.4 is now 0.69.

It is important to note that both post-consultation costs and survey costs are estimated by employers who need to know these matters and in extensive consultations.

In contrast, costs for the model WHS Regulations are based on subjective estimates. While there is evidence for overall net benefits for harmonisation, evidence of the distribution between groups should be treated with caution.

Table 7.4: Summary of anticipated business costs, by jurisdiction and subject, after final regulatory changes

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
General Workplace Management									
General Working Environment:									
Entry, Exit and Movement	0	0	0	0	0	0	0	0	0
Work areas and space	0	0	-1	-1	0	0	0	0	0
Floors and Surfaces	0	0	0	0	0	0	0	0	0
Lighting	0	0	0	0	0	0	0	0	0
Ventilation	0	0	0	0	0	0	0	0	0
Heat and Cold	0	0	0	0	0	0	0	0	0
Essential Services	0	0	0	0	0	0	0	0	0
Facilities	0	0	-1	-1	0	0	0	0	0
Remote or Isolated Work	1	1	1	0	1	0	1	0	1
Hazardous Atmospheres#	0	0	0	0	0	0	0	0	0
Falling Objects	0	0	0	0	0	0	0	0	0
Personal Protective Equipment	0	0	0	0	0	0	0	0	0
First Aid	2	0	0	0	0	0	0	0	0
Emergency Plans	0	1	2	0	0	0	0	0	2
***Representation and Participation**									
*Health and Safety Reps/Work Groups	1	1	1	1	1	2	1	1	1
*Issues Resolution	0	0	1	0	0	0	0	0	0
*Consultation	0	0	0	0	0	0	0	0	0
Hazardous Work									
Noise	2	0	2	2	2	0	2	2	2

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
Hazardous Manual Tasks	0	0	1	0	0	0	0	0	0
Confined Spaces	0	1	0	0	1	1	0	0	0
Falls	0	0	0	0	0	0	0	0	0
High Risk Work – licensing	0	0	0	0	0	0	0	0	0
Demolition Work	0	1	1	1	0	1	0	1	0
Electrical safety and energised work	0	1	1	1	1	1	0	1	0
Electricity – RCDs	0	1	0	0	0	1	0	1	1
Diving Work	1	1	1	1	1	1	1	0	1
Plant and Structures									
Plant	0	0	0	0	0	0	0	0	0
Scaffolding	0	0	0	0	0	1	0	0	0
Amusement devices	1	1	1	0	1	1	1	1	1
Plant registration	-1	0	-1	1	1	1	1	2	1
Construction									
Construction – General	1	1	1	1	1	1	1	1	1
Construction – High Risk	0	0	-1	1	1	1	1	1	1
Construction – Excavation Notification	1	1	0	1	1	1	1	1	1
Construction – Induction	1	1	1	1	0	1	1	1	1
Hazardous Chemicals									
Chemicals – General	1	1	1	1	1	1	1	1	1
Chemicals – Labelling	1	1	1	1	1	1	1	1	1
Chemicals – Safety Data Sheets	0	1	0	0	1	0	0	0	1
Lead	0	0	0	2	0	0	0	0	1
Asbestos									
Asbestos removal and management	2	2	2	2	2	2	2	0	2
Asbestos removalist licensing	1	1	1	1	1	1	2	1	2
Licensed asbestos assessor	2	2	2	2	2	2	2	1	2
Certified SMS for Class A removal licence	2	2	2	2	2	2	2	1	2

Subject	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
Major Hazard Facilities (MHF)									
MHF	0	0	0	2	0	0	0	0	0
MHF – Licensing	0	0	0	1	0	0	1	0	0

Notes: "2" = considerable cost increase, "1" = some cost increase, "0" = nil or minimal change, "-1" = some cost decrease, relative to costs under existing regulatory arrangements. *These issues are principally derived from the model WHS Act and not the model WHS Regulations. However, as public comment was received on these issues they have been included as an indicator of anticipated costs but moderated to reflect that it was previously costed, in part, under the model WHS Act RIS.
#Hazardous Atmospheres and Flammable and Combustible Substances was formerly Chemicals-Fire or Explosion.
Costs are assumed to be in the same orders of magnitude for large businesses and SMEs (see 7.7.3).

7.6 Net benefits of regulatory changes

This section measures which individual changes are socially beneficial including safety benefits to workers, government, the community and firms (Table 7.5). Reported benefits from the survey are multiplied by 4.17, based on the distribution of benefits presented in Chart 7.4. Firm costs are taken from the average of state changes for each regulation in Table 7.4 above. Where a state has minimal or no change costs, it is not treated as zero but excluded from the average, as it would correspondingly be expected to have nil or minimal benefits also.[8]

Benefits are sourced from the survey. For regulations within a group where this is not possible benefits are assumed to be equal to the average of survey benefits within that group. For example within construction there are survey results for general construction and excavation but not for induction or high risk construction. The average benefit of the first two categories is applied to each of the other two. Benefits for general workplace management are based on only 10 responses from the survey. Benefits for representation and participation are assumed to be the same as the average for all other benefits. The typical respondent is assumed to have used consistent weights for costs and benefits.

[8]In this analysis costs are only averaged across states that have material changes. For example if three states had a cost of one, and three had no costs (because they had no material changes), the average costs would be one (total costs of three, divided by three states), not 0.5 (total costs of three, divided by six states)

Table 7.5: Summary of anticipated costs and benefits by subject, after final regulatory changes

Subject	Firm costs	Society benefits	BCR
Representation and Participation			
Health and Safety Reps/Work Groups	1.11	2.48	2.23
Issues Resolution	1.00	2.48	2.48
Consultation*	0.00	0.00	0.00
General Workplace Management			
General Working Environment*:			
Entry, Exit and Movement*	0	0	0
Work Areas and Space[#]	-1.00	1.67	2.67
Floors and Surfaces*	0	0	0
Lighting*	0	0	0
Ventilation*	0	0	0
Heat and Cold*	0	0	0
Essential Services*	0	0	0
Facilities[#]	-1.00	3.56	4.56
Remote or Isolated Work	1.00	3.56	3.56
Personal Protective Equipment*	0	0	0
Hazardous Atmosphere*[*]	0	0	0
Falling Objects	0	0	0
First Aid	2.00	3.56	1.78
Emergency Plans	1.67	3.56	1.13
Hazardous Work			
Noise	2.00	2.27	1.13
Hazardous Manual Tasks	1.00	1.58	1.58
Confined Spaces	1.00	2.27	2.27
Falls[*]	0	0	0
High Risk Work – Licensing	0	0	0
Demolition work	1.00	2.27	2.27
Electrical Work	1.00	2.27	2.27
Electricity – RCDs	1.00	3.45	3.45
Diving Work	1.00	2.50	2.50

Subject	Firm costs	Society benefits	BCR
Hazardous atmosphere/combustibles	0	0	0
Plant and Structures			
Plant -general	0	0	0
Scaffolding	1.00	1.48	1.48
Amusement devices	1.00	1.48	1.48
Plant Registration	0.63	1.48	1.27
Construction			
Construction – General	1.00	**1.39**	1.39
Construction –High Risk	0.63	1.60	2.24
Construction – Excavation Notification	1.00	**1.81**	1.81
Construction – Induction	1.00	1.60	1.60
Hazardous Chemicals			
Chemicals – General	1.00	1.39	1.39
Chemicals – Labelling	1.00	1.39	1.39
Chemicals – Safety Data Sheets	1.00	1.39	1.39
Lead	1.50	1.39	0.93
Asbestos			
Asbestos Removal and Management	2.00	3.06	1.53
Asbestos Removalist Licensing	1.22	3.06	2.50
Licensed Asbestos Assessor	1.89	3.06	1.62
Certified SMS for Class A removal licence	1.86	3.06	1.65
Major Hazard Facilities (MHF)			
Major Hazard Facilities	1.13	1.75	1.56
MHF – licensing/registration	1.40	1.75	1.25

Note: numbers in bold are from the survey. *As no jurisdiction is assessed as having above nil/minimal change, benefits are also assumed to be nil/minimal. #For Work Areas and Spaces, and Facilities, costs are negative so have been added to benefits.

7.7 Costs and benefits of general regulatory changes to various stakeholders

As noted, the distribution of the benefits to the various groups in society is based on Table 7.2 (using Access Economics 2004). Table 7.6 below presents a breakdown of the economic costs associated with work-related injury and illness.

The economic costs of occupational injury, illness and death, coupled with the impacts of the quality of life of those affected, highlight the importance of work health and safety.

Table 7.6: Economic costs borne by the employer, worker and the community

Conceptual group	Total (T)	Employer (E)	Worker (W)	Society (S)
Production disturbance costs	Value of production (inc. overtime)	Overtime premium Employer excess payments Sick leave	Loss of income prior to RPR[a], net of compensation, welfare and tax	Compensation and welfare payments transferred to worker for temporary loss of wage and tax losses prior to RPR
	Staff turnover costs	Staff turnover costs	Zero	Zero
Human capital costs	Present value of earnings before incident minus earnings after incident	Zero	Loss of income after RPR, net of compensation, welfare and tax	Compensation and welfare payments for lost income earning capacity and tax losses after RPR
Medical costs	Medical and rehabilitation costs incurred as a result of the injury	Threshold medical payments	Gap payments Private health insurance payments	Compensation medical payments Public health system payments
Administrative costs	Legal costs	Real legal costs incurred plus fines and penalties	Real legal costs incurred	Real legal costs incurred Deadweight costs of enforcement minus fines and penalties credit

Conceptual group	Total (T)	Employer (E)	Worker (W)	Society (S)
	Investigation costs	Employer investigation costs	Zero/negligible	Real costs of running the compensation system (including investigation of claims)
	Travel costs	Zero/negligible	Travel costs net of compensation & concessions	Compensation for travel costs Travel concession
	Cost of funeral today minus present value of future cost	Zero	Net costs of bringing forward funeral	Compensation for funeral costs
Transfer costs	Real deadweight costs of transfer payments (welfare and tax)	Negligible	Zero (accounted for in netting other items)	Deadweight costs of welfare payments (Disability Support Pension, Sickness Allowance, Mobility Allowance and Rent Assistance) Deadweight costs of tax losses
Other	Carers	Zero	Carer costs net of carer payment/allowance	Payments to carers plus deadweight cost
	Aids, equipment and modifications	Zero	Aids etc. (net cost after reimbursements)	Reimbursements for aids etc. plus deadweight cost

[a]RPR = time to return or permanent replacement of injured worker
Source: ASCC (2009) based on Access Economics (2004).

7.7.2 Employers

Using the methodology and assumptions discussed above to convert survey rankings into dollar values, the average compliance cost increase reported in the survey of 0.83 translates to a 2.08 per cent increase in compliance costs. The revised cost increase from the amended regulations of 0.69 translates to a 1.72 per cent increase in

compliance costs. Against median annual work health and safety costs of $701 per worker, this represents an increase in costs of $12.07 per worker per year. The average of surveyed business safety benefits of 0.48 translates to a 1.2 per cent increase in benefits worth $8.50 per worker per year. Similarly, the revised regulations have an average benefit of 0.44, which translates into a 1.10 per cent increase in benefits, or $7.74 per worker.[9] Comparing the two yields, a net cost to firms of $4.33 per worker per year is expected, assuming that the average of survey results is representative of the average of non-surveyed results. This analysis only applies to the sum of individual regulatory changes and does not include overarching red tape changes or harmonisation benefits to multi-state employers, which affect single and multi-state firms differently as quantified in Sections 7.13.1 and 7.13.2.

These net costs to employers will largely be from disruptions to human capital arrangements including staff turnover, sick leave and other salary premiums. Additional compliance costs will manifest in the form of medical, legal and administrative incident costs (Table 7.6).

7.7.3 Small business

On the whole small business would be expected to have the same outcome as businesses in general which is a net cost of $4.33 per worker per year. This would be tempered by low levels of compliance by small business. The Productivity Commission (2010) reports that most small and medium enterprises (SMEs) are either “not aware” or only “somewhat aware” of their work health and safety obligations. To the extent that they currently do not comply now, SMEs would probably not benefit from relaxed risk assessment requirements under the model WHS Regulations. Impacts are modelled as being the same for SMEs as for other businesses.

The vast majority of small businesses are single-state traders and so would not reap the benefits of harmonisation that large businesses would, who are mostly multi-state traders.

7.7.4 Workers

Assuming that the safety benefits to the rest of society are 3.17 times[10] as large as to firms (as per the discussion in section 7.3), the total safety benefits to the rest of society equate to $24.51 per worker in single-state firms (=3.17*7.74). Workers capture 54 per cent of these benefits to the rest of society (equals 1.71/(1.71+1.46)), with government/community capturing the other 46 per cent. Thus, of these $24.51 safety benefits, $13.22 accrues to single-state workers.

Multi-state businesses reported higher safety benefits (0.92, equivalent to a 2.3 per cent increase) worth $16.12 per worker, which, using the same ratio (3.17), equates to

[9] Where costs have been revised to nil / minimal under the post-consultation regulatory changes, benefits are also assumed to be nil / minimal.

[10] Total benefits to society are 4.17 times as large as benefits to firms, thus benefits to rest of society (workers, government, community) are (4.17-1) times as large as to firms. This implicitly uses the conversion of ‘significant’ to a 5 per cent change.

rest-of-society benefits of $51.04. Multi-state workers' 54 per cent share of this is $27.53.

Given there are 2.51 times as many single-state workers as multi-state, using a weighted average of these two groups, $17.30 accrues as a net benefit to workers. Workers are assumed not to have any compliance costs, at least not paid for by employers.

Workers can still be expected to incur some costs during the transition of return to work. Transitional income loss and medical expenses would lead to costs to workers including health insurance payments, medical gap costs and medical aids which would all contribute to the burden borne by workers. Individual cases may generate the incursion of legal, medical and various travel costs for workers.

7.7.5 Government

Government captures the remaining element of the rest of society safety benefits. Some of the benefits assigned to government would in reality accrue to others in society such as family and carers of injured workers. Governments do incur compliance costs and these are discussed in the discussion on regulators below. Society would bear the bridging costs between the abovementioned economic agents. These costs cover production disturbance and human capital including salary compensation payments and tax loss offset; medical including public health system; administrative including legal, law enforcement and travel compensation; transfer including transfer deadweight loss costs; and other costs including carer payments and medical aid dispensations.

7.8 Jurisdictions

The survey did not receive enough responses to allow statistically valid results to be calculated for individual jurisdictions. A minimum of 30 responses per jurisdiction would be required for this or at least 240 responses to cover all jurisdictions individually.

It is still possible to derive some relative estimates, albeit with low degrees of confidence. Average adjustment costs per regulation in each jurisdiction are available from Table 7.4. These can be compared to the benefits per subject in Table 7.5 to derive BCRs for each regulation in each state.

Regulations vary greatly by how many workers they cover and the severity of injuries they are designed to prevent. Table 7.7 assigns subjective workforce coverage to each regulation of 'almost all', 'many' and 'few' (with weightings of three, two and one respectively). Each regulation is also assigned an equally subjective injury potential of 'severe', 'medium' and 'low' (with weightings of three, two and one respectively).

Table 7.7: Workers covered, and severity of injuries prevented, by regulation

Subject	% of workers affected	Injury potential
Representation and Participation		
Health and Safety Reps/Work Groups	almost all	low
Issues Resolution	almost all	low
Consultation	almost all	low
General Workplace Management		
General Working Environment	almost all	low
Entry, Exit and Movement	almost all	low
Work Areas and Space	almost all	low
Floors and Surfaces	almost all	low
Lighting	almost all	low
Ventilation	many	medium
Heat and Cold	many	severe
Essential Services	many	medium
Facilities	almost all	low
Remote or Isolated Work	few	severe
Falling objects	few	severe
Personal Protective Equipment	many	severe
First Aid	almost all	medium
Emergency Plans	almost all	severe
Hazardous Work		
Noise	many	severe
Hazardous Manual Tasks	many	severe
Confined Spaces	few	medium
Falls	almost all	severe
High Risk Work – Licensing	many	severe
Abrasive Blasting	few	severe
Electrical Work	many	severe
Electricity – RCDs	almost all	severe
Diving Work	few	severe

Plant and Structures		
Plant	many	severe
Scaffolding	many	severe
Amusement devices	few	severe
Plant Registration	many	low
Construction		
Construction – General	many	medium
Construction – High Risk	many	severe
Construction – Excavation Notification	many	severe
Construction – Induction	many	medium
Hazardous Chemicals		
Chemicals – General	many	medium
Chemicals – Labelling	many	low
Chemicals – Safety Data Sheets	many	medium
Chemicals – Fire or Explosion	many	severe
Lead	many	severe
Asbestos		
Asbestos Removal and Management	many	severe
Asbestos Removalist Licensing	few	severe
Licensed Asbestos Assessor	few	severe
Certified SMS for Class A removal licence	few	severe
Major Hazard Facilities (MHF)		
Major Hazard Facilities	few	severe
MHF – licensing/registration	few	severe

The assumed value at risk from Table 7.7 are used to weight the costs and benefits derived from Table 7.4 and Table 7.5 to provide an estimate of broad benefit cost ratios (BCRs) in each jurisdiction. These are illustrated in Table 7.8 below. Results are reported by regulatory group, as Deloitte Access Economics does not have confidence in lower levels of disaggregation. Weighting jurisdiction outcomes by share of national workforce yields a total national BCR of 3.4. Differences between states are illustrative and these figures are only provided as a way to gauge variance from the national average.

Table 7.8: Broad BCRs by regulatory group and jurisdiction

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Cth
Representation and Participation	3.3	3.3	3.3	3.3	3.3	3.3			-
Major Hazard Facilities (MHF)	-	-	-	1.8	-	-	2.3		-
General Workplace Management	4.8	9.5	5.9	-	4.8	-	4.8	-	5.9
Hazardous Work	3.2	5.6	3.9	3.9	3.6	5.6	3.2	6.5	6.7
Plant and Structures	2.1	2.0	2.0	1.3	1.6	2.4	1.6	1.3	1.6
Construction	3.4	-	2.7	3.6	3.9	3.6	-		3.6
Hazardous Chemicals	1.9	2.1	1.9	1.9	2.1				2.9
Asbestos	2.7	2.7	2.7	2.7	2.7	2.7	2.0	4.1	2.0
Total	3.0	4.4	3.2	2.3	3.1	3.6	2.9	4.0	3.8

7.9 Adjustment costs

Respondents indicated that they considered it would cost $129.19 per worker to train them about harmonisation. They also indicated that in an average year they would spend $54.55 on training for jurisdiction-specific work health and safety changes, which will not be occurring. The net cost of harmonisation of training is $74.64 per worker but this is a one-off cost.

7.10 Costs and benefits of red tape changes

One of the major changes under the model WHS Regulations is that the documentation of risk assessments for common hazards no longer needs to be carried out, other than for certain high risk activities including diving, electrical work, confined spaces and asbestos.

Many current work health and safety Acts or regulations mandate the undertaking of risk assessments and the documentation of those risk assessments as part of the overall activity of managing risks. The model WHS Regulations do not specifically mandate the undertaking of risk assessments or their documentation except for some particular high risk activities. The removal of broad requirements to formally document risk assessments is a major change introduced under the model WHS Regulations.

During consultations many businesses said that they would continue to conduct risk assessments even if they were no longer required to because they considered it a valuable defence in case of a breach. In the survey the majority of businesses (61 per

cent) stated that they would continue to conduct risk assessments regardless. For the substantial minority of firms (39 per cent) who said they would cease conducting non-mandatory risk assessments, the median annual savings were around $42.62 per worker. Weighting to account for firms that would still conduct assessments, the benefit is around $16.62 per worker (=$42.62*39 per cent). This represents a saving of around 2.5 per cent on median annual work health and safety costs ($701 per worker).

This figure is close to that estimated in the Consultation RIS. On the basis of Worksafe Victoria (2007), the Consultation RIS estimated that single-state firms would benefit from the removal of risk reduction by $117.5 million a year. On the basis of survey results this figure is slightly higher, at $137.3 million a year.[11]

It is possible that voluntary risk assessments may decline over time if these are conducted primarily as a defence. It is often said that of the four levels of work health and safety governance—legislation, regulation, Codes of Practice and the inspectorate—the actual impact on businesses increases by an order of magnitude at each level. If the inspectorate no longer has paper compliance such as a written risk assessment, companies may switch effort from the former to the latter.

These savings have to be offset against the increased cost of notifications. The ACT estimated that ongoing regulatory costs could be around $5.70 per worker per year for new requirements under harmonisation. While there were a number of other costs in addition to notifications, this places an upper limit on notification costs. It is highly likely that compiling a notification would cost a firm more than it would cost the regulator to file it. It could cost firms around $5.70 per worker to deal with increased notifications under the model WHS Regulations.

The net savings to firms from administrative changes under harmonisation would be in the vicinity of $10.91 per worker per year ($16.62 minus $5.70).

It is worth noting that excavation notification was arguably the single most controversial topic during consultations and this is no longer required. The savings calculated above would thus represent a minimum estimate.

7.11 Costs and benefits of harmonisation

Using the same methodology as employed for firms in general in section 7.7, multi-state firms surveyed reported a decline in compliance costs from harmonisation per se of 1.27 (=3.2 per cent[12]) and an increase in safety benefits of 0.92 (=2.3 per cent). These effects are in addition to any compliance costs or safety benefits these firms may experience from other individual changes.

Firms have often stated that they have a fixed safety budget. If so, savings from not having to deal with paper compliance for eight sets of jurisdictional regulations would be put into actual compliance and improve safety.

[11] Equals $16.62 per person multiplied by 8.26 million workers in single-state firms.

[12] This implicitly uses the conversion of ‘significant’ to a 5 per cent change.

Based on the survey results and the methodology used, for multi-state firms harmonisation in itself reduces compliance costs by $22.24 per worker and safety benefits of $16.12, for a total benefit of $38.35 per worker per year (Table 7.9).

According to survey respondents and the methodology employed to estimate the costs and benefits, the main estimated benefit of harmonisation for multi-state firms is improved productivity.[13] The median multi-state firms reported net output, based on the survey and on the assumption that 5 per cent is a significant change, of $185 714 per worker per year.[14] A 2.3 per cent increase in this output is equivalent to $4285 per worker per year. On a national basis this is $14.1 billion a year.

Table 7.9: Harmonisation benefits for multi-state firms

	Compliance costs	Safety benefits	Productivity	Total
Survey average	-1.27	0.920	0.923	
Percentage change	-3.2%	2.3%	2.3%	
Benefit per worker	$22.24	$16.12	$4285.71	$4324.07

This estimation of productivity should be treated with caution. The relative magnitude of the estimated productivity is compared below with other research to check the scale and plausibility of the productivity improvement estimated for multi-state firms.

The Productivity Commission (2006) assessed the potential maximum or outer-envelope gains that could be achieved through COAG's National Reform Agenda in the long run in the areas of competition and regulatory reform and human capital reform. The Productivity Commission noted that increased productivity in competition and regulatory reform including in energy, transport, infrastructure and other activities could provide resource savings of around $10 billion. In terms of health service delivery, achieving a five per cent improvement in productivity could equate to resource savings or additional resources to spend on health care of around $3 billion in 2005–06 prices.

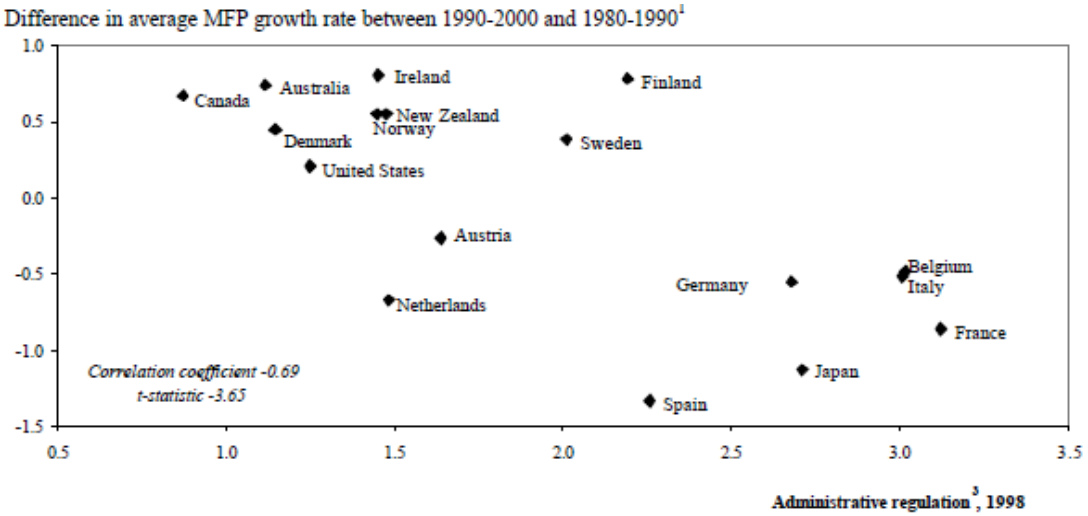
The Productivity Commission (2008b) undertook quantitative analysis of the benefits that could be realised from reforming Australia's consumer policy framework. The Productivity Commission considered that the most important gains would arise from the reduction in consumer detriment, dynamic gains through enhanced productivity and innovation, and reduced transaction costs in the economy. The gains were estimated to be around $2.7 billion a year in 2006–07 prices, with a range from $1.5–$4.5 billion.

[13]Other benefits were noted by respondents in the survey, namely, "Business opportunities" and "understanding legal requirements". These have not been quantified.

[14]The standard measure of productivity is output per worker, as used here. Value-added productivity, which takes out costs such as wages and intermediate inputs, is an alternative measure and it would significantly lower the productivity improvement.

A number of international studies have discussed the impacts of administrative regulation on productivity. The World Bank (Nicoletti and Scarpetta, 2003) reports a strong correlation across developed countries between administrative regulation and multi-factor productivity (Chart 7.5).

Chart 7.6: Productivity growth and regulation in developed nations



Notes:[1] Productivity is adjusted for hours worked. [3]Administrative regulation scale, 0 is least restrictive.

Source: Nicoletti and Scarpetta (2003)

This chart shows the difference in average multi-factor productivty growth rate between 1980–1990 and 1990–2000 across countries.

Gelauff and Lejour (2006) estimate that a 25 per cent reduction in administrative burden in the Netherlands would increase labour efficiency (total output to total employment) by 1.6 per cent. Arpaia et al (2007) consider the impact of a 25 per cent reduction in EU-15 administrative burdens. They estimate that this reduction in administrative burden would lead to a 0.9 per cent increase in EU-15 GDP by 2025. Crafts (2006) suggests that if administration costs doubled from 1.5 per cent of GDP to 3 per cent of GDP, this would possibly lead to a 0.15 per cent per year reduction in productivity growth. Loayza et al (2005) undertook cross-country regression analysis using a sample of 76 countries and found that there is a negative relationship between productivity and economic growth, but that this relationship becomes less strongly negative as the quality of institutions improves.

Based on the domestic and international research, the estimated economy-wide productivity gain from reducing the administrative burden by harmonising work health and safety regulations (which is roughly around one per cent of GDP) appears high, although possible. This estimate may be partly influenced by the number and nature of the survey responses received and difficulties in conceptualising the extent of productivity improvements.

The productivity gain estimated in this RIS should be viewed with caution and outside the scope of the central case quantitative net benefits presented in this chapter. However, for illustrative purposes, the estimated productivity gains are presented in Appendix E, with further sensitivity analysis presented on the estimated quantitative net benefits. Based on a review of the analysis in this RIS, productivity improvements in

the order of $1.5 billion to $2 billion per annum over the next 10 years are considered likely.

7.12 Regulator costs

Deloitte Access Economics wrote to all regulators asking them for information on matters including adjustment costs for the new regime, additional ongoing costs under harmonisation and possible new fees. Three regulators were able to quantify these costs.

The ACT reported training, drafting and associated establishment costs equivalent to $2.85 per worker. SA reported costs of around $2.22. The other much larger jurisdiction reported costs equivalent to $1.94. On a weighted average this yields an estimate of one-off adjustment costs of $2.03 per worker or $23.47 million nationally.

In each case the actual costs are higher but were reduced by 42 per cent to make allowance for training costs that would have occurred in the absence of harmonisation.[15] One jurisdiction suggested a reduction of up to 50 per cent would have been appropriate and another that normal costs would have been smaller than harmonisation costs. The ratio used is the same one that businesses reported in the survey between harmonisation and normal training costs.

Only the ACT reported an estimate of ongoing additional costs (e.g. from new notification requirements). This was equivalent to around $5.70 per worker. As smaller jurisdictions have higher unit costs and may not be representative of national averages, this figure was reduced to $3.85 per worker per year. This is the same percentage reduction as applied to the ACT's adjustment costs.

If jurisdictions found it difficult to estimate actual expenditure on adjusting to harmonisation, they found making predictions about future changes in fees even more so. Comments were made that Safe Work Australia had not yet decided on a transition path for fees or to what extent rigorous cost recovery would be enforced. Any new fees are assumed to be captured in estimated changes to red tape (section 7.10).

7.13 Overall net benefits

This section compares the one-off adjustment costs of harmonisation against the flow of benefits over the next 10 years. Following standard OBPR practice, a discount rate of 7 per cent is used. As adjustment costs occur in 2011 they are not discounted. Ongoing costs commence in 2012 and are discounted from then on. Summary costs and benefits are presented in Table 7.10. Sensitivity analysis, including the estimates of productivity gains, is undertaken in Appendix E. As noted earlier in this chapter, the quantitative results derived from the survey are mainly used to support the qualitative impacts obtained from public consultation and submissions. This should be kept in perspective.

[15] That is. normal enforcement costs would be $2.81 per worker (=$3.85 times 42/58) in an average year.

7.13.1 Single-state firms

Single-state firms lose an average of $4.33 per worker from general regulatory changes (compliance cost increases are greater than safety benefits to the firm).[16] They gain an average of $10.91 per worker from net red tape reductions. On average, they are $6.59 per worker per year better off. Across an estimated 8.26 million workers,[17] that is a national annual benefit of $54.41 million.

Single-state firms also face substantial adjustment costs. The estimated cost from the survey was $74.62 per worker. Nationally this equates to $616.52 million. At a 7 per cent discount rate the flow of benefits equates to $586.30 million over the decade, which would not be sufficient to offset these adjustment costs. Over the decade single-state firms are worse off by $269.85 million, which equals an annual average of $26.99 million per year. The OBPR requires RISs to use a 7 per cent real discount rate. For sensitivity analysis a lower bound of 3 per cent and an upper bound of 11 per cent are also used. Using a 3 per cent discount rate, single-state firms would still not receive net benefits from harmonisation over the decade and would not have recouped their adjustment costs over the decade.

7.13.2 Multi-state firms

Multi-state firms face initial adjustments costs which are attributable to training costs and education associated with new harmonised work health and safety reform. These per-worker costs were multiplied by the number of workers employed in multi-state firms and the resulting total benefit for the decade was the Net Present Value (NPV) of ongoing changes less these initial adjustment costs.

In addition to the annual benefit from general regulatory changes of $10.91 per worker[18] shared with single-state firms, multi-state traders also benefit from harmonisation. These firms reported that the simple fact that they would only have to deal with one set of regulations in future would save 3.2 per cent on compliance costs. They also reported a 2.3 per cent increase in safety from harmonisation. In consultations it was frequently stated that firms have a fixed work health and safety budget and the less effort they are required to put into red tape the more they can put into improving safety. Multi-state firms gain an additional $22.24 per worker in compliance costs savings and an additional $16.12 in safety benefits for a total of $38.35.

Adding together the $38.35 from harmonisation plus the $10.91 from net red tape reductions, and subtracting the $4.33 from general regulatory changes, multi-state firms are $44.94 per worker better off per year, not including productivity benefits. This translates to $147.99 million nationally across 3.29 million employees, or $942.95 million over the next decade in net present value terms.

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[16] This implicitly uses the conversion of 'significant' to a 5 per cent change.

[17] Following the Productivity Commission (2004), assumes that single-state traders employ 71.5 per cent of the 11.56 million workers in Australia in 2011.

[18] This implicitly uses the conversion of 'significant' to a 5 per cent change.

Multi-state firms also face adjustment costs. At $74.62 per worker, which is the same as single-state firms, this totals $245.74 million nationally. Unlike single-state firms, the compliance and safety benefits would pay for the adjustment costs several times over before productivity benefits are even considered.

7.13.3 Workers

Social safety benefits were extrapolated across workers from both single-state and multi-state firms and used to calculate a weighted average for all workers. The calculated weighted average was multiplied through the national employment to obtain a sum for all workers for the current year. This value was discounted by 7 per cent for all future years. As there were no initial adjustments to make for workers, the total benefit for the decade was simply the NPV of ongoing changes.

The safety benefits to the rest of society are $13.22[19] per worker in single-state firms and $27.53[20] in multi-state firms. On a weighted average this is $17.30 per worker and $199.91 million nationally. Over the course of the decade this totals $1.27 billion. Workers are assumed not to face any adjustment costs for harmonisation.[21]

7.13.4 Government

The NPV for government was established on a per-worker case by deriving the net of government safety benefits per worker of work health and safety reform and ongoing costs per worker. These per-worker benefits arising from work health and safety reform were multiplied through the national employment to obtain a sum for government for the current year. This value was discounted by 7 per cent for all future years. Initial adjustment costs were apparent as a small cost per worker, which were multiplied through the working population. The total benefit for the decade was the NPV of ongoing changes, less initial adjustment costs.

Regulators face ongoing costs of $3.85 per worker.[22] Governments receive substantial benefits from reform also. As noted in section 7.13.3 above, on a weighted average basis the model WHS Regulations confer benefits of $17.30 per worker. Given workers' share of societal benefits is 41 per cent (Chart 7.4) and governments' share is 35 per cent, on a pro-rata basis, the benefits accruing to government is $14.77[23] per worker. On a net basis, governments benefit by $10.92 per worker per year ($14.77 minus $3.85) or $126.16 million per annum nationally.

Governments also face adjustment costs estimated at $2.03 per worker or $23.47 million nationally. Ongoing benefits of $803.88 million NPV over the decade are easily sufficient to offset these costs.

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[19] This implicitly uses the conversion of 'significant' to a 5 per cent change.

[20] Equals firms safety benefits of harmonisation per se of $16.12 * 3.17 (rest of society) *.0.54 (worker share)

[21] In some jurisdictions, some self-employed tradesmen may have to buy new types of licenses. However, in this analysis, they would be treated as sole-trader businesses rather than workers.

[22] This implicitly uses the conversion of 'significant' to a 5 per cent change.

[23] Equals worker's safety benefits (including from harmonisation) of $17.30 times 46/54.

7.13.5 Summary of net benefits

There is evidence to suggest that harmonisation provides a net gain to the Australian economy. Limitations in the survey response and design preclude reliance on exact numbers but the following discussion indicates relative magnitudes of costs and benefits across groups using the assumptions discussed in this chapter and Appendix E, including that a significant change from the survey responses is considered to be 5 per cent or greater. The Consultation RIS made it clear that firms have historically had difficulty quantifying the costs and benefits of existing work health and safety regulation, let alone untested proposed future changes. The quantitative estimates in this chapter do not form the main body of evidence for the conclusions in this Decision RIS but rather are one source among many, specifically public consultations, submissions and other research.

The quantitative cost estimates from the survey are supported by qualitative evidence from consultations as well as submissions and desktop research. Quantitative benefit estimates of improved safety are not so well supported by the same qualitative sources. While this work health and safety is based on harmonisation rather than optimisation per se, it still provides an opportunity to reform some regulations that did little to enhance safety. The modelled 1.2 per cent improvement in safety appears reasonable in the real world context.

Despite initial adjustment costs indicatively modelled at around $886 million, harmonisation is estimated to produce a net annual average benefit of around $250 million over the next 10 years before any productivity increases (see Table 7.11).

Multi-state firms, workers and government all benefit from the reforms. Single-state firms and by implication small businesses would have a net loss from the reforms. Almost all small businesses are based within a single jurisdiction. According to the ABS (2010b), businesses that are sole traders or that employ fewer than 20 persons constitute about 95 per cent of the total employing and non-employing businesses. In addition, about one third of all businesses have an annual turnover of less than $50 000. As shown in Table 7.11, implementation costs for single-state firms are estimated at about $617 million. Using the ABS data and the survey results, it is estimated that small businesses will face an implementation cost of approximately $580 million. The net cost to single-state firms is equivalent to an average $3.27 per worker per year. The overall net benefit to society as a whole is around $21.48 per worker per year.

Table 7.10: Summary of costs and benefits from work health and safety harmonisation

	Initial adjustment (first year, $m)	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Number of workers (m)	Annual average per worker ($)
Single-state firms	-$616.52	$346.67	-$269.85	-$26.99	8.26	-$3.27
Multi-state firms*	-$245.74	$942.95	$697.20	$69.72	3.29	$21.17
Workers	0	$1273.74	$1273.74	$127.37	11.56	$11.02
Govt/ Society	-$23.47	$803.88	$780.40	$78.04	11.56	$6.75
Total	-$885.73	$3367.23	$2481.49	$248.15	11.56	$21.48

Note: Column 3 = Column 2 minus Column 1. Column 4 = Column 3 divided by ten. Column 6 = Column 4 divided by Column 5

*Does not include productivity benefits

8 Implementation

The model WHS Regulations will be presented to the respective Commonwealth, state and territory Parliaments for consideration and approval in the period September to December 2011.

Some transitional provisions are included within the regulations in specific areas including for hazardous chemicals alignment with the global harmonisation scheme, implementation of general construction induction, changes to diving competencies and installation of RCDs in hostile work environments.

The model WHS Regulations are scheduled for implementation on 1 January 2012.

9 Review provisions

All legislative changes agreed by COAG are subject to review to ensure a commitment to establish and maintain effective arrangements for maximising the efficiency of both new and amended legislation. This avoids unnecessary compliance costs and restriction of competition.

Safe Work Australia is developing a plan in consultation with the Research Evaluation and Data Advisory Group (a tripartite group established to advise Safe Work Australia regarding research and statistical work) to evaluate the model work health and safety legislative framework and the outcomes of its implementation if adopted and implemented. This evaluation plan is being designed to provide information to:

- meet reporting requirements on progress towards achieving the objectives set out in the IGA and the model WHS Act
- assist the 2015 review of the IGA by WRMC, and
- assist jurisdictions in their implementation of the legislative framework and inform them of the impact of changes.

The plan has four main focus areas that align with the objectives of the IGA and the objects of the model WHS Act:

- improved health and safety
- uniformity
- reducing the regulatory burden of employers operating in more than one jurisdiction, and
- efficiencies for government.

The evaluation plan proposes work to begin in 2010–11 and will cover the first three years following implementation of the legislative framework up to the review of the IGA in 2015.

Where possible change will be measured using existing data sources including workers' compensation statistics, the Australian Bureau of Statistics work-related injuries survey, fatality data and the National Hazard Exposure Worker Surveillance Survey 2008.

Where data is not available, surveys will be developed and undertaken. Some baseline measures will be established in 2011–12 to enable pre- and post-implementation comparisons. Measures will include both lead and lag indicators where possible.

10 Conclusion

Work health and safety regulations and compliance policies differ between jurisdictions. This can impose substantial costs on businesses that operate in more than one state or territory. Australian governments are committed to harmonising work health and safety laws, regulations, Codes of Practice and enforcement policies. The first step in this process was the development of a model WHS Act. This RIS process assesses the costs and benefits of adopting harmonised regulations and Codes of Practice to support the model WHS Act (Option 2) relative to retaining the status quo (Option 1). The reform of work health and safety implementation, enforcement and compliance policies will follow.

The model WHS Regulations will reduce differences across jurisdictions at the legislative level. In most cases the model WHS Regulations do not significantly depart from the general structure and content of existing regulations because many of the regulations were based on National Standards and National Codes of Practice. The model WHS Regulations consolidate existing elements in a more consistent manner. However, there are exceptions to some measures where exclusions and derogations are likely to result in lower net benefits relative to full implementation of Option 2.

The primary method for assessing the cost and benefits of harmonisation has been qualitative in nature, largely based on consultations and feedback from various stakeholders, including regulators, small and large businesses and a large number of submissions. While monetary values are derived in the form of NPV and an appropriate sensitivity analysis is undertaken, these results should be treated with some caution given the uncertainties associated with estimating changes in work health and safety benefits.

From a small business perspective, some of the model WHS Regulations may be seen as a significant burden. For example, in terms of first aid, having trained first aiders and providing facilities on site or alternative access to these will increase costs to small businesses. This is widely expected to occur in NSW, where currently small businesses under 25 employees are exempt.

For large or small businesses that primarily operate in one jurisdiction there may be transitional costs from changing to different regulations. For example, the model WHS Regulations for RCDs propose the requirement for RCDs to be installed in hostile operating environments. As this is not the current practice in Victoria, Tasmania and the ACT, this has the potential to be a significant cost to businesses operating in these jurisdictions, notwithstanding that some businesses may already have RCDs operating on their premises.

Several submissions expressed concerns about the application of the model WHS Regulations to not-for-profit organisations. Organisations that have both volunteers and paid employees, however, will not be classified as ‘volunteer associations’. Volunteers in such organisations will need to be afforded the same occupational health and safety rights and responsibilities as paid workers. While many of these organisations currently provide work health and safety duties of care to volunteers as part of their duty of care to their paid workers, under the reform such organisations will need to specifically

address these concerns for volunteers. Some not for profit organisations will face additional compliance burdens.

While there will be varied impacts across business sectors, especially for small businesses, the expected aggregate benefits in terms of lower administrative burden, regulatory duplication, improved efficiency and improved work and safety outcomes are greater than the costs of implementing the model WHS Regulations.

There are also some proposed regulations that are more than harmonising in the sense that they propose new requirements across jurisdictions and are seen as reform in nature. For example, the model WHS Regulations for asbestos will provide for the first time in Australia, a consistent framework for the management of asbestos materials in workplaces, the removal of asbestos and the licensing and competencies for asbestos removalists and assessors. These reforms are estimated to cost about $14 million to implement, while at the same time deliver substantial benefits in the long run in terms of reduced risk and exposure to asbestos in the workplace.

Based on the quantitative analysis undertaken at the national level for adopting the model WHS Regulations, an indicative estimate results in net benefits of about $250 million per annum. However, one-off implementation costs are substantial, in the order of $886 million. It is estimated that small businesses will face a significant implementation cost, at about $580 million.

Option 2—the adoption of the work health and safety reforms—is the preferred option. The table below summarises the indicative expected net benefits.

Table 10.1: Indicative costs and benefits from work health and safety harmonisation

	Initial adjustment (first year, $m)	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Workers (m)	Annual average per worker ($)
Single-state firms	-$616.52	$346.67	-$269.85	-$26.99	8.26	-$3.27
Multi-state firms*	-$245.74	$942.95	$697.20	$69.72	3.29	$21.17
Workers	0	$1273.74	$1273.74	$127.37	11.56	$11.02
Govt/ Society	-$23.47	$803.88	$780.40	$78.04	11.56	$6.75
Total*	-$885.73	$3367.23	$2481.49	$248.15	11.56	$21.48

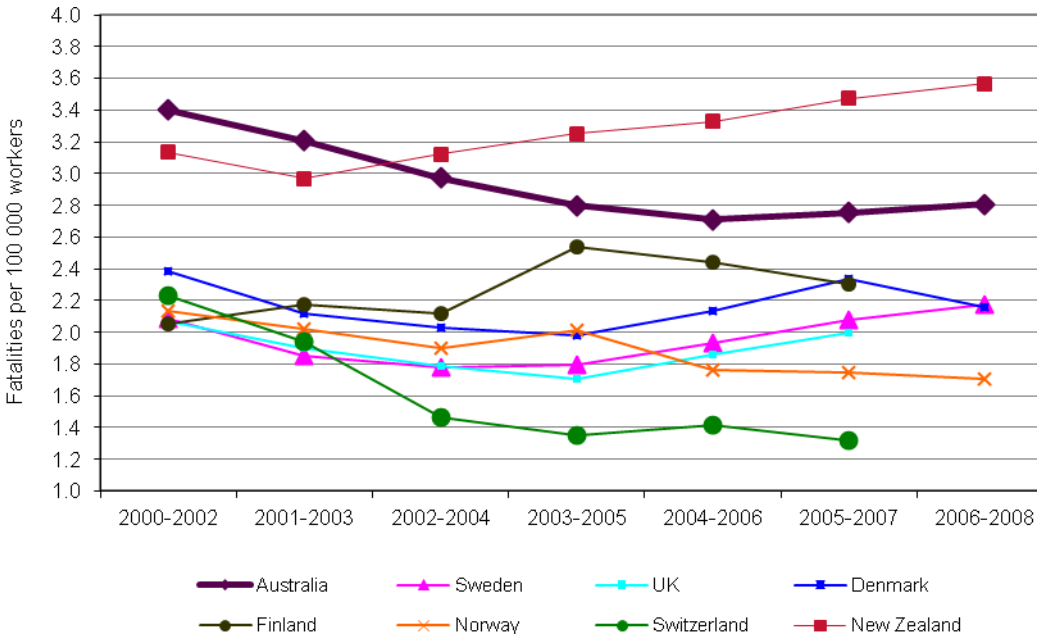
Note: Column 3 = Column 2 minus Column 1. Column 4 = Column 3 divided by ten. Column 6 = Column 4 divided by Column 5
*Does not include productivity benefits

Appendix A: Australia's work health and safety performance

Occupational injury, illness and deaths have a significant impact on workers, employers and society. Preliminary data indicates that in 2008–09 there were 128 735 serious workers' compensation claims for an injury or illness, which equates to 1.3 per cent of the Australian workforce. It is important to note that these figures are likely to understate the true incidence of workplace injury and illness, because not all work-related injuries and illness result in workers' compensation claims being made. The ABS (2011) found that in 2009–10, 5.3 per cent of workers experienced a work-related injury or illness and approximately 2 per cent reported experiencing a work-related injury or illness resulting in one or more weeks off work.

From an international perspective Australia's work-related fatality rates are above some of the best performing countries. Australia's incident rates have generally decreased at a greater rate than the best performing countries (see Chart A.1). While the gap between Australia and the better performing countries has reduced since 2000–2002, Australia did not meet its aspirational goal of having the lowest levels of work-related traumatic fatalities in the world by 2009, as set out in the *National OHS Strategy 2002–2012.*

Chart A.1: Comparison of Australia's work-related injury fatality rate with the best performing countries



Source: WRMC (2010)

This chart shows work-related injury fatality rate, fatalities per 100,000 workers, by best performing countries (including Australia, Finland, Sweden, Norway, UK, Switzerland, Denmark and New Zealand), from 2000–2008.

Safe Work Australia estimates the economic cost alone of occupational injury, illness and death for 2005–06, was $57.5 billion or 5.9 per cent of gross domestic product, of which it is estimated that 3 per cent is borne by employers, 49 per cent by workers and 47 per cent by the community (ASCC 2009). This figure does not include an estimate of the cost of suffering and early death. Table A.1 below presents a breakdown of the economic costs associated with work-related injury and illness.

Safe Work Australia did not estimate the cost of suffering and early work-related death. An earlier report by Access Economics (2004) estimated the cost of suffering and early death to be at least $57 billion in 2000–01. The report utilised a willingness to pay methodology and the concept of the value of a statistical life to estimate the cost of suffering and early death.

The economic costs of occupational injury, illness and death, coupled with the impacts of the quality of life of those affected, highlight the importance of work health and safety.

Table A.1: Economic costs borne by the employer, worker and the community

Conceptual group	Total (T)	Employer (E)	Worker (W)	Society (S)
Production disturbance costs	Value of production (inc. overtime)	Overtime premium Employer excess Payment Sick leave	Loss of income prior to RPR, net of compensation, welfare and tax	Compensation and welfare payments transferred to worker for temporary loss of wage: tax losses prior to RPR
	Staff turnover costs	Staff turnover costs	Zero	Zero
Human capital costs	Present value of earnings before incident minus earnings after incident	Zero	Loss of income after RPR, net of compensation, welfare and tax	Compensation and welfare payments for lost income earnings capacity: tax losses after RPR
Medical costs	Medical and rehabilitation costs incurred as a result of the injury	Threshold medical payments	Gap payments Private health Insurance payments	Compensation medical payments Public health system payments
Administrative costs	Legal costs	Real legal costs incurred plus fines and penalties	Real legal costs incurred	Real legal costs incurred Deadweight costs of enforcement minus fines and penalties credit
	Investigation costs	Employer investigation costs	Zero/negligible	Real costs of running the compensation system (including investigation of claims)
	Travel costs	Zero/negligible	Travel costs net of compensation and concessions	Compensation for travel costs Travel concession

Conceptual group	Total (T)	Employer (E)	Worker (W)	Society (S)
	Cost of funeral today minus present value of future costs	Zero	Net costs of bringing forward	Compensation for funeral costs
Transfer costs	Real deadweight costs of transfer payments (welfare and tax)	Negligible	Zero (accounted for in netting other items)	Deadweight costs of welfare payment (Disability Support Pension, Sickness Allowance, Mobility Allowance, Rent Assistance) Deadweight costs of tax losses
Other	Carers	Zero	Carer costs net of carer payment/allowance	Payments to carers plus deadweight cost
	Aids, equipment and modifications	Zero	Aids etc. (net costs after reimbursements)	Reimbursements for aids etc. plus deadweight cost

RPR = time to return or permanent replacement of injured worker
Source: ASCC (2009) based on Access Economics (2004)

Trends in injury and incident rates

Nationally the incidence rate of serious occupational injuries, as measured by workers' compensation claims, is declining (see Chart A.2).

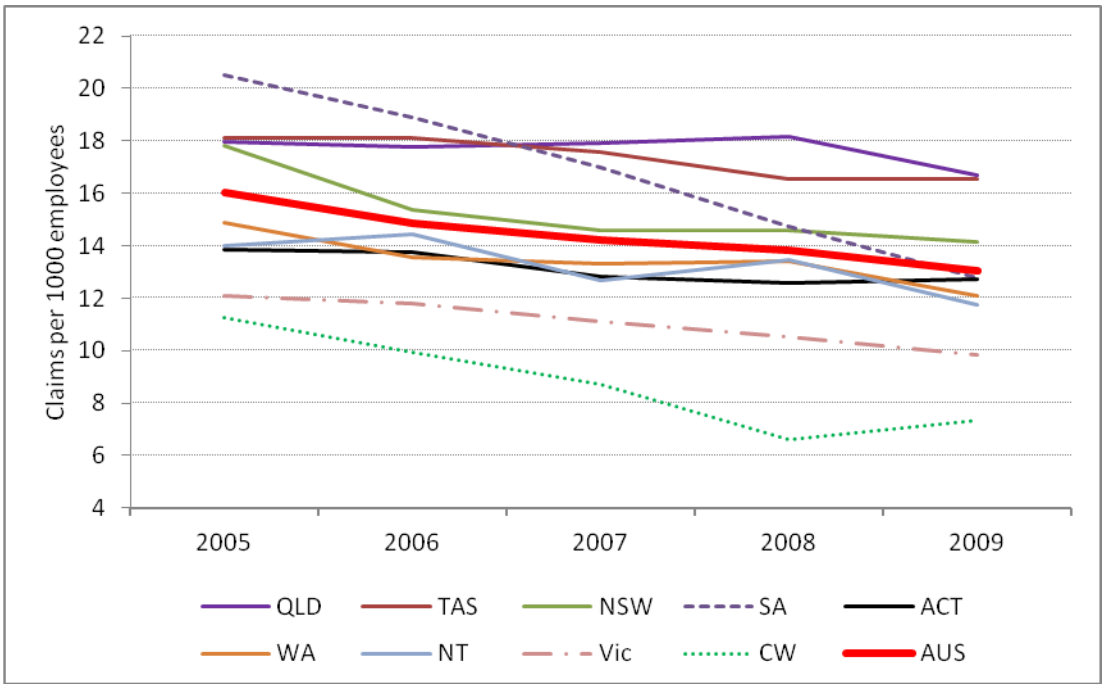
Each jurisdiction has a different work health and safety regime and different workers' compensation schemes. There are a large number of factors that may influence work health and safety outcomes in each state as measured by workers' compensation claims (e.g. differing industry composition and the nature of the workers' compensation schemes themselves).

Workers' compensation data remains the main data source for examining trends over time and for comparing performance between jurisdictions and industries. Incidence rates (or claims per 1000 employees) are used to compare performance and the ABS provides estimates of the number of employees (those covered by workers' compensation claims) for each jurisdiction and industry.

To ensure that the jurisdictional data is not influenced by the different excess periods that exist, Safe Work Australia uses a standard definition of serious injury which includes only those workers' compensation claims where the duration of absence from work is one week or more, or where a permanent incapacity or death has occurred. Data from workers' compensation schemes with an excess period greater than one week have been factored to allow comparison.

Chart A.2 shows the incidence rates of the jurisdictions since 2004–05. Both NSW and SA started the period with relatively high rates. The Commonwealth and SA showed the greatest improvements in incidence rates in the four years between 2004–05 and 2007–08. Queensland, which also started the period with a high rate, has shown less improvement and in 2008–09 recorded the highest incidence rate of the jurisdictions. The Commonwealth and Victoria started the period with the lowest and second-lowest rates and have maintained this position over the four years.

Chart A.2: Incidence of serious injuries by jurisdiction, 2004–2008



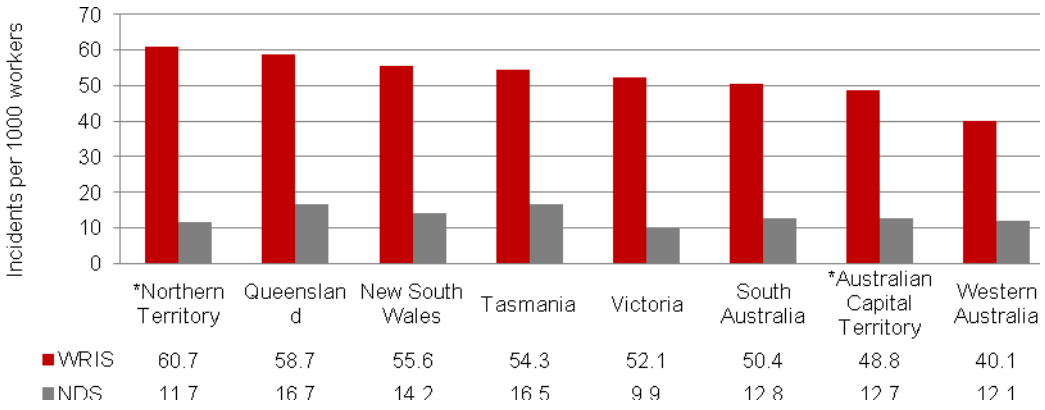
Source: WRMC (2010)

This chart shows incidence of serious injuries by Australian jurisdictions from 2004–2009, as claims per 1000 employees. Generally, rates decreased in all States during this period.

While workers' compensation claims are an important measure for work health and safety performance, they are limited in that data to reflect the injury experience of employees only. Measurements of work health and safety outcomes using only workers' compensation claims can be affected by changes to scheme structure or differences in schemes operating across Australia. An alternative source of information is the work-related injuries survey conducted by the ABS for the 2009–10 year. This data (Chart A.3) shows a similar pattern to the workers' compensation data but includes all work-related injuries, not just serious injuries[24] or those incurred only by employees. The NT recorded the highest incidence rate of 60.7 injuries per 1000 workers, while WA recorded the lowest incidence rate of 40.1 injuries per 1000 workers. NDS data for the 2009–10 preliminary year is not yet available. As a result, the WRIS 2009–10 data is compared to the 2008–09 NDS preliminary data in Chart A.3.

[24]Injuries resulting in a fatality, a permanent incapacity or a temporary incapacity requiring one week or more off work.

Chart A.3: Injury incidence rates by state



Source: NDS (2008-09p) and ABS (2009-10)

* Estimates for these jurisdictions have a relative standard error of 25 per cent to 50 per cent and should be used with caution.

This chart shows injury incidence rates by Australian jurisdictions, and NDS and WRIS, as incidents per 1000 workers. Lowest incidents by WRIS were found in Western Australia.

Another measure of work health and safety outcomes that does not depend on workers' compensation data alone is the rate of occupational injury fatalities. The data from Chart A.4 combines information from workers' compensation claims, injury fatalities notified to work health and safety jurisdictions and the NCIS. Due to the relatively small number of fatalities, fatality rates can be volatile. To smooth out some of this volatility, incidence rates have been calculated for the six-year period from 2004–2009. The NT and Tasmania recorded the highest incidence rates of injury fatalities and the ACT the lowest rate.

Chart A.4: Average worker fatalities per 100 000 workers by state/territory of death, 2004–2009

Source: Work-related Traumatic Injury Fatalities (2011)

This chart shows average worker fatalities per 100,000 workers by Australian jurisdiction from 2004–2009. The NT and Tasmania exhibited particularly high relative rates, and ACT the lowest.

While there is some link between work health and safety regimes and numbers of injuries, other factors—including industrial composition of employment in different states—will also have a major effect. In WA, the fact that many people work in mining—a dangerous occupation—will drive up the level of injuries in that state. Conversely, a high proportion of people under the Commonwealth's jurisdiction work in public administration, which will reduce injury levels.

While there are links between work health and safety regimes and severity, as measured by compensation payments, other factors also have major influences. The design of the workers' compensation system can affect average payments for a given severity of injury.

Both the Productivity Commission (2010) and the National OHS Review (2009) concluded that the impacts of work health and safety regimes on safety outcomes are not readily quantifiable across jurisdictions. The Productivity Commission concluded:

> *It is difficult to draw conclusions on the performance of work health and safety regulation from outcomes data. Firstly, there are data limitations. Secondly, notwithstanding data limitations, it is usually difficult to link changes in outcomes with particular regulatory changes. Even attributing better or worse performance to whole regulatory regimes is dubious.*

The National Review concluded: 'The standardised statistics are, in our view, not reliable for reaching conclusions about the effect of particular legislative provisions.'

Where a jurisdiction has made significant changes in its work health and safety regime it is possible to compare outcomes over time. Depending on other variables, it can be reasonable to attribute improved (worsened) outcomes to better (worse) regulations. This approach will be adopted here for the Decision RIS where possible.

The relative degree of industry risk of fatality can be seen in Table A.2, which shows the number of worker fatalities across the 2003–04 to 2008–09 financial years by industry and state of death. Relative risk is measured by the incidence rate, which shows the number of fatalities per 100 000 workers. This illustrates that high risk industries include: agriculture, forestry and fishing; transport, postal and warehousing; mining; and electricity, gas, water and waste services.

Chart A.5: Work health and safety statistics report – worker fatalities by state and industry division, 2003–04 to 2008–09

Industry	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	ALL	Incidence rate
Accommodation & food services		7		8	2	1	3	1	**22**	0.5
Administrative & support services	1	19	2	20	4		5	8	**59**	2.8
Agriculture, forestry & fishing	2	98	14	91	29	32	77	42	**385**	18.1
Arts & recreation services		10	1	8	1		1	6	**27**	2.5
Construction	3	75	7	70	11	3	48	23	**240**	4.5
Education & training	2	4		6	4		3	3	**22**	0.5
Electricity, gas, water and waste services		13		5	2		9	5	**34**	5.3
Financial & insurance services		1	1	1				3	**6**	0.3
Health care & social assistance		4		1	1	2	6		**14**	0.2
Information media & telecommunication		2		1	1		1	1	**6**	0.4
Manufacturing		53	1	19	7	4	41	20	**145**	2.3
Mining		6	2	13	10	1	4	21	**57**	7.3
Other services		12	3	9	2	1	13	2	**42**	1.6
Professional, scientific & technical services		7	2	7		1	8	3	**28**	0.7
Public administration & safety		19	5	15	2	7	15	7	**70**	1.7
Rental, hiring & real estate services		10	1	10		2	2	5	**30**	2.6
Retail trade		24		8			10	5	**47**	0.7
Transport, postal & warehousing	1	133	5	99	22	12	86	37	**395**	12.6
Wholesale trade	1	22		14	1	1	13	5	**57**	2.4
ALL	**10**	**519**	**44**	**405**	**99**	**67**	**345**	**197**	**1686**	2.7
Incidence rate	0.9	2.6	6.7	3.3	2.2	5.0	2.3	3.1	2.7	

Source: Work-related Traumatic Injury Fatalities, Australia, 2008-09 (2011)

Appendix B: History of work health and safety harmonisation in Australia

NOHSC

NOHSC was established in 1985 as a tripartite body made up of representatives from the state, territory and Commonwealth governments, and employer and trade unions.

Following a review by the Department of Industrial Relations (1990) the Ministers of Labour Advisory Committee agreed that standards developed and endorsed by NOHSC as far as possible be accepted as minimum standards and implemented in each jurisdiction.

The primary focus of national uniformity from the early 1990s was the development and adoption of National Standards and National Codes of Practice for priority areas: manual handling, plant, hazardous substances, noise, certification of occupations and major hazard facilities (National Uniformity Taskforce 1992).

The development and adoption of standards was slow and lacked consistency across jurisdictions, with some jurisdictions implementing provisions in work health and safety regulations while others implemented the same provisions in Codes of Practice or in guidance material (Johnston 2008). The implementation of National Standards was slow because of extensive consultation and regulation impact requirements in some jurisdictions and complications derived from tailoring National Standards and Codes of Practice to each jurisdiction.

Industry Commission

In 1995 the Industry Commission released its report *Work, Health and Safety: Inquiry into Occupational Health and Safety* (Industry Commission 1995). The report highlighted substantial inconsistencies in work health and safety legislation across jurisdictions and also in standard development and uptake. By 1995 only five of the seven priority standards had been declared by NOHSC and none of these had been implemented in the jurisdictions at the time of the report.

The Industry Commission (1995) noted that Australian work health and safety instruments had increased from around 90 in the mid-1980s to around 150 by 1995.

The Industry Commission (1995) concluded that non-uniformity of work health and safety legislation may impose significant costs on the business community, with employers who work across multiple work health and safety jurisdictions facing increased compliance costs and additional costs whenever systems of work are changed or staff are moved between regimes.

The Industry Commission recommended the use of template legislation covering the core elements of work health and safety legislation, which all jurisdictions would agree

to adopt with little or no amendment through a process of co-operative federalism (Industry Commission 1995).

National OHS Strategy

In 2002 Workplace Relations Ministers, ACCI and the ACTU endorsed the *National OHS Strategy: 2002–2012* which established national targets and priorities. One of the areas requiring national action is the development of a nationally consistent regulatory framework.

Productivity Commission

In 2003, the Productivity Commission (successor to the Industry Commission) conducted a further inquiry into work health and safety arrangements in Australia, with a view to 'assess possible models for establishing national frameworks for Workers' Compensation and OHS'.

Its report *National Workers' Compensation and Occupational Health and Safety Frameworks* was released in 2004 and found that all previous attempts to achieve national consistency in work health and safety legislation had failed.

The report considered it essential that the existing broad agreement on work health and safety legislation be taken further to develop, adopt and enforce uniform national work health and safety legislation. Nationally consistent work health and safety legislation would increase efficiency for multi-state organisations to meet their work health and safety requirements as workers and employers could be trained in one set of work health and safety requirements. Businesses could establish a single safety culture with common manuals and procedures throughout their organisation.

The Productivity Commission (2004) argued that national uniformity in work health and safety regulations should be established as a matter of priority and stated that 'there are no compelling arguments against a single national work health and safety regime, and there are significant benefits from a national approach, particularly for multi-state employers and for the increasingly mobile workforce'.

The Productivity Commission recommended that a single uniform national work health and safety regime be the medium-term objective and provided two approaches that would operate in parallel:

- adapt the current cooperative model by strengthening the national institutional structure based on NOHSC and WRMC, emphasising the timely development of best-practice national work health and safety standards and their implementation uniformly throughout Australia. Such an approach should be commenced immediately, and
- progressively open up access to the existing Australian Government OHS regime, giving businesses the choice of a single set of national work health and safety rules.

A second proposed approach was implemented in 2007 with amendments to the *Occupational Health and Safety Act 1991*. The amendments allowed for employers licensed to self-insure under the *Safety, Rehabilitation and Compensation Act 1988*

(Commonwealth) to be regulated by the *Occupational Health and Safety Act 1991* (Commonwealth), instead of by state and territory work health and safety statutes.

ASCC

In response to the 2004 Productivity Commission report, the Australian Government replaced NOHSC with the ASCC in 2005. The ASCC was also a tripartite body and had a similar role to NOHSC in facilitating national consistency in the work health and safety regulatory framework but its role expanded to include workers' compensation policy.

Taskforce for reducing the regulatory burden on business

The taskforce for reducing the regulatory burden on businesses (the Regulation Taskforce) was established in 2005 to address areas of 'unnecessarily burdensome, complex, redundant or duplicate regulations'. Submissions to the Regulation Taskforce highlighted deficiencies with work health and safety regimes, and its report *Rethinking Regulation* noted industry concerns that inconsistency in work health and safety regulation across jurisdictions adds significantly to compliance costs for businesses. The report recommended:

- COAG should implement nationally consistent standards for work health and safety and apply a test whereby jurisdictions must demonstrate a net public benefit if they want to vary a National Standard or National Code of Practice to suit local conditions, and
- COAG should request the ASCC examine the duty of care provisions in principal work health and safety Acts as a priority area for harmonisation. In undertaking this work the ASCC should give weight to recent work health and safety reforms in Victoria.

Productivity Commission Benchmarking Report

The Productivity Commission released a report benchmarking work health and safety regulations in 2010. In a submission to this report, ACCI (2009) noted that since the mid-1990s 'the stock and complexity of work health and safety burden has grown incrementally over time, exacerbated by a lack of consistency in legislation and regulation across jurisdictions'. ACCI (2009) reported that its 2007 Pre-Election Survey found that the majority of its members had moderate to major concerns regarding compliance with work health and safety regulations and over a third of multi-state businesses found that differences in work health and safety regulations were significant enough to increase their costs.

COAG National Reform Agenda

The harmonisation of work health and safety legislation has become part of the COAG National Reform Agenda aiming to reduce regulatory burdens and create a seamless national economy. In February 2006 COAG agreed to improve the development and uptake of National Standards and the ASCC commenced work on reviewing the national work health and safety framework to achieve greater national consistency and on prioritising areas for harmonisation.

Of all the regulations faced by businesses, work health and safety causes most concern. The COAG Business Regulation and Competition Working Group (2008) assessed 27 priority areas of regulation and nominated work health and safety as the number one issue.

By 2008, there were over 400 work health and safety Acts, regulations and Codes of Practice (WRMC 2008).

Safe Work Australia

Safe Work Australia replaced the ASCC in 2009 and is the national body progressing work health and safety and workers' compensation policy development in partnership with governments, employers and employees. Currently its main focus is to progress the harmonisation of work health and safety legislation in Australia.

Appendix C: Literature review

This section reviews processes that have already been undertaken to identify the costs and impacts of introducing various regulations and guidance material relevant to the national work health and safety harmonisation process.

These reports have been previously produced by Commonwealth, state and territory agencies and independent organisations. Aspects of these publications that concern the adoption of national model WHS Regulations and Codes of Practice are summarised in this section.

The previous RIS documents outlined in this Appendix are an important part of the RIS process. They provide a base line for determining additional change and impact that may arise in the course of developing the model WHS Regulations and Codes of Practice. All jurisdictions have previously agreed to the outcomes of these RISs. Regardless of whether they have implemented any or part of the regulation assessed they represent the base from which the proposed model WHS Regulations or Codes of Practice have been assessed.

Chemicals RIS – 2009

Existing workplace chemicals regulations in the jurisdictions are based on two separate instruments covering hazardous substances and dangerous goods. The primary regulatory instruments are the *National Model Regulations for the Control of Workplace Hazardous Substances* and the *National Standard for the Storage and Handling of Workplace Dangerous Goods*.

An extensive review of these regulatory instruments commenced in 2002. In July 2009 Safe Work Australia made a policy decision to develop model work health and safety regulations for hazardous chemicals that merged the existing hazardous substances and dangerous goods instruments and adopted the United Nations' GHS as the basis for classification and hazard communication on labels and safety data sheets.

The Safe Work Australia decision was supported by a RIS developed by Access Economics, *Proposed Revisions to the National OHS Framework for the Control of Workplace Hazardous Substances and Dangerous Goods*. The RIS considered transitional arrangements for moving to the new classification and hazard communication system and based calculations on a five year transitional period between 2012 and 2017, during which time both existing and GHS systems would operate concurrently. The transitional period would allow two years to reclassify and re-label pure substances, and a further three years to reclassify mixtures. The RIS demonstrated a net benefit in accordance with COAG requirements and was approved by the OBPR noting that:

- the COAG Guide had been followed
- the level of analysis was commensurate with the potential impacts of the proposal, and
- alternatives to the proposal had been adequately considered.

Asbestos RIS – 2005

A RIS was developed by NOHSC on the *Proposed Codes of Practice and Guidance Note for Asbestos* in 2005. The RIS considered the impacts of the provision of new and additional guidance to manage and control exposure to airborne asbestos fibres from in situ asbestos-containing material compared to maintaining the guidance material that was first published by NOHSC in 1988. The RIS recommended the revision of the 1988 Removal Code of Practice and 1988 Guidance note, and upgrading the 1988 guide to a Code of Practice.

The average cost to businesses of complying with the additional requirements of the Management Code of Practice in the first year of operation was estimated at between $843.75 (SA) and $4580.50 (Queensland). The average additional cost per job for all forms of asbestos removal under amendments to the Removal Code of Practice was estimated at up to $1042.05 (WA, Tasmania, NT and ACT). The average additional cost per job for friable asbestos removal work was estimated at between $2587.50 (Queensland and NSW) and $2703 (other states and territories).

The medical and compensation costs avoided by preventing each case of mesothelioma were estimated at $667 000, with an estimated reduction in the number of cases of asbestos-related disease of 156 cases between 2005 and 2030. Regardless of the monetary value of each option the significant factor in these two options is the reduction in the number of new cases of asbestos-related lung cancer, mesothelioma and other diseases that could be expected to occur.

Major Hazardous Facilities RIS – 1995

In 1996 a RIS was prepared to accompany NOHSC's original declaration of the *National Standard for the Control of Major Hazard Facilities*. Through NOHSC, all states and territories and the Commonwealth agreed to implement this National Standard. The model WHS Regulations do not propose any significantly new concepts over and above what was included in the original national standard but it is acknowledged that model WHS Regulations for MHFs will be an entirely new set of regulations for SA and the ACT. The ACT has no licensable facilities.

A compliance cost survey in 1995 indicated there would be some additional costs for industry in meeting the provisions of the then new National Standard. Additional costs were found to be on average 11.4 per cent of current expenditure.

The benefits derive from the objective of preventing major incidents and near misses and minimising the effects of major accidents.

National Construction Standard RIS – 2005

The NOHSC developed this RIS as part of the development of the *National Standard for Construction Work* in response to a perceived need for regulatory action. At the time of the RIS each Commonwealth, state and territory jurisdiction had its own approach to work health and safety policy and practice and developed its own legislation. The Royal

Commission into the Building and Construction Industry[25] noted that inefficiencies existed where companies operated nationally and needed to comply with individual jurisdictional regulations or Codes of Practice.

The Royal Commission recommended that NOHSC develop a uniform national standard for the construction industry under the National Strategy. WRMC considered NOHSC's scoping work and agreed to the development of national material for the construction industry. A sector of the residential construction industry expressed concerns over the scope of the proposed national standard and in response further consultations with industry bodies were undertaken. This resulted in the proposal for two national Codes of Practice to be developed: one for the construction industry and the other for the housing sector.

This 2005 RIS identified a range of factors that were to be targeted including:

- safe design
- consistent national regulation to improve industry understanding of responsibilities, and
- consistent targeting of the high risk tasks on a construction site, with legislative requirements for specific controls.

The RIS noted that many construction industry fatalities and injuries were either directly or in part attributable to poor design. The RIS identified that up to 37 per cent of workplace injuries over a two-year period were connected with design-related hazards. This was also acknowledged by the Royal Commission, which called for a consistent national approach, recognising that inconsistency in construction regulation results in inefficiencies in the industry. Inconsistent work health and safety regulation can lead to misunderstandings and contribute to the higher–than-average incidence of workers' compensation claims in the construction industry.

The option to develop a single National Standard for construction was the preferred option, with benefits to businesses including efficiency gains and lower overall costs for work health and safety compliance. The RIS stated that if all injuries and fatalities arising from design were eliminated there could be savings of $112 million per annum. This figure was calculated by NOHSC using workers' compensation claims between 1994 and 2000 where there was an average cost per claim of $11 900.

In 2007 benefits to the Australian community of approximately $20 billion were estimated through the reduction of both workers' compensation costs and costs that are borne by the public health and income support systems.

General Falls Code of Practice RIS – 2008

Access Economics (2008) developed a RIS for the ASCC on preventing falls in the general construction industry (excluding housing construction). The RIS was primarily focussed on analysing the introduction of a two-metre height threshold for physical fall

[25] Royal Commission into the Building and Construction Industry, Volume 6: Reform – Occupational Health and Safety, Final Report, February 2003.

protection, where reasonably practicable. The RIS found that introducing a two-metre height threshold would result in net benefits of $191 million over the following 10-year period. For those jurisdictions that already employed a two-metre rule the average cost of safety measures was around $432 per worker higher than the average for other jurisdictions. In terms of benefit-cost ratios, the RIS found that every dollar spent on fall protection would result in $1.23 worth of benefits.

Housing Falls Code of Practice RIS – 2009

Access Economics (2009a) examined the impact of adopting a *National Code of Practice for the Prevention of Falls in Housing Construction* (Housing Falls Code). The report also considered the costs and other effects of incidents involving falls from height in the course of housing construction work, as well as the costs and impacts of introducing a two-metre height threshold for physical fall protection, where reasonably practicable. The costs and benefits to the housing construction industry of introducing the Housing Falls Code were outlined in this RIS process.

The Housing Falls Code was developed to provide practical guidance on meeting the safety principles outlined in the *National Standard for Construction Work* and for reducing the incidence and impacts of falls from height in housing construction.

Streamlined Victorian Work Health and Safety Regulations RIS – 2007

Allen Consulting (2007) (Allens) was commissioned by WorkSafe Victoria to conduct the *Regulatory Impact Statement: proposed OHS Regulation and proposed Equipment (Public Safety) Regulations 2007,* which found that streamlining and consolidating the existing work health and safety regulatory framework in Victoria would have a positive net impact on businesses. This report suggested that the regulatory approach prior to the review was unduly complex, adding to business costs and reducing businesses' ability to comply with the work health and safety framework. Proposed improvements to the regulations included:

- streamlining a set of 13 regulations into a single set
- removing duplication between the existing regulation, and
- aligning the regulations with the national standards.

While the new regulation framework was largely a translation exercise, in many areas the Government was still able to reduce the compliance costs of red tape. Removing prescriptive risk assessment requirements was estimated to lead to accrued savings of $40 per annum per business. Allens estimated that this represented a 20 per cent reduction in the total work health and safety administrative burden for businesses. There are similarities between the removal of the prescriptive risk assessment requirements in the Victorian regulations and that proposed in the model WHS Regulations.

It was estimated that $71 million in new costs to businesses would arise from new obligations and increases in business compliance. In order to generate a net benefit work health and safety incidents would need to be reduced by 0.2 per cent per year. This was judged to be achievable by Allens.

Construction Induction Training RIS – 2006

Access Economics (2006) was commissioned by the ASCC to conduct a CBA of the introduction of a *National Code of Practice for Construction Induction Training*. The CBA formed part of the RIS supporting the draft Code of Practice within the regulatory review process. When the RIS was prepared there was considerable variation in construction induction training across jurisdictions. While induction training was mandatory in NSW, Queensland and WA it was not required in the ACT, Victoria, SA or Tasmania. Since the publication of the National Code in May 2007 these jurisdictions have adopted the requirements of the National Code.

The report found that reductions in incidents were related to the numbers of additional workers undertaking training, with the reduction occurring one year after the training. Benefits would begin to accrue in 2007–08 following on from the commencement of additional training in 2006–07. In 2007–08 the claim rate was estimated as 24.26 incidents per 1000 workers, falling from 25.27 in 2006–07, the 'base year'.

Introducing induction training created a net financial cost of $28.1 million in 2006–07, compared to maintaining the status quo. From 2007–08 this became a net benefit as the benefits from incidents averted outweighed the costs of the training. There was also an estimated 76 disability adjusted life years (DALYs) gained in 2007–08 (worth $12 million), with 307 DALYs (worth $50 million) averted over the period to 2014–15.

High Risk Work Licensing RIS – 2006

This RIS (OASCC 2006) concerned the introduction of a new *National Standard for Licensing Persons Performing High Risk Work*. The existing National Standard was inflexible and unable to accommodate contemporary work practices or emerging technologies. The proposed National Standard recognised the importance of training as an underpinning principle in providing competent workers and that the most effective form of training was a combination of formal and informal training methods. The new National Standard required training and assessment to be undertaken by RTOs operating under the Australian Quality Training Framework.

The report found that the introduction of a new National Standard was the preferred option. This option was found using a CBA that included calculation of the number of injury incidents averted. Incident rates were calculated in relation to the equipment associated with the cause of the injury such as forklift truck, power hoists and scaffolding. The number of incidents for each equipment type (e.g. scaffolding) in the revised National Standard was found to diminish over the forecast horizon (2005–06 to 2013–14) in line with the average growth in all claims of -2.7 per cent per annum. The eventual reduction in incidents averted was due to trend improvements over time. Results for projected incidents averted are presented in Table C.1. The overall net benefit of this option was estimated as $38.6 million in 2006.

Table C.1: Projected incidents averted by type of equipment, 2004–05 to 2013–14

Equipment type	'04–05	'05–06	'06–07	'07–08	'08–09	'09–10	'10–11	'11–12	'12–13	'13–14
Power hoists	6	6	6	6	5	5	5	5	5	5
Cranes	12	12	11	11	11	10	10	10	10	9
Forklift trucks	63	61	59	58	56	55	53	52	50	49
Scaffolding	33	32	31	31	30	29	28	27	27	26
Boilers	4	4	4	4	4	3	3	3	3	3
Total	118	115	112	109	106	103	100	97	95	92

Source: OASCC (2006)

Economic analysis of NSW work health and safety regulations – 2006

WorkCover NSW commissioned ACIL Tasman (2006) to undertake the *Occupational Health and Safety: Economic Analysis* to determine the impact of reforms to its work health and safety regulations in 2001. This analysis found that the average level of workplace injuries would have increased by about 3 per cent in the absence of the 2001 work health and safety reforms. Actual claims data since 2001 showed an average reduction of about 9 per cent. The total effect of the 2001 reforms was estimated to be a reduction of about 12 per cent or 19 248 claims.

The reduction in injury and disease incidents reported above were converted into injury categories and used in conjunction with updates of the NOHSC cost data to estimate the reform-induced cost saving. Based on this methodology, it was estimated that the saving in direct and indirect costs resulting from the 2001 work health and safety reform was $5.58 billion per year. This estimate was based on reductions in the number of work-related compensated injury incidents in a single year and equates to the savings these workers (who would have otherwise been injured), their employers and the community enjoy as a result of the reform-induced reduction in injury and disease.

Rethinking Regulation – 2006

A report looking at the burden of over-regulation across a number of areas, *Rethinking Regulation* (Regulation Taskforce 2006) recommended that a rigorous program of evaluation including CBA, targeted consultation and comprehensive RIS be undertaken for proposed regulation programs. The basis for this recommendation was that the unnecessary component of compliance in Australia—partially due to overlap and duplication—was conservatively estimated by the Taskforce as $3 billion per year.

These additional costs are borne by businesses in the form of:

- providing management and staff time to fill in forms and assist with audits and the like
- recruiting and training additional staff where needed to meet compliance burdens

- purchasing and maintaining reporting and information technology systems
- obtaining advice from external sources including accountants and lawyers to assist with compliance, and
- obtaining licences and/or attending courses to meet regulatory requirements.

As well as the monetary cost, regulatory compliance obligations can also divert management attention. Compliance issues can consume up to 25 per cent of the time of senior management and boards of some large companies, which risks stifling innovation and creativity. Smaller companies are disproportionally hit as a result of a smaller revenue base to spread costs, no in-house regulatory team, relatively less time to keep abreast of regulatory developments and heightened concern of penalties for non-compliance. In addition, where regulation increases business costs, these are often passed on to consumers in the form of higher prices for goods and services.

Governments also experience costs in designing, updating, implementing and enforcing regulation. The administrative expenses of 15 dedicated Australian Government regulatory agencies approached $2 billion in 2003–04. The Australian Taxation Office accounted for a further $2.3 billion in that year.

RIS for the Manual Handling Standard – 2006

In May 2005 the Office of the ASCC commissioned Access Economics to research and write components of a RIS for the revised National Standard and Code of Practice for Manual Handling.

A consultation process was used in order to obtain feedback on the financial impacts of the changes. A series of phone consultations and email correspondence was conducted with a range of state and territory work health and safety authorities, industry associations, ergonomics consultants and employers.

The RIS (ASCC 2006) found that on purely quantifiable economic grounds the highest expected net benefit came from the option to revise and update the National Standard for Manual Handling and National Code of Practice for Manual Handling. Consistency across jurisdictions would be improved by moving the national regime closer to the regimes implemented in Victoria, Queensland and WA. Key changes included:

- an expansion of the duties of designers, manufactures and suppliers
- shifting the ‘duty holder’ from employers to persons with ‘control of work’, and person with control of workplaces, and
- ensuring that the hazard identification and risk assessment tools are updated to help duty holders identify, assess and control manual handling hazards.

New and additional costs to businesses pursuing this option involved hazard identification and modification costs for owners of workplaces and the transitional costs for businesses and work health and safety authorities associated with regulatory change. However these costs were expected to be outweighed by the benefits from improvement in consistency between jurisdictions and a reduction in manual handling incidents in workplaces as a result of enhanced design practices. Table C.2 summarises the main components of the benefits accruing in the first year after implementation of the revised National Standard.

Table C.2: Main benefits from revision and update of National Standard and Code of Practice for Manual Handling

Benefit component	Benefit range (million p.a.)[(a)]
Greater mutual recognition	$0.18
Financial benefits from incidents avoided	$118
The value of healthy life gained	$495

Note: (a) figures from 2005

In net present value terms, over 10 years the net benefits were potentially valued up to $630 million.

Appendix D: Survey

During the public comment process Deloitte Access Economics sent out a web-based survey to around 4500 firms across industry, jurisdictions and a range of workforce sizes. Questionnaires were sent to Deloitte Access Economics' own mailing list and Safe Work Australia's mailing list. Participants at consultations in every jurisdiction were also asked to fill in the survey. The survey also contained a section asking businesses that trade across borders about the perceived benefits from only having to deal with one set of regulations. A copy of the survey is contained at the end of this Appendix.

While previous experience has shown response rates can be low for such surveys (around 15 per cent), it was hoped that a sample of this size should enable the collection of sufficient data to assess the impact of model WHS Regulations. Unfortunately this was not the case. While the survey sample was 10 times larger than that used for the model Act RIS, the response rate was 10 times smaller at 1.5 per cent. While the absolute number of returns of 73 was more than double that of the Model Act RIS survey (30), this sample is not large enough to be useful. Statistically, around 300 responses would be required to represent the Australian business population. The survey was designed to be able to separate respondents for whom a particular aspect of the model WHS Regulations were completely new (e.g. mandatory RCDs in Tasmania) from those who already operate under similar regulations (e.g. mandatory RCDs in Queensland). With only 73 responses it was not possible to divide responses into smaller groups and make any meaningful inferences about the population at large. It is also not possible to make separate observations about industry, jurisdiction or firm size. The only observations that can be made are about Australian businesses as a whole.

Due to the low response rate, some internal inconsistencies in responses and the necessarily subjective nature of some questions, Deloitte Access Economics does not consider the survey results sufficiently robust to enable the qualitative arguments of the Consultation RIS to be replaced by quantitative arguments in the Decision RIS. However the results can still be used to triangulate with qualitative data from consultations, desktop research and expert opinion to form well-supported outcomes.

Survey respondents indicated a median annual work health and safety spend per employee of $701. The median firm indicated that it would cost $129 to train an employee about the model WHS Regulations. However in an average year it costs $55 to train an employee about work health and safety changes. The net cost of training an employee about the model WHS Regulations will be $74. This represents around a 10 per cent one-off impact of the model WHS Regulations.

For most areas, businesses expected adjustment and compliance costs would outweigh safety benefits to their bottom line.

This is not the same as the benefits of safety to society. The ASCC (2009) estimated that the economic costs to the rest of society (mainly workers and government) of occupational incidents were at least four times greater than those borne by employers.[26] Because of the increased uncertainties in forecasting safety benefits (relative to compliance costs), Deloitte Access Economics has conservatively applied a weighting of two to allow for safety benefits to the rest of society. On this basis most of the regulatory changes surveyed result in net benefits to society.

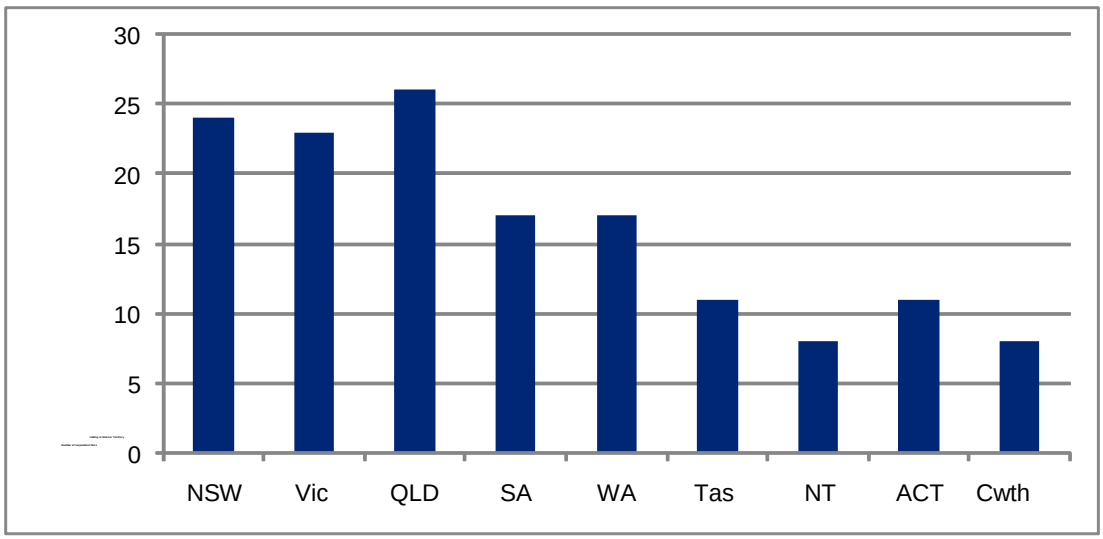
Not surprisingly, multi-state firms (who account for around one-third of the workforce) expected clear overall benefits from harmonisation.

Firms reported that they would no longer have to undertake and keep risk assessments in most areas. This would save them an average of $75 per employee per year. However most firms (61 per cent) reported that they would probably still continue to do so anyway as a defence in case of a breach, which more than halves the expected value of harmonisation.

Characteristics of respondents

The survey had a reasonably good spread of geographic coverage.

Chart D.1: Jurisdictions operated in by survey respondents

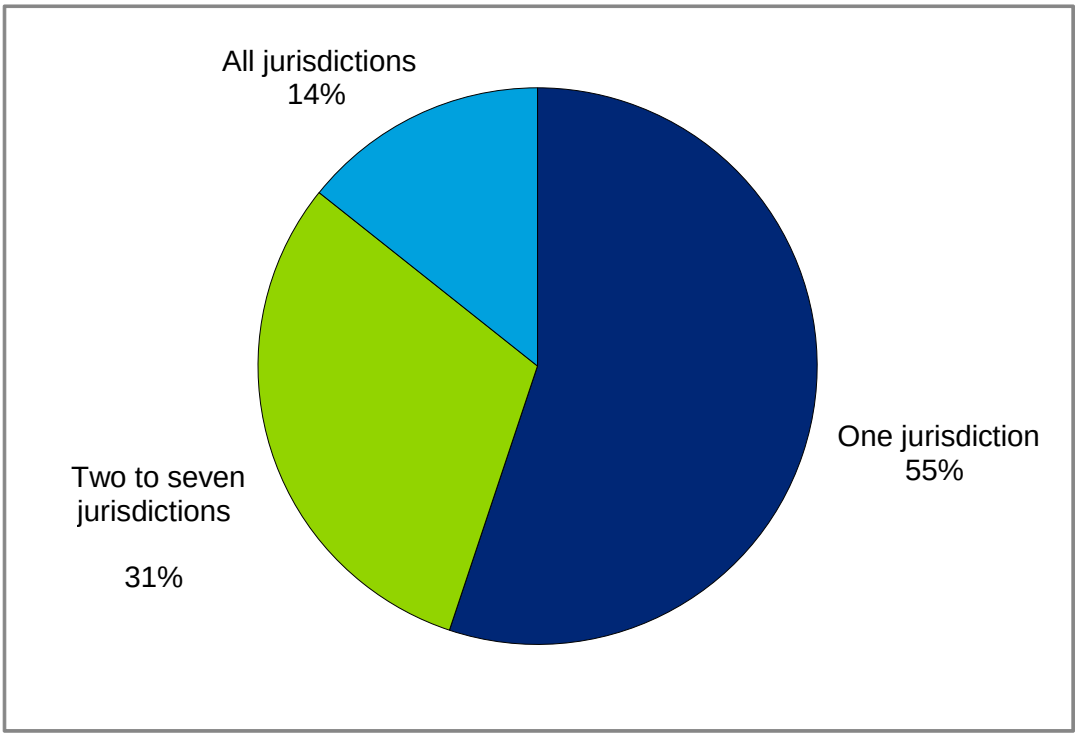


This chart demonstrates that respondents varied by jurisdiction.

While just over half (55 per cent) of respondents were single-state operators, those who were multi-state had operations in an average of five states. Overall the average respondent operated in 2.8 states.

[26]Costs borne by employers includes workers' compensation premiums. Costs borne by workers excludes economic value of healthy life lost (burden of disease), which would at least double total costs to society.

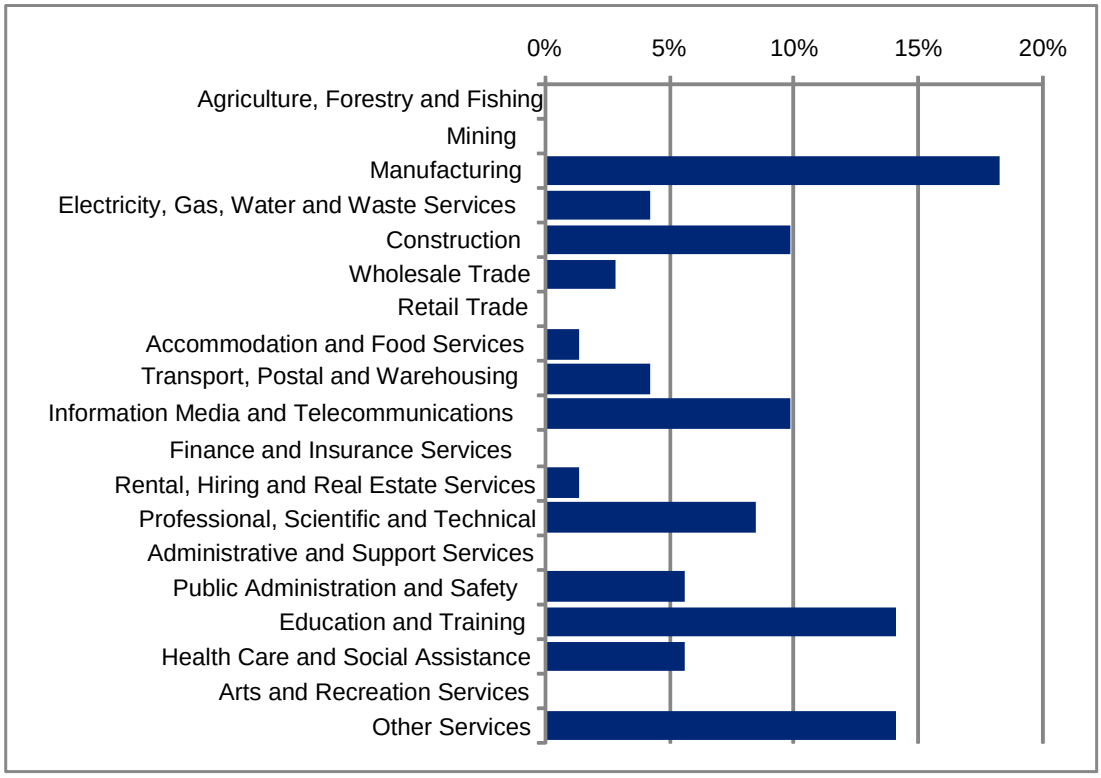
Chart D.2: Number of jurisdictions operated in by respondents



This chart demonstrates that the majority of respondents were from a single jurisdiction.

While the number of respondents was low, most sectors of the economy were at least represented. Manufacturing was the most represented sector. Mining was not represented and will be the subject of a separate RIS.

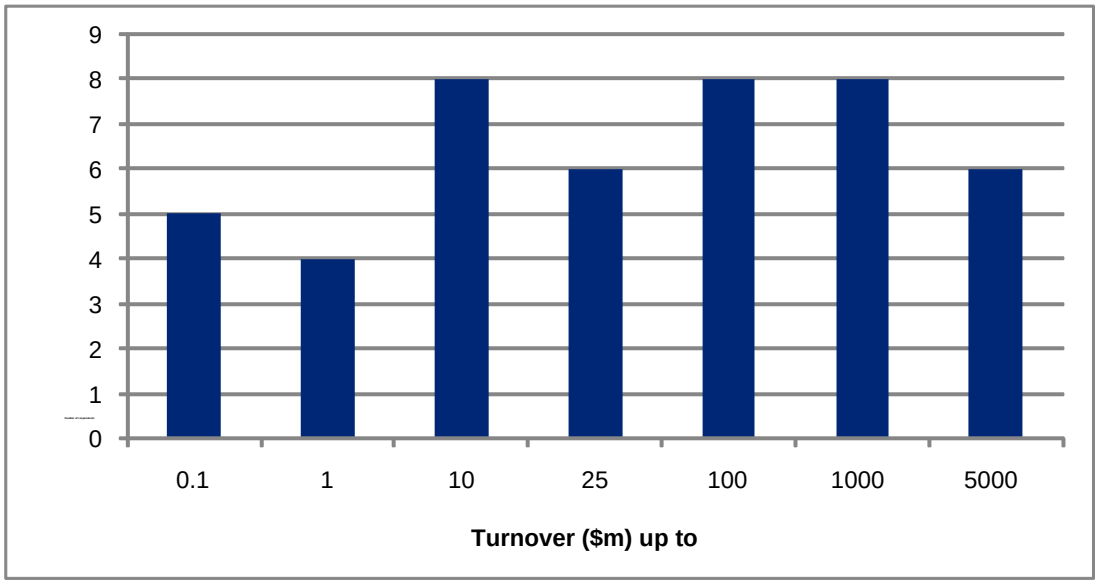
Chart D.3: Industry representation of respondents



This chart demonstrates that manufacturing, education and training, and other services not classified were the main respondents.

The average firm had a turnover of $702.5 million, though this was skewed by the presence of some large turnover firms, with the median being only $25.5 million.

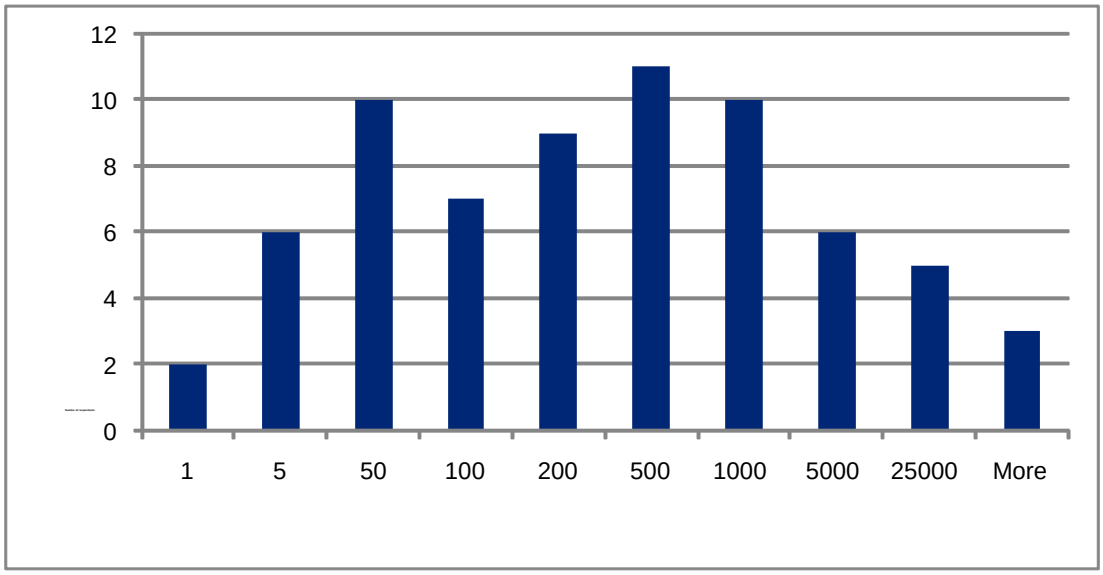
Chart D.4: Respondent turnover



This chart demonstrates that the main respondents had turnovers between $10m and $1,000m.

The average firm had an average of 9700 employees and the median was 270 employees.

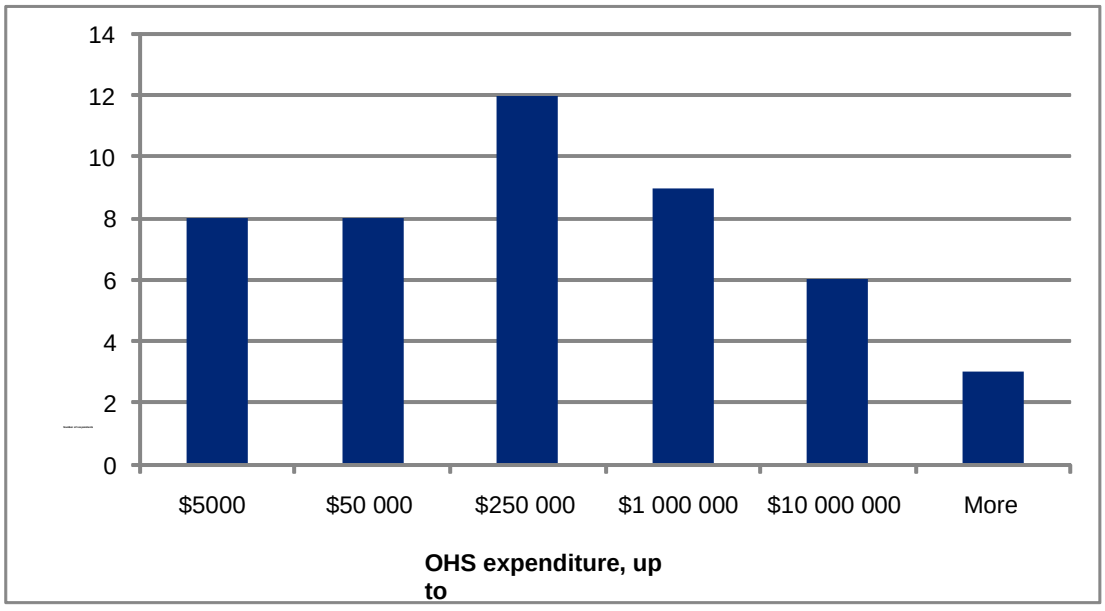
Chart D.5: Distribution of firms by employment size



This chart demonstrates that the main respondents had between 50 and 1000 employees.

The median firm spent $0.178 million per year on work health and safety as per Chart D.6. The average was $2.769 million, but given the distortion from large firms the median is a preferable measure.

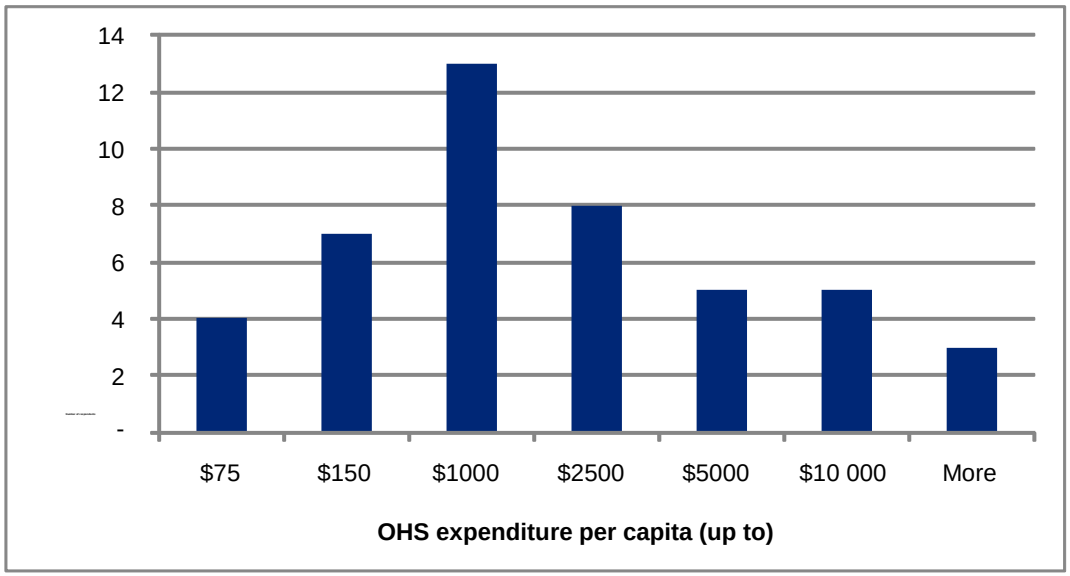
Chart D.6: Work health and safety expenditure by firm



This chart demonstrates that the main respondents had OHS expenditure of up to $250 000.

From firms giving both employee and work health and safety spend numbers, the median work health and safety spend per employee was reported at $701 and the average at
$2752 as per Chart D.7.

Chart D.7: Work health and safety expenditure per employee



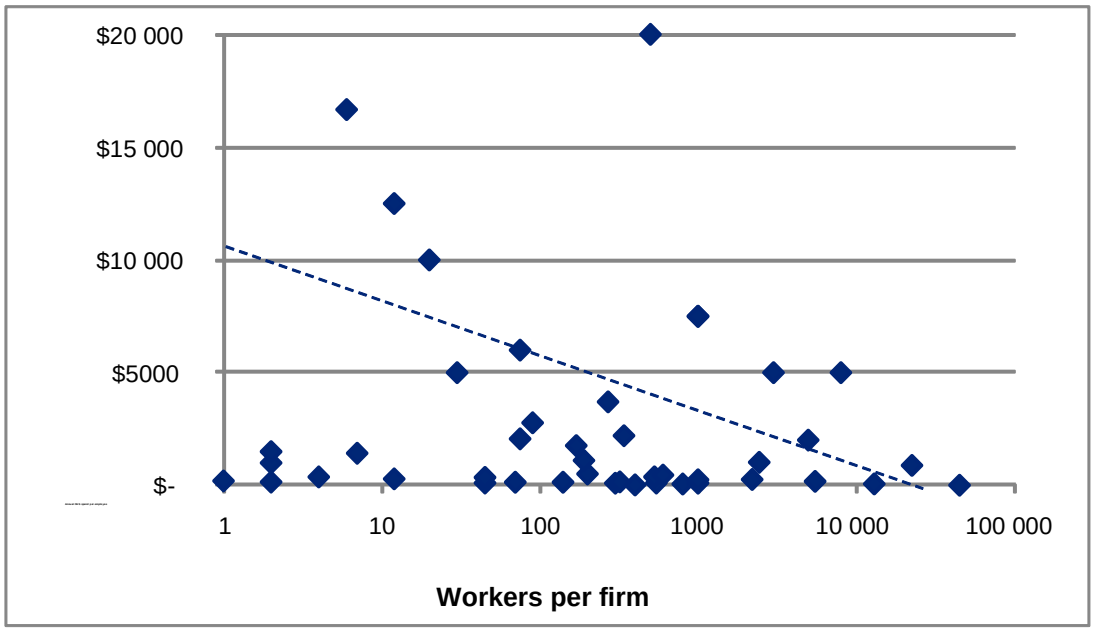
This chart demonstrates that the main respondents had OHS expenditure per capita of up to $1000.

Firms were asked what the cost may be to educate workers about the new harmonised work health and safety regime when it is introduced. The median cost per employee was $129 and the average cost per worker was $7041.

Firms were asked what the ongoing cost may be to educate workers about the previous changes to existing work health and safety regulations and Codes of Practice. From those that responded, the median cost per employee was $55 and the average cost per worker was $297.

There was no direct correlation between firm size and work health and safety spend per employee. A slight trend was noticeable, suggesting that firms of increasing sizes had decreasing work health and safety spending per employee as shown in Chart D.8.

Chart D.8: Distribution of work health and safety spending by firm size



This chart demonstrated that there was a trend towards decreased costs by larger firms, where information was given for both workers per firm and annual work health and safety spend per employee.

Respondents indicated that complying with the model WHS Regulations required approximately 3 FTE positions (median value). Seventy per cent of respondents indicated that this would not change as a result of each jurisdiction having identical model WHS Regulations.

Impact of specific aspects of the model Act

Respondents were asked for each of a number of aspects of the regulations whether they considered that aspect would increase or decrease their compliance costs and safety benefits. They were also asked whether the magnitude of this change would be "significant" (more than 5 per cent change) or "minor" (less than 5 per cent).

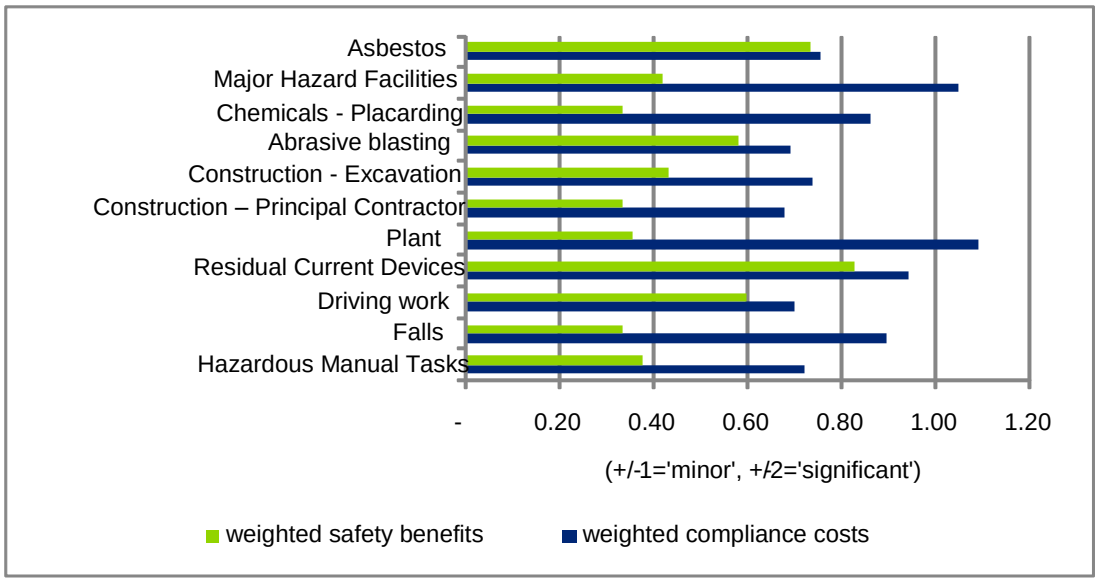
To analyse these responses, Deloitte Access Economics assigned a weight of zero to "no change" and "don't know", a weight of +/- one for insignificant change and a weight of +/-two for minor change.

Respondents considered that all aspects of proposed regulations would increase their compliance costs (Chart D.9). The most costly change was considered to be changes to plant followed by changes relating to major hazard facilities. In all cases safety benefits also increased, though not equally to the increase in compliance costs.

An indication of net impacts on firms can be extracted if we assume that current compliance costs are equal to current safety benefits from the firm's perspective. Economic theory would indicate that this should be the case. Firms would spend their first compliance dollars in areas that would yield the largest net benefits. They would then spend on equipment and practices that yielded smaller—but still positive—

benefits. This expenditure would only be undertaken up to the point where the last few dollars were just breaking even, but no further.

Chart D.9: Impact of proposed model WHS Regulations on compliance cost and safety benefits (employer perspective)

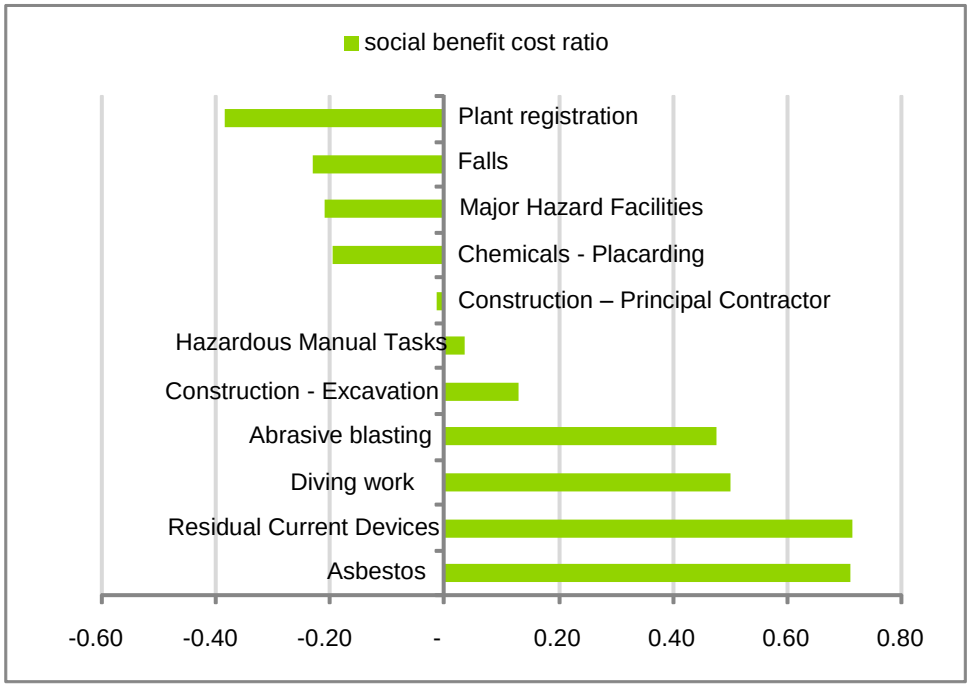


This chart demonstrates, as noted in the main section, that where the employer foresaw compliance costs and safety benefits from the changes directly attributable to the firm, compliance costs were higher.

Safety benefits to firms are not the same as safety benefits to society. The ASCC (2009) estimated that the economic costs to the rest of society of occupational incidents were at least four times greater than those borne by employers. Deloitte Access Economics has conservatively[27] applied a weighting of only two to factor in safety benefits to the rest of society because safety impacts are far more difficult to estimate than compliance costs, even under well-established regulatory regimes. Most regulatory changes surveyed result in net benefits to society.

[27] Allowing for the value of healthy life years lost, the costs of incidents to the rest of society would be considerably more than four times larger than the cost to employers.

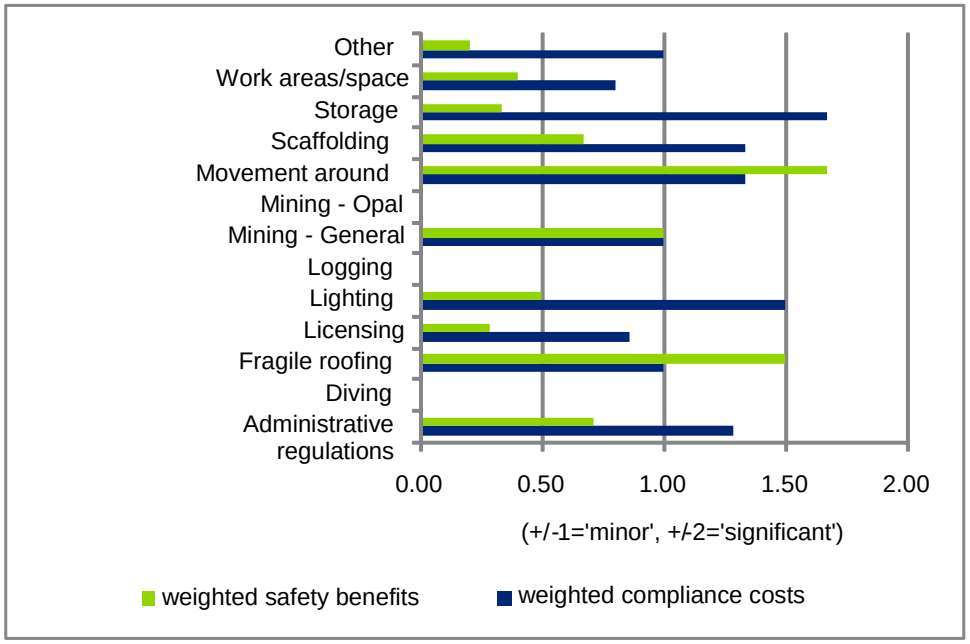
Chart D.10: Net effect of safety benefits and compliance cost from the proposed model WHS Regulations (whole of society perspective)



This chart demonstrates that net social benefit, even when measured conservatively, was mostly positive.

Respondents were asked a range of questions that may be applicable to their businesses. The response rate was much lower for these sub-options and no meaningful conclusions may be drawn from this data. The trend was similar to responses earlier, where the cost outweighed the benefit (see Chart D.11 below).

Chart D.11: Impact of proposed model WHS Regulations on compliance cost and safety benefits – voluntary submission



Asbestos

In regards to asbestos further questions were asked:

- Should the competent person undertaking identification of asbestos have any formal qualifications to undertake this work?

  Of those that responded 100 per cent said yes.

- Do you agree that only persons who have undergone a competency-based training unit should be suitable for licensing as an asbestos assessor?

  Of those that responded 88 per cent said yes.

- The model WHS Regulations will require that an asbestos register be developed for a workplace where asbestos is identified. If you do not currently have an asbestos register for your workplace, would you be confident to develop an asbestos register yourself, assuming that a 'competent person' has identified your asbestos?

  Of those that responded 77 per cent said yes.

- The model WHS Regulations will require that a Licensed Asbestos Assessor is engaged to conduct air monitoring, and to undertake clearance inspections for Class A (friable) asbestos removal jobs. The regulations will require that a licensed asbestos assessor will have to provide a statement of attainment for the specified unit of competency for asbestos assessor work to obtain a licence. Do you agree with the proposed competency requirement for licensed asbestos assessors?

  Of those that responded 84 per cent said yes.

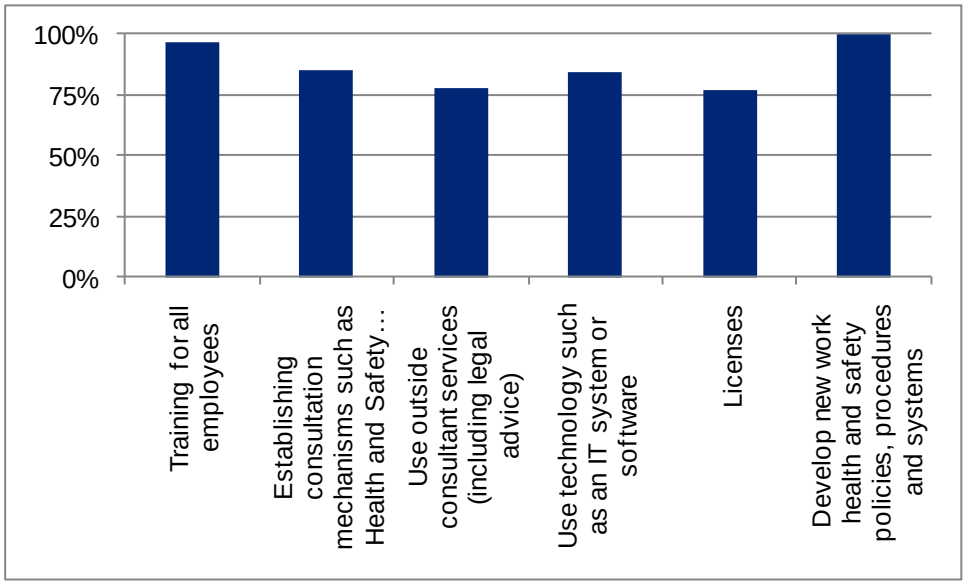
- How much would you expect a register would cost to develop, given that a competent person must carry out the identification unless asbestos has been presumed?

  Of those that responded the median cost is $5000 and an average cost of $28 292.

Multi-state firms

Respondents were asked: "If your business currently operates in more than one state/territory, do you undertake the following activities to comply with jurisdictional requirements?" For all of the activities the majority of the responses were affirmative (the lowest being 77 per cent and the highest 100 per cent), as shown in Chart D.12.

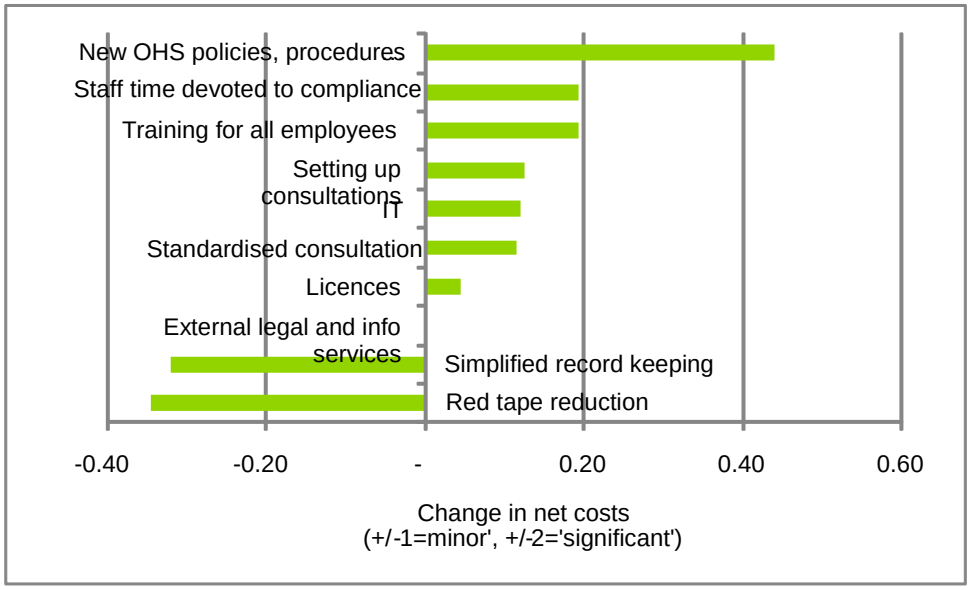
Chart D.12: Multi-state organisations that already undertake training



This chart demonstrates that the majority of multi-state organisations already undertake activities to comply with varying jurisdictional requirements.

These multi-state respondents were then asked: "If they currently deal with multiple state and territory work health and safety acts, what impact did they think the process of adopting the model WHS Regulations might have on their costs" (Chart D.13). The largest adjustment cost was for new work health and safety policies, procedures and systems, with training and setting up consultation mechanisms and IT systems also significant costs. Interestingly, firms did not think they would need any extra external legal services or consultants to transition to the new arrangements. Record keeping and red tape costs were expected to decline sharply even during the transition period. Compliance costs were expected to initially increase during the adjustment period but then to be lower once everything had been finalised (Chart D.14).

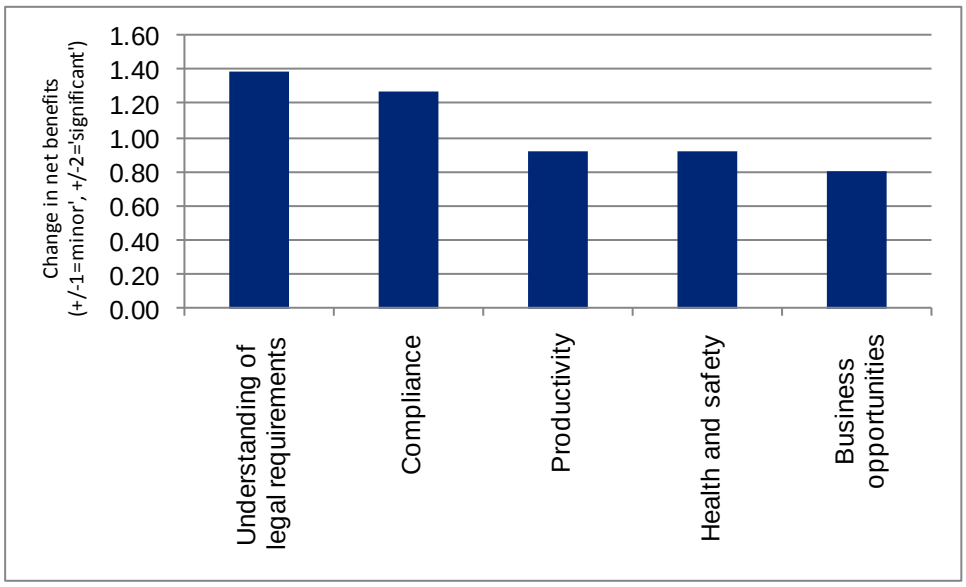
Chart D.13: Expected cost impact on multi-state businesses by adopting the same work health and safety regulations



This chart demonstrated that, from a business point of view, harmonisation would result in minor cost increases.

These multi-state respondents were then asked if they would benefit from having the same work health and safety regulations in all states and territories that they currently operate. The same number answered this question as the previous question. The weighted response indicated that it was uniform that multi-state businesses would benefit from this, as shown in Chart D.14.

Chart D.14: Expected benefit to multi-state businesses by adopting the same work health and safety regulations



This chart demonstrated that, from a business point of view, harmonisation would result in minor benefits but in comparison between the two, benefits seemed stronger.

Removal of mandatory requirements

All respondents were asked what the anticipated savings in time or costs would be with the removal of the mandatory requirements to undertake risk assessments across all hazards of their business. Of those that responded 61 per cent felt that it would not improve any savings because they would have to carry these out regardless of regulation. Of those that felt it would provide a saving, eight respondents gave an actual value that equated to an average of $75.32 per employee.

Comments

Falls

- We work in aviation maintenance and carry out risk assessments on a regular basis, the only issue will be how the regulations change. If there is significant change then we will have more to do.
- A work health and safety risk reduction program is already in place.
- The regulations are unclear as to what thresholds apply in respect to height for falls.
- This will significantly increase the compliance cost.
- Being there is no height threshold and it is currently two metres in Victoria we will need to conduct hazard identification and implement controls for all falls from heights.
- More costs associated with the inclusion of all working at heights and not just a specific height from the ground.

Diving

- The proposed changes may actually reduce costs by allowing our own staff to undertake incidental diving work rather than having to hire commercial divers.

Electrical

- Our main building is old and each floor has its own electrical board as other tenants occupy the building. We would need to upgrade the electrical boards and this will be a significant cost.
- Have RCDs on high risk locations (e.g. wet) and now will need to expand it.
- RCDs are installed and regularly tested.
- We support the requirements for protection of hand held electrical equipment by RCDs as a cost-effective way of enhancing worker safety.
- No history of electrocution.
- We support the use of RCDs. RCDs if installed, tested and operated correctly whether they be hard wired or portable prove a practical life saving device.
- Already happens.

- We use RCDs on most circuits as required however I am sure this will increase costs quite significantly.
- Any cost increase is based on bringing up to date facilities and items that currently are not protected. This will inevitably bring an increase in safety benefits.
- Many older sites will have to undertake expensive retrofit.
- Safety benefits can be attributed to the introduction of this facility and not through the legislative requirement. A detailed risk assessment should identify the necessity for this device.

Plant registration – would a requirement to mark plant with a registration number be difficult or expensive?

- What is the point if nobody from the regulator checks it? The current process of a certificate would be a better option.
- We have a significant number of identified items that would meet the definition of registrable plant; most notably mobile cranes. Currently our plant already complies with Queensland vehicle registration which requires attaching yearly labels and each vehicle already has its own unique identification number. With the current quantity of identification markings required to be placed on our vehicles already it is believed that the ability for the owner to nominate their own identification number which links with internal process would be a practicable solution. If the work health and safety regulator provides the numbering and labelling there would be only minor increase in costs to attach to vehicles.
- No.
- Yes – resource hungry activity.
- They have number plates already.
- Not difficult or costly.
- Should not be an issue but will usually need to be done by Contractors and will be passed on to Principal Contractor as a result of changes.
- We register and maintain our plant through our own systems so the change should be minimal.
- Yes, we would have to engage contractors to do the work resulting in significant cost increases and we would in turn increase tenancy costs and leases to reflect the changes.
- It is essential that plant registrations are portable across all jurisdictions.
- Not ready.
- What would be ‘registrable’ plant?
- No, but it all adds up.
- Not a major issue but it would increase the operational costs initially.
- No.
- Yes, because of the number and scope of such plant in the organisation.
- Would not change if fees remain around current state averages.

- Exceptions should be considered in this regard for companies which have detailed safety and equipment maintenance systems in place. Such systems should comply with relevant ISO standards and would need to be independently audited against established standards.

Construction – principal contractor

- Tendering system for clients usually requires this regardless of legislation. The client sets the dollar value. This should just help clarify it and make a level playing field for contractors and subcontractors.
- Assessment of contract OHSMS and applicable procedures would add to the time frame for the letting of contracts as we currently operate at $250 000.
- Under the definition of construction work, all activities that we undertake would be potentially covered. As the requirements of construction work have been developed around a designated construction site, many of these requirements will be problematic in terms of practicality of compliance and implications for the community both in terms of costs and delays in restoring supply (e.g. works on roads or at poles and houses). The Electricity Supply Industry (ESI) is advocating that there be an exclusion for works of an electricity network owner and we fully support this representation. Currently we operate under a local exemption from this requirement, however this will be subject to review after 1 January 2012.
- $200 000 is low, $500 000 more suitable.

Construction – excavation. Do you think the definition of high risk construction is too broad?

- Not too broad, but the requirement for five days notice is unrealistic especially when concerned with the reconnection of supply. An exemption for ‘works’ where it is imperative to undertake the work as part of activities to restore or maintain electricity supply to the community is required. Unless 'works’ are exempted from these requirements there will be a significant unjustified impost on us in relation to underground electrical work associated with maintaining or building works in public areas, especially work to maintain electricity supply to the community that may require immediate excavation or where scoping cannot indicate the actual depth of excavation required until the soil has been broken. It is considered that the 5 day period is not practicable and that a regulator may not be resourced to support this requirement if excavation is required immediately.
- We do not endorse the requirement to notify each high risk excavation work activity to the regulator. This is seen as a significant increase in cost of compliance for an administrative requirement that will see no safety benefit.

Chemicals – abrasive blasting. What would it cost to source alternative chemicals?

- This could be interesting due to the products we use as they are provided by Defence. We make extensive use of PPE but the cost will be hard to determine.
- No impact. Have not been allowed to blast with silica based material for over 20 years.

Chemicals – placarding

- I think all flammable gases should have placarding, regardless of quantities.
- The organisation I work for tend to do that anyhow as it assists the fire department in hazard identification.
- Many sites already require placarding – a reduction in volumes on site will add to compliance costs but achieve no safety benefit.

Major Hazard Facilities. If your site could become a designated MHF, what would it cost to develop an emergency plan for it?

- Don't know.
- Unsure.
- Subjective question. What hazard?
- $2000 per site.
- Plan is in place but MHF is significant cost for any organisation and should not be taken without full understanding of ongoing cost and intervention by authorities.
- $20 000.

Asbestos

- I believe you have made a monumental error in letting business certificate holders deem others competent for prescribed occupations, please do not make the same mistake with this, leave it to the scientists who work for properly accredited (NATA) labs and the like. I personally will not accept an audit done by anyone who is an employee of the business whose premises that is about to become a job site, even if they have been deemed competent. I will insist the audit be redone properly before I allow staff to work there.
- We are already compliant with these regulations so no additional charge and you cannot be too careful; also taking a proactive and thorough approach allays staff concerns somewhat.
- The scope of works of the division involves the removal and disposal of ‘old’ Telstra pits that may contain asbestos. Cost may be prohibitive for no real safety benefit as the current removal process ensures safety of persons removing pits anyway.
- This is difficult to judge. We have a large number of sites – many which have asbestos identified and under management. We could end up with more compliance cost but no safety benefit, as we are managing it now.
- SA requirements make it costlier now.
- The use of a suitably qualified assessor (e.g. Occupational Hygienist) is the most appropriate person to identify asbestos in all its forms.
- This company is currently licensed. To bring in additional assessors is counterproductive and will slow work to an unacceptable level.
- This is a priority regulation that needs a nationally consistent approach.
- The easier it is to have asbestos identified and controlled then it will be done more often with resultant safety improvements.

Other Comments

- Lack of health risk assessment for Hazardous Chemicals Exposure.
- Record keeping will increase significantly if regulations and Codes of Practices are not changed significantly. Manual hazardous tasks are too broad and will require SME businesses to perform reviews and keep records not previously performed.
- Compulsory first aid training will be costly for SME businesses.
- As a sole trader consultant this is not a question I can answer for my clients easily.
- Page 99 2b of draft regulations gives an exemption to licensing if demolishing plant. I think this should be done by a licensed demolisher. Demolition is a prescribed activity for very good reasons and I believe it needs to stay that way for all the right reasons. A good example of this would be the demolition or dismantling of a boiler. There is a good chance part or most of the business will still be trading whilst this occurs, a builder of any description or plant designer has no way of knowing how to implement tasks to ensure safety of all workers, they have no idea that the boiler may be filled with friable asbestos ... no working at heights, no rigging experience, the list goes on ... a very dangerous situation, that was avoidable. Back to your earlier point, if the office girl has just been made 'competent person' to do an audit, instead of a scientist with lots of experience, or an asbestos remover/demolisher with audit accreditation, no one will have thought to test all components possible on the boiler, as part of the audit, so suddenly you have an even more dangerous situation.
- Requirements have become too stringent. Business cannot afford the imposts being brought in.
- What is happening with demolition business certificates in Queensland? And will other states have demolition business certificates?
- I believe my industry has suffered greatly with the last round of changes to licensing, (demolition and asbestos); it makes it easier for the dodgy operators, which means harder for ones with moral fibre. Please ensure demolition remains a prescribed activity and remains under the WHS banner. I believe insurance should be a legal requirement and that a business certificate or some reasonable qualification is essential for bonded asbestos (not a 2 hour course on the internet, as currently available). I believe this is an opportunity for you to raise standards, not bring them down to the lowest common denominator. Please make it harder to get these licences, not easier. Please fix the problem with the B class licences, please return the judging of competent people to specialist assessors for the relevant industries. The system does not work as it is and it is making it very difficult for honest people to run a business. It is very stressful not knowing what is going to change. I think the concept of harmonisation is wonderful and long overdue, but please confirm that demolition will stay a prescribed activity. Thank you for your time.
- Long overdue!
- The main concern we have from a SA and NSW perspective is some waiting down of some parts of the Act and Regulations including HSR roles.
- The existing enforcement frameworks are so varied in their approach that it is highly unlikely that we will achieve effective and practical harmonisation. Secondly, there are well over 100 jurisdictional notes in the model WHS Act which will allow

the states to set up their own arrangements and preserve their own preferred approaches. This undermines the whole approach of harmonisation.

- The big issue is not the harmonisation but getting the states to apply model laws the same way. If they don't (and they won't) there will be little change for the multi-state companies who ultimately waste time and money trying to satisfy the different masters they work under.
- I had hoped that new legislation and regulations would be written in a concise and clear manner. Unfortunately not.
- I would like to know where this rubbish comment came from and on what grounds it has been conceived? "These changes will lead to long term health and safety benefits ("safety benefits") such as reduced accidents, lower fines, smaller premiums and less lost productivity". How is aligning the rules to a single version going to do anything to reduce incidents? Fines are going up, not down and fines are not a motivator for change, premiums are based on claims experience/industry/wage roll and you would need to make one or all of these change to see smaller premiums. Less lost productivity is debateable as that would need to be linked to less incidents and already we have dispelled that as a result of the alignment of legislation. Companies working across jurisdictions should already be operating via best practice and therefore benefit little from harmonisation, and those businesses that do not work in multiple jurisdictions will have no benefit only further confusion and cost. If the harmonisation was adopting a different approach, say from a risk management perspective or some other innovative approach then you may be able to make the aforementioned claims. But when we are continuing to do the same just in a different but similar manner, we will continue to get the same results. What this change does is remove the excuses used in boardrooms and some of the justification for additional resources to manage safety. Mind you in the short term there will be justification to increase resources to train everyone in the changes, reaccredit your people in the competencies now covered by Codes of Practice and the additional administration as every procedure and policy needs to be revised to reflect the new legislation and Codes of Practice rather than the traditional alignment to the state legislations you operate in and Australian Standards.
- The harmonisation of work health and safety regulations and Codes of Practice is the most progressive move for all business, organisations and the general public that Australia has ever made.
- I am looking forward to clarity on when (height) fall prevention and arrest must be used. It differs in all states and provided no clarity at the moment. However this will impact on the costs of domestic housing and on small traders that do roof work on single story dwellings, many of which still do not wear harnesses at that height as the jobs are too quick. I would like to see the Building Code of Australia altered to require domestic dwellings to be built with anchor points for harnesses and railing – this will be a boon to emergency workers who must secure rooves [sic] when normal workers are barred from being on the roof due to the risk.
- A guide on implementation for employers would be nice.
- There are a number of specific areas of construction. Our focus is on civil construction generally, roads and road repair. This is the case with all Local Government. Specific roads construction regulations under one legislative instrument would be very beneficial given that the state roads authorities have an active role in construction and maintenance which is often different from the

requirements of the work health and safety regulations as they currently stand (e.g. traffic control is only now being brought together as an Australian Standard for use in each State). In NSW the traffic control manual was more strict than the standard in most cases but it is the document that was required to be followed. There are probably other specific areas of construction that fall within the same problematic areas.

- Degree of uncertainty until final acts/regulations/guidance notes have been passed/produced by each state.
- Compulsory public liability for both demolition and asbestos removal to be held by all licensees – $5000 minimum and then according to turnover is minimal.
- The 4 April deadline for public comment is too short for employers and employer associations, workers and unions and should be extended.
- Please bring NSW and WA into the fold.
- I am a safety consultant. Whilst welcoming the harmonisation principle, I am of the opinion it will do little for NSW, ACT or Victoria and the laws do not appear to be written by people who understand anything more complicated than aiming for compliance. These laws do not address the self evident need to consult with professionals about aspects of safety which are not fixed by audit or compliance measures, and cheapen the complexity of actions needed to provide sustainable safety gains and culture gain.
- Make it happen!
- In respect to industry costs to our members we draw your attention to the following items; 1. Administration including record keeping and compliance requirements is estimated to cost SME businesses in the sector $29.6 million. 2. The removal of the exemption for SME businesses to provide trained first aid officers in each workplace is expected to cost the SME business operators $26.4 million per annum. 3. It is noted that Safe Work Australia is proposing a 480 per cent increase to the minimum infringement notice penalty from $250 to $1200. The maximum penalty is being lifted from $3250 to $3600 or over 10 per cent.
- MHF incident criteria should not be expanded to cover anything beyond schedule 9 chemicals. By changing or broadening the criteria it removes the focus away from the original objective of managing major chemical and dangerous goods incidents like Longford explosion. If the criteria is broadened it will just become another risk assessment program.
- The licensing of all mobile plant operators who operate machines on private property is not just a duty of care by the employer. Equal responsibilities should be placed on the employees.
- With regard to diving work – as a police dive squad I look at the proposed regulations from the aspect of 1. A commercial Dive Team and 2. As the state coroner's investigator responsible for looking into diving related deaths. I have serious concerns that the model WHS Regulations in their existing format are too loose and would encourage some commercially trained and experienced people to enter the commercial diving industry. Encouraging free diving as an acceptable occupational practice is also not supported. I can see tow truck drivers breath hold diving to attach chains to vehicles in lakes and rivers with no more qualification than a recreational diving ticket.

- The model WHS Regulations provide an outcome based approach that is fully supported. We could comply with the construction requirements but consideration must be given to if the community can afford the implications (both cost and time) and what would be the benefits. We and like companies have mature safety systems, long term workers and contractors, and safety performance that is superior to construction industry. Qualifier of “so far as reasonably practicable” in relation to requirements within the regulations is considered appropriate. This test of reasonable will enable a practical approach to be taken without diminishing the intent of the legislation.
- It is not appropriate to introduce legislation linked to Codes of Practice that will have evidentiary status if the Codes of Practice have been developed after the consultation phase has closed. It is not appropriate to introduce legislation with widespread implications for PCBUs without appropriate timeframes that allow businesses to review safety frameworks and budget for change. At least 12 months is required to allow for this once all requirements are finalised.
- Definition of Principal Contractor is problematic and will impose significant administrative costs to clarify safety obligations of contractors working for the PC to ensure the PC is not liable for safety obligations of the contractor (e.g. provision of PPE).
- The model WHS Regulations introduce requirements in relation to manual tasks. Although this has been good practice previously, this requirement will legislate action. The definition is all encompassing and includes just about any activity (e.g. low risk office activities). We consider this definition needs reviewing to reflect the intention to address the meaning of the word ‘hazardous’ and there be the ability to group specific tasks under activities so a generic assessment could be conducted rather than each individual task and to apply a risk based approach to addressing this safety concern.
- A number of proposed amendments outlined within the RIS have been identified as having the potential to result in an appreciable cost increase on us which will ultimately have a flow on effect to the community through increased operation costs which are effectively linked to electricity costs.

1. Section 1 Introduction

Safe Work Australia has recently agreed to release for public comment a set of draft work health and safety (WHS) regulations and Codes of Practice that will apply uniformly across all Australian states and territories by 1 January 2012. Details are available at: http://www.safeworkaustralia.gov.au/LEGISLATION/PUBLICCOMMENT/Pages/PublicComment.aspx

Access Economics is conducting this survey to assess the additional work health and safety costs caused by existing differences in WHS regulations, and future impacts of harmonising WHS legislation (including on businesses that only operate in one jurisdiction).

Work health and safety reform is an important issue and businesses have approached the government for reform. If you think the proposed work health and safety reforms will impose unnecessary costs on your business – or bring welcome changes – we need to know so that we can get reform right. Your opinion is valuable, and we greatly appreciate any time you can spare to complete this survey.

Please note Access Economics will treat all information in strictest confidence; only aggregated summaries will be reported.

It would be appreciated if you could respond by 4 April 2011.

1. Please supply some details about your company. If you would be amenable to a possible follow up, it would be helpful if you supplied your name, and contact details, but this is purely optional.

Name (optional):

Position:

Company:

Address:

City/Town:

State:

Email Address: (optional)

Phone Number: (optional)

2. Which jurisdictional law(s) does your business operate under (tick all that apply)

- ☐ New South Wales
- ☐ Victoria
- ☐ Queensland
- ☐ South Australia
- ☐ Western Australia
- ☐ Tasmania
- ☐ Northern Territory
- ☐ Australian Capital Territory
- ☐ Commonwealth

3. Approximately how many employees does your business have (including casuals and part-timers)?
(please enter a whole number) _____

4. What sector does your business operate in? (Select the one that best applies)

- ○ Agriculture, Forestry and Fishing
- ○ Mining
- ○ Manufacturing
- ○ Electricity, Gas and Water and Waste Services
- ○ Construction
- ○ Wholesale Trade
- ○ Retail Trade
- ○ Accommodation and Food Services
- ○ Transport, Postal and Warehousing
- ○ Information Media and Telecommunications
- ○ Finance and Insurance Services
- ○ Rental, Hiring and Real Estate Services
- ○ Professional, Scientific and Technical Services
- ○ Administrative and Support Services
- ○ Public Administration and Safety
- ○ Education and Training
- ○ Health Care and Social Assistance
- ○ Arts and Recreation Services

Other Services

5. What was your approximate turnover last financial year, ending 30 June 2010? (If you're not sure, you can enter a range, e.g. "between x dollars and y dollars")

6. Approximately how much does your company spend each year to comply with work health and safety regulations? Please do not include workers compensation costs. (If you're not sure, you can enter a range, e.g. "between x dollars and y dollars")

7. Approximately, what percentage of your company's turnover would these work health and safety compliance costs be equivalent to?
(If you're not sure, you can enter a range, e.g. "between x% and y%")

8. This question looks at the time costs to your business of complying with WHS regulations. Please do not include the time costs of workers acting in their capacities as Health and Safety Representatives or Committee members (as their role is to facilitate consultation and representation of workers' interests in safety).

On an annual basis, how much time (in terms of full time equivalent positions) would your business spend on complying with WHS regulations? (fractions of a position are acceptable, e.g. 0.5 FTE)

Is this likely to change as a result of each jurisdiction having identical WHS regulations?

2. Section 2 Impact of specific WHS reforms

This section examines impacts where particular regulations may change substantially in particular states. For all states and territories, there will be some changes to current practices. Full details new regulations and codes of practice can be found at http://www.safeworkaustralia.gov.au/LEGISLATION/PUBLICCOMMENT/Pages/PublicComment.aspx

Some of these changes may involve short term costs to comply with the new work health and safety requirements ("compliance costs"). But these changes then hopefully should also lead to health and safety benefits ("safety benefits") in the longer term such as reduced accidents, lower fines, smaller premiums and less lost

productivity. When estimating costs and benefits, please allow enough time for any such safety benefits to be realised.

If a question is not relevant for your business, please leave it blank.

The questions in this section cover manual tasks, prevention of falls, diving work, electrical work, plant and structures, construction, hazardous chemicals (including asbestos) and other regulations.

1. MANUAL TASKS. It is proposed that workplaces must have procedures in place to identify potential hazardous manual tasks. If you don't already have such procedures in place, what impact do you think this could have on your compliance costs and/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

If you currently conduct risk assessments for manual tasks, what is the cost in undertaking these risk assessments? (a broad range is acceptable)

2. FALLS. The model regulation specifies methods for controlling the risk of falls and falling objects and includes requirements for the establishment of emergency and rescue procedures to address fall hazards. What do you think could be the impact on your compliance costs and/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

3. DIVING WORK. It is proposed that the model regulations be largely based on, and refer to the current Australian Standard for diving work. What impact do you think this could have on your compliance costs and/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Do you have any comments you would like to make on this matter?

4. ELECTRICAL WORK. It is proposed that all workplaces will have to use residual current devices (RCDs). If you already use RCDs, what do you think has been the impact on your compliance costs and safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Do you have any comments you would like to make on this matter?

5. PLANT. It is proposed that an annual notice of plant maintenance be required for registrable plant with an administration fee. If you operate such plant, what impact do you think these changes could have on your compliance costs &/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Would a requirement to mark registrable plant items with a registration number be difficult or costly to implement? (And if so, why?)

6. CONSTRUCTION - GENERAL. It is proposed that a principal contractor be identified for construction projects worth more than $200,000. If you already operate under (or could operate under) such regulations, what impact do you think these changes have had (could have) on your compliance costs &/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Do you have any comments you would like to make on this matter?

7. CONSTRUCTION - EXCAVATION. It is proposed that a Safe Work Method Statement (SWMS) must be prepared before high risk excavation work is undertaken. If you already operate under (or could operate under) such regulations, what impact do you think these changes have had (could have) on your compliance costs &/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Do you think the definition of high risk (notifiable) excavation work is too broad? (And if so, why?)

8. RESTRICTED CHEMICALS. It is proposed that silica and certain other restricted chemicals may no longer be used for abrasive blasting and spray painting. If you already operate (or could have to operate) under such requirements, what do you think has been (could be) the impact on your compliance costs and safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

If this affects your business, what would it cost to source alternative chemicals? (broad range estimates are acceptable)

9. CHEMICALS - PLACARDING. It is proposed to lower the threshold amount that triggers placarding requirements for flammable gases from 500 L to 200 L. If this will affect your operations, what do you think has been / will be the impact on your compliance costs and safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

Do you have any comments you would like to make on this proposal?

10. MAJOR HAZARD FACILITIES. It is proposed that regulators will have to be notified whenever a site is likely to store hazardous chemicals in amounts greater than 10% of the relevant threshold. If you already operate, or could have to operate, under such conditions, what impact do you think this has had /could have on your compliance costs &/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	◯	◯	◯	◯	◯	◯	◯
Safety benefits	◯	◯	◯	◯	◯	◯	◯

If you have a site that could become classified as an MHF, what do you think it could cost you to develop an emergency plan for it?

11. ASBESTOS. The model regulations will require that asbestos at your workplace be identified by a 'competent person' unless the PCBU has presumed that asbestos is present. An asbestos register does NOT require a competent person to prepare it but would include the asbestos identified by the competent person. The regulations specify that a 'competent person' is someone who for has acquired through training, qualification or experience, the knowledge and skills to carry out the task.

(a) Should the competent person undertaking identification of asbestos have any formal qualifications to undertake this work?

(b) Do you agree that only persons who have undergone a competency based training unit should be suitable for licensing as an asbestos assessor? Should the regulations specify other requirements e.g. experience and qualifications?

(c) The model regulations will require that an asbestos register be developed for a workplace where asbestos is identified. If you do not currently have an asbestos register for your workplace, would you be confident to develop an asbestos register yourself, assuming that a 'competent person' has identified your asbestos?

(d) How much would you expect a register would cost to develop, given that a competent person must carry out the identification unless asbestos has been presumed?' (broad ranges are acceptable)

(e) 'The model regulations will require that a Licensed Asbestos Assessor is engaged to conduct air monitoring, and to undertake clearance inspections for Class A (friable) asbestos removal jobs. The regulations will require that a licensed asbestos assessor will have to provide a statement of attainment for the specified unit of competency for asbestos assessor work to obtain a licence. Do you agree with the proposed competency requirement for licensed asbestos assessors?

12. ASBESTOS. What impact do you think the proposed asbestos regulations would have on your compliance costs &/or safety benefits?

	Significant increase	Minor increase	No change	Minor decrease	Significant decrease	Don't know	Not applicable
Compliance costs	○	○	○	○	○	○	○
Safety benefits	○	○	○	○	○	○	○

13. OTHER. There are a large number of other regulations that may only have an impact in one or two states. (For example, diving work.) If any of these affect you, could you please select up to three of them (from column 1) and pick the impact you think each could have on your compliance costs (column 2) and safety benefits (column 3)

	Matter covered	Compliance costs	Safety benefits
Regulation #1			
Regulation #2			
Regulation #3			

If you chose any instances of "other" in column 1, could you please specify which regulation(s) you are referring to?

3. Section 3 Education and training costs

The questions on this page relate to education and training costs your business may face in adjusting to the new WHS regulations.

1. In view of the above changes, what do you think it might cost your business to educate your workers about the new harmonised WHS regime when it is introduced? (A ranged answer is acceptable, e.g. "x thousand to y thousand")

2. In an average year, what do you think it might cost your business to educate your workers about changes to WHS regulations and Codes of Practice? (A ranged answer is acceptable, e.g. "x thousand to y thousand")

4. Section 4 Impact of WHS reforms on interstate businesses

This section examines the benefits of harmonising WHS regulations across all States and Territories for those businesses that trade in multiple jurisdictions. In framing your answers, please consider a period in the future for all adjustment costs to have been spent, and for any resultant safety benefits to have had enough time to come into play.

If your business only trades within a single State or Territory, please hit "Next" at the bottom of the page to proceed.

1. If your business currently operates in more than one state/territory, do you undertake the following activities to comply with jurisdictional requirements?

	Yes	No	Don't know
Training for all employees	◯	◯	◯
Establishing consultation mechanisms such as Health and Safety Representatives and OHS Committees	◯	◯	◯
Use outside consultant services (including legal advice)	◯	◯	◯
Use technology such as an IT system or software	◯	◯	◯
Licenses	◯	◯	◯
Develop new OHS policies, procedures and systems	◯	◯	◯

2. If your business currently deals with multiple state and territory WHS Acts, what impact do you think each jurisdiction adopting the same WHS regulations might have on the following costs for your business?

	Significant increase in costs	Minor increase in costs	No change	Minor decrease in costs	Significant decrease in costs	Don't know	Not applicable
Training for all employees	○	○	○	○	○	○	○
Establishing consultation mechanisms, such as Health and Safety Representatives and WHS committees	○	○	○	○	○	○	○
Outside consultant services (including legal advice)	○	○	○	○	○	○	○
Technology such as an IT system or software	○	○	○	○	○	○	○
Licenses	○	○	○	○	○	○	○
Staff time devoted to WHS compliance administration	○	○	○	○	○	○	○
Developing new WHS policies, procedures and systems	○	○	○	○	○	○	○
Standardisation of consultation arrangements	○	○	○	○	○	○	○
Red tape reduction	○	○	○	○	○	○	○
Simplified record keeping	○	○	○	○	○	○	○

3. Do you think that your business would benefit from having the same WHS regulations in all the states and territories you operate in? Please indicate if you would expect benefit in the following ways:

	Significantly better	Better	No change	Worse	Significantly worse	Don't know	Not applicable
Understanding of legal requirements	◡	◡	◡	◡	◡	◡	◡
Compliance	◡	◡	◡	◡	◡	◡	◡
Productivity	◡	◡	◡	◡	◡	◡	◡
Health and safety	◡	◡	◡	◡	◡	◡	◡
Business opportunities	◡	◡	◡	◡	◡	◡	◡

5. Section 5 General impact

1. With the removal of the mandatory requirements to undertake risk assessments across all hazards of your business, what are your anticipated savings in time and/or costs?

6. Section 6 Completion

Thank you for your time - your feedback is a valuable input into the process of creating better regulations.

1. Are there any other matters you would like to comment on regarding harmonisation of work health and safety regimes?

Appendix E: Sensitivity analysis for the national impacts

The online survey was a key element of the quantitative information. Survey participants were asked to rank both costs and benefits on a scale of 0 (no change), 1 (minor) and 2 (significant). These rankings have then been assigned dollar values.

There is no reason to expect that participants would not use the same relative weightings consistently. If a respondent reported an increase of '1' for both compliance costs and safety benefits, it is expected that both factors would be impacted by similar magnitudes.

For the purposes of transforming the rankings from the survey into dollar values, it was assumed that a ranking of significant is equal to a change of 5 per cent. The 5 per cent estimate of significance has been used by Deloitte Access Economics in a number of published reports, including the RIS for the harmonisation of work health and safety legislation (Access Economics 2009) and the impact of introducing the Fair Work Act (Access Economics 2009c). In the survey work for these RISs, the piloting and focus group process validated that the 5 per cent estimate of significance used is a sensible parameter estimate. Moreover, in the broad literature, 5 per cent can be used as a threshold for significance for practical reasons.[28]

As the numeric weightings that have been applied to survey results were 2 for significant, 1 for minor and 0 for no change, weightings were multiplied by 0.025 to derive percentage changes. Thus, 2 (for significant) times 0.025 equals a 5 per cent change. It is reiterated that while the sign of such changes is robust, the magnitude is to be treated with caution as it is used to estimate the dollar values of the costs and benefits in this RIS. However, as long as participants are consistent in their weightings, using alternative thresholds for the ranking of significant generally does not change the sign or relative magnitudes of net benefits by group (see discussion below).

In this appendix, sensitivity analysis is undertaken to test the robustness of the results presented in Chapter 7 using different scenarios and assumptions. In particular:

[28]Dallal (1999) states that "significant has become synonymous with 0.05" as it "will have a fair chance of picking up those effects which are large enough to be of interest".

- monetised costs and benefits are altered in order to provide best and worst case scenarios of net benefits given the central case scenario presented in Chapter 7
- analysis of the net benefits is extended by including different discount rates at 3 per cent and 11 per cent, and
- instead of the assumption used in this RIS that 5 per cent is associated with 'significant' change, two alternatives are used for sensitivity testing (1 per cent and 10 per cent).

Estimates of productivity were not included in the main body due to lack of robustness, but are included here for comparative purposes.

The expected increase in productivity for multi-state firms is not a result of improved safety but of streamlined regulation. Decreases in safety can disturb production by reducing the number of workers available. If the reduction in production is the same as the reduction in labour, productivity—which is measured as output per worker—is not affected. Labour resources tied up in red tape are unproductive. Reducing regulatory impediments frees up these resources to be put to their most productive uses. Productivity is increased as output per worker is improved. Such multi-factor productivity where output increases while both labour and capital remain constant is the main source of economic growth.

To illustrate, one large manufacturing company privately stated that they had found the most effective way to cope with multiple conflicting jurisdictional work health and safety requirements was to take the most onerous jurisdictional requirements for any given regulation and apply it nationally to all of their operations. With increasing pressure from Chinese imports, they could no longer afford to spend "a million dollars a year complying with regulations where they didn't actually need to".

Best and worst case scenarios

Sensitivity analysis was performed around an upper (best case) and lower (worst) case scenario with discount rates at 7 per cent. In the upper case scenario (Table E.1), benefits are taken as 150 per cent of those in the central case scenario presented in Chapter 7 and costs are at 50 per cent of those presented in Chapter 7. In contrast, for the lower case scenario (Table E.2), benefits are taken as 50 per cent of those in the central case scenario and costs at 150 per cent.

These ranges are larger than would normally be used in statistical analysis but reflect the high degree of uncertainty in extrapolating numbers from surveys.

In comparison to the central case scenario, the upper case scenario presents universal increases in net benefits:

- single-state firms show a net benefit, with annual average of $25.15 million or $3.04 per worker

- multi-state firms, workers and government/society also show increased net benefits, and
- in aggregate, there are net social benefits of $386 million a year without any productivity increases.

In comparison to the central case scenario, the lower case scenario presents universal increases in costs and reductions in benefits:

- single-state firms have an annual average cost of around $79 million, which is a cost of $9.58 per worker
- multi-state firms, workers and government/society show reductions in net benefits, and
- in aggregate, there are net social benefits of around $111 million a year without any productivity increases.

Table E.1: Sensitivity analysis – upper case scenario

	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	$868.03	$251.51	$25.15	$3.04
Multi-state firms x/p	$1150.76	$905.02	$90.50	$27.48
Workers	$1621.73	$1621.73	$162.17	$14.03
Govt/Society x/p	$1100.94	$1077.47	$107.75	$9.32
Total	$4741.46	$3855.73	$385.57	$33.37
Multi-state firms w/p	$91 079.54	$90 833.80	$9083.38	$2758.20
Total w/p	$94 670.24	$93 784.51	$9378.45	$811.62

Note: w/p = with productivity, x/p = without productivity
Source: Deloitte Access Economics calculations.

Table E.2: Sensitivity analysis – lower case scenario

	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	-$174.70	-$791.21	-$79.12	-$9.58
Multi-state firms x/p	$735.13	$489.39	$48.94	$14.86
Workers	$925.74	$925.74	$92.57	$8.01
Govt/Society x/p	$506.81	$483.34	$48.33	$4.18
Total	$1992.99	$1107.25	$110.73	$9.58
Multi-state firms w/p	$90 663.91	$90 418.17	$9041.82	$2745.58
Total w/p	$91 921.77	$91 036.03	$9103.60	$787.84

Note: w/p = with productivity, x/p = without productivity
Source: Deloitte Access Economics calculations.

Alternate discount rates

Sensitivity analysis was undertaken at the OBPR recommended levels of 3 per cent and 11 per cent (Table E.3 and E.4). Neither of these results affects the composition of who benefits and who does not (single-state firms are still the only ones worse off). The results suggest:

- with increasing discount rates to 11 per cent, net benefits would diminish across all groups
- at a 3 per cent discount rate relative to 7 per cent discount rate, single-state firms would still not actually benefit, while multi-state firms, workers and government would attract an additional average annual benefit of approximately 22–30 per cent per worker, and
- at an 11 per cent discount rate, benefits of harmonisation would be lower across all groups compared with a 7 per cent discount rate. Net annual average benefits per worker would continue to accrue to multi-state firms, workers and government but at lower levels. Costs would increase further for single-state firms.

Table E.3 Summary of costs and benefits from work health and safety, with and without productivity, discount rate = 3 per cent

	Initial adjustment (first year, $m)	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	-$616.52	$421.79	-$194.72	-$19.47	-$2.36
Multi-state firms x/p	-$245.74	$1147.30	$901.56	$90.16	$27.38
Workers	$0.00	$1549.78	$1549.78	$154.98	$13.41
Govt/Society x/p	-$23.47	$978.09	$954.62	$95.46	$8.26
Total	-$885.73	$4096.96	$3211.22	$321.12	$27.79
Multi-state firms w/p	-$245.74	$110 565.12	$110 319.37	$11 031.94	$3349.89
Total w/p	-$885.73	$113 514.78	$112 629.04	$11 262.90	$974.71

Note: w/p = with productivity, x/p = without productivity

Table E.4: Summary of costs and benefits from work health and safety, with and without productivity, discount rate = 11 per cent

	Initial adjustment (first year, $m)	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	$285.98	-$330.54	-$33.05	-$4.00	$285.98
Multi-state firms x/p	$777.87	$532.12	$53.21	$16.16	$777.87
Workers	$1050.75	$1050.75	$105.07	$9.09	$1050.75
Govt/Society x/p	$663.14	$639.67	$63.97	$5.54	$663.14
Total	$2777.73	$1892.00	$189.20	$16.37	$2777.73
Multi-state firms w/p	$74 963.04	$74 717.30	$7471.73	$2268.82	$74 963.04
Total w/p	$76 962.91	$76 077.18	$7607.72	$658.38	$76 962.91

Note: w/p = with productivity, x/p = without productivity
Source: Deloitte Access Economics calculations.

Alternate thresholds for "significant" change

Instead of the assumption used in Chapter 7 that 5 per cent is associated with "significant" change, two alternatives are used for sensitivity testing: 10 per cent, which would probably be beyond the impact of any one regulatory change on a firm's work health and safety budget (Table E.5); and 1 per cent, which would generally be too small a change to really be noticed (Table E.6).

As long as participants are consistent in their weighting for both costs and benefits, then changes in the significance level generally only change the absolute magnitude of net benefits but not the relative magnitude or their signs. Because there is some interplay with survey estimates that were not dependent on significance levels, there can be some variation to signs and relative magnitudes for some stakeholders in extreme cases. For example, under a 1 per cent significance level the benefits governments receive—which depend entirely on the survey and methodology employed regarding the distribution of benefits and the level of significance—no longer outweigh their adjustment costs, which are largely based on feedback from regulations

and consultation. Governments would face a net loss. This is the only sensitivity test that results in a difference in distribution of benefits by group.

Under a 1 per cent significance threshold, the total (with productivity) gains from harmonisation fall to $157.41 per worker (from $799.73), whereas under a 10 per cent threshold they rise to $1602.61 per worker.

This illustrates the sensitivity of productivity gains to choice of significance level. However, in the WHS model Act RIS, where the survey explicitly stated that significance equated to 5 per cent, the percentage of respondents reporting a 'significant' increase in productivity was almost the same (On the 0 = minimal, 1 = minor, 2 = significant scale, the average response there was 0.8 compared to 0.9 here). Table E.6: Significant change = 10 per cent.

Table E.5: Significant change = 10 per cent

	Initial adjustment costs	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	-$616.52	$118.76	-$497.76	-$49.78	-$6.02
Multi-state sans productivity	-$245.74	$1656.87	$1411.13	$141.11	$42.85
Workers	$0.00	$2547.47	$2547.47	$254.75	$22.05
Government	-$23.47	$1891.21	$1867.74	$186.77	$16.16
Total sans productivity	-$885.73	$6214.31	$5328.58	$532.86	$46.11
Multi-state firms with pty	-$245.74	$181 514.43	$181 268.68	$18 126.87	$5504.29
Total with pty	-$885.73	$186 071.87	$185 186.13	$18 518.61	$1602.62

Source: Deloitte Access Economics calculations.

Table E.6: Significant change = 1 per cent

	Initial adjustment costs	NPV of ongoing changes (decade, $m)	Total (decade, $m)	Annual average ($m)	Annual average per worker ($)
Single-state firms	-$616.52	$528.99	-$87.52	-$8.75	-$1.06
Multi-state sans productivity	-$245.74	$371.81	$126.07	$12.61	$3.83
Workers	$0.00	$254.75	$254.75	$25.47	$2.20
Government	-$23.47	-$65.99	-$89.47	-$8.95	-$0.77
Total sans productivity	-$885.73	$1089.56	$203.82	$20.38	$1.76
Multi-state firms with pty	-$245.74	$18 357.57	$18 111.82	$1811.18	$549.97
Total with pty	-$885.73	$19 075.31	$18 189.58	$1818.96	$157.41

Source: Deloitte Access Economics calculations.

Appendix F: References

Access Economics 2010, *Proposed Revisions to the National OHS Framework for the Control of Workplace Hazardous Substances and Dangerous Goods: Regulation Impact Statement*, Report for Safe Work Australia.

Access Economics 2009, *Decision RIS for a model OHS Act*, Report for Safe Work Australia.

Access Economics 2009a, *National Code of Practice for the Prevention of Falls in Housing Construction: RIS Cost Benefit Analysis*, Report for Safe Work Australia.

Access Economics 2008, *Falls Prevention in the General Construction Sector – Regulation Impact Statement*, Report for the Office of the ASCC.

Access Economics 2008, *The Health of Nations: The value of a statistical life*, Report for the Office of the ASCC.

Access Economics 2006, *Cost benefit analysis of the introduction of a National Code of Practice for Construction Induction Training*, Report for the Office of the ASCC.

Access Economics 2004, *The Cost of Work-related Injury and Illness*, Report for the NOHSC.

Allen Consulting Group 2007, *Regulatory Impact Statement: proposed occupational health and safety regulations*.

ACIL Tasman 2006, *Occupational Health and Safety: Economic Analysis*, Report for WorkCover NSW.

Arpaia, A., Grilo, I., Roeger, W., Varga, J., in't Veld, J. and Wobst, P. 2007, *Quantitative Assessment of Structural Reforms: Modelling the Lisbon Strategy*, European Commission Directorate-General for Economic and Financial Affairs European Economy Economic Papers No. 282.

Australian Bureau of Statistics 2011, *Labour Force, Australia, March 2011*, Cat No 6202.0.

Australian Bureau of Statistics 2010a, *Australian Industry 2008-09*, Cat No 8155.0.

Australian Bureau of Statistics 2010b, *Counts of Australian Businesses, including Entries and Exits Jun 2007 to Jun 2009*, Cat No 8165.0Australian Bureau of Statistics 2007, *Counts of Australian Businesses, including Entries and Exits*, Cat No 8165.0. Australian Bureau of Statistics 2006, *Work-Related Injuries 2005-06*, Cat No 6324.0.

Australian Chamber of Commerce and Industry 2009, S*ubmission to Productivity Commission Report on Performance Benchmarking of Australian Business Regulation: Occupational Health & Safety*.

Australian Safety and Compensation Council (ASCC) 2009, *The Cost of Work-Related Injury and Illness for Australian Employers, Workers and the Community: 2005-06*.

Australian Safety and Compensation Council (ASCC) 2008, *National Hazard Exposure Worker Surveillance Survey (NHEWS).*

Australian Safety and Compensation Council (ASCC) 2006, *Regulatory impact statement for the national standard for licensing persons performing high risk work*.

Australian Safety and Compensation Council (ASCC) 2006, *Regulatory impact statement for the national standard for manual tasks and national Code of Practice for the prevention of musculoskeletal disorders from manual tasks at work*.

Australian Safety and Compensation Council (ASCC) 2006, *Regulatory impact statement for the proposed National Standard for Licensing Persons Performing High Risk Work.*

Bryan Bottomley and Associates in association with Economic Associates, 2010, *Independent assessment of the costing of the adoption of the National Standard for Construction Work in South Australia*, Report for SafeWork SA.

Council of Australian Governments 2008, *Intergovernmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety –*: http://www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/OHS_IGA.pdf

Council of Australian Governments 2007, *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*.

Crafts, N. 2006, *Regulation and Productivity Performance*, Oxford Review of Economic Policy, Vol. 22, no. 2.

Dallal, 1999, *The Little Handbook of Statistical Practice*, Tufts University, Boston, MA. available at http://gpvec.unl.edu/bcpms/files/Epi/mod3/Project%20Resources/LittleHandboofOfStatisticalPracticeDallal.pdf

Economic Associates, 2002, *Regulatory Impact Statement on the Proposed Occupational Health and Safety (Prevention of Falls) Regulations 2002*, Report for WorkSafe Victoria.

Department of Commerce and Energy Safety 2010, *New laws – residual current device, Government Western Australia*, http://www.commerce.wa.gov.au/EnergySafety/PDF/Misc/RCD_flyer.pdf, accessed 2 September 2010.

Industry Commission, 1995, *Work, health and safety. An inquiry into Occupational Health and Safety*.

Gelauff, G. and Lejour, A. 2006, *Five Lisbon highlights: The Economic Impact of Reaching These Targets*, Netherlands CPB.

Johnstone R. 2008, 'Harmonising Occupational Health and Safety Regulation in Australia: the First Report of the National OHS Review' *Journal of Applied Law and Policy* 2008 ISSN 1836-6953.

Loayza, N.V., Oviedo, A.M. and Serven, L., 2005, *Regulation and Macroeconomic Performance*, World Bank Policy Research Working Paper No.3469.

Lord Robens, 1972, *Report of the Committee on Safety and Health at Work*, HMSO.

National Review into Model Occupational Health and Safety Laws 2008, *First Report*, Commonwealth of Australia.

National Review into Model Occupational Health and Safety Laws 2009, *Second Report*, Commonwealth of Australia.

National Occupational Health and Safety Commission (NOHSC) 2005, *Regulation Impact Statement on the Proposed Codes of Practice and Guidance Note for Asbestos*.

National Occupational Health and Safety Commission (NOHSC) 2005, *Regulation Impact Statement on the proposed National Standard for Construction Work*.

National Occupational Health and Safety Commission (NOHSC) 1996, *Economic Impact Analysis for the Control of Major Hazard Facilities*.

Nicoletti and Scarpetta, 2003, *Regulation, Productivity and Growth: OECD Evidence* World Bank Policy Research Working Paper 2944, January , available at http://elibrary.worldbank.org/docserver/download/2944.pdf

Office of Queensland Parliamentary Counsel 2002, *Regulatory impact statement for SL 2002 No 180 – electricity amendment regulation*, Queensland Government, http://www.legislation.qld.gov.au/LEGISLTN/SLS/RIS_EN/2002/02SL180R.pdf, accessed 2 September 2010.

Productivity Commission 2010, *Performance Benchmarking of Australian Business Regulation: Occupational Health & Safety*. Productivity Commission Research Report.

Productivity Commission 2008a, *Chemicals and Plastics Regulation Research Report*, http://www.pc.gov.au/__data/assets/pdf_file/0017/82331/chemicals-plastics-regulation.pdf

Productivity Commission 2008b, Review of Australia's Consumer Policy Framework, Final Report, Canberra.

Productivity Commission 2006, *Potential Benefits of the National Reform Agenda*, Report to the Council of Australian Governments, Canberra.

Productivity Commission 2004, *National Workers' Compensation and Occupational Health and Safety Frameworks*. Productivity Commission Inquiry Report, No 27.

Quigley N. 2003, *The Economics of Harmonisation: Implications for Reform of Commercial Law and Regulation in New Zealand*, New Zealand Institute for the Study of Competition and Regulation Inc.

Regulation Taskforce 2006, *Rethinking Regulation*: Report of the Taskforce on Reducing Regulatory Burdens on Business.

Safe Work Australia 2010, *Model work health and safety regulations: electricity policy proposal*, SIG-OHS meeting 29-30 July 2010.

Workplace Relations Ministers' Council 2009, *Comparative Performance Monitoring Report*.

Workplace Relations Ministers' Council 2008, *Comparison of Occupational Health and Safety Arrangements in Australia and New Zealand* 5th Edition, Department of Education, Employment and Workplace Relations (Appendixes 1, 2 and 3).

WorkSafe Victoria 2007, *Technical appendix to the Occupational Health and Safety Regulation Impact Statement 2007*, http://www.vcec.vic.gov.au/CA256EAF001C7B21/WebObj/OHSTechnicalAppendixtotheRIS/$File/OHS%20Technical%20Appendix%20to%20the%20RIS.pdf, accessed 7 September 2010.