Heads of Workplace Safety Authorities

PROJECT REPORT

Falls Prevention in Construction

AN AUSTRALIAN AND NEW ZEALAND JOINT COMPLIANCE PROJECT

Queensland Government
Department of Industrial Relations

NT WorkSafe

Government of South Australia
Workplace Services
Department for Administrative and Information Services

WorkCover New South Wales

ACT WorkCover

WorkSafe

Workplace Standards Tasmania
Department of Infrastructure, Energy and Resources

WorkSafe Victoria

OSH occupational safety & health service

January 2005

15 October 2004

John Watson
Chair
Heads of Workplace Safety Authorities

Dear John

On behalf of the project management group, I am pleased to submit our report on the Australian and New Zealand joint compliance project – **Falls Prevention in Construction**.

This project was one of the three national intervention projects initiated by the Heads of Workplace Safety Authorities on 24 May 2003.

I take this opportunity to record my appreciation for the support the project was given by each of the participating workplace safety authorities, and for the endorsement and encouragement of the construction industry's key employer bodies and unions.

Working with the project management group's delegated officers from the nine participating workplace safety authorities was a pleasure. The high degree of enthusiasm, cooperation and professionalism they brought to the project, and their management of its rollout within their jurisdictions, reflects credit on themselves and on the organisations they represent.

The project management group wishes to record its thanks to the 134 inspectors from across Australia and New Zealand who made this project happen through their May 2004 site visits and for the data they provided for this report.

I now request that the Heads of Workplace Safety Authorities:

- Note the report's findings,
- Consider the report's recommendations, and
- Release the report for publication on the workplace safety authorities' websites, for dissemination to the construction industry's employer bodies and unions, and for distribution to the project's participating inspectors.

Yours sincerely

PHIL COURT
Project Coordinator
(WorkSafe Victoria)

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1. Introduction

Fall hazards are the construction industry's main cause of death from traumatic injuries. They are also its second largest cause of non-fatal injuries to construction workers.

During May 2004, 134 inspectors from Australia's eight state and territory workplace safety authorities, and from New Zealand's Occupational Safety & Health Service, conducted a joint compliance campaign on falls prevention in the construction industry.

Between them, the nine participating workplace safety authorities committed to a minimum of 920 project visits to housing and small-scale commercial construction sites. This target was exceeded, with a total of 1,347 project visits being conducted.

Inspectors examined how falls hazards were being managed on site and, where necessary, they took appropriate enforcement action to bring about compliance with OHS legislation.

Approximately 50% of the sites visited were found to be in general compliance with OHS requirements for the prevention of falls.

759 instances of non-compliance with falls prevention requirements were identified and dealt with.

In addition to enforcing compliance, inspectors distributed information on the campaign and guidance material on falls prevention during their site visits.

They also collected data during their visits, enabling a snapshot of the targeted construction sectors to be prepared as a benchmark for future reference.

The Falls Prevention in Construction project was a pioneering initiative. It marked the first time a coordinated construction safety compliance campaign has ever been mounted across Australia, and the first time a joint Australian and New Zealand construction safety exercise has ever occurred.

Inspectors from nine jurisdictions conducted visits at construction sites during the joint compliance project in May 2004. Left: An ACT WorkCover inspector notes the lack of edge protection at a housing site in Canberra. Right: A Workplace Services SA inspector examines a dangerous non-complying scaffold in Adelaide.

2. Background

At its 24 May 2003 meeting in Melbourne, the Heads of Workplace Safety Authorities[1] initiated three national intervention projects for 2004; falls prevention in construction, manual handling in aged care facilities, and falls from height in road transport.

WorkSafe Victoria agreed to coordinate the project on falls prevention in construction.

The project supported the National OHS Strategy 2002-2012[2] for national efforts to prevent workplace death, injury and disease. One of the strategy's five areas for action involves reducing high incidence and high severity injuries in the workplace.

2.1 The issue

Falling from height is the most common cause of death from traumatic injuries in construction. In 2003, 18 construction workers fell to their deaths in Australia and New Zealand.

Falling from height is the second highest cause of injury in the construction industry, after sprains and strains. In Australia alone, between 1997 and 2001, the construction industry generated around 1,600 fall-related workers' compensation claims each year. This represents approximately 12% of all construction workers' compensation claims.

The direct cost of fall-related workers' compensation claims, Australia-wide, has been estimated at approximately $41 million annually[3].

At the time of the project rollout, the level of employment in the construction industry, as a measure of activity, was 751,160 in Australia and 120,000 in New Zealand (see Table 1 for more information).

3. Preparation

3.1 Project management group

A project management group, comprising the project coordinator and a project manager from each state and territory workplace safety authority, was established in September 2003.

Its first meeting, in Melbourne on 25 September 2003, scoped the project, and set out its objectives, timeframes, proportional allocation of field visits and specific areas of focus.

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[1] Heads of Workplace Safety Authorities brings together the most senior executives from the Australian (Commonwealth, State and Territory) and New Zealand workplace safety authorities. Amongst other things, HWSA seeks to improve the operational coordination and enhance the operational consistency of the workplace safety authorities' efforts in order to maximise their collective impact on selected industries and issues.

[2] The ten-year National OHS Strategy *National OHS Strategy 2002-2012* was endorsed in 2002 by the Australian Commonwealth Government, all State and Territory Governments, the Australian Chamber of Commerce and Industry, and the Australian Council of Trade Unions. It can be downloaded by going to: www.nohsc.gov.au

[3] *Draft National Code of Practice for Prevention of Falls from Height in Construction 2004 -- Preliminary Regulation Impact Statement June 2004*. It can be downloaded by going to: www.nohsc.gov.au

Its second meeting, on 1 April 2004, finalised arrangements for project implementation, data collection, evaluation and reporting. It also endorsed a media strategy to support the project.

Following this meeting, New Zealand's Occupational Safety & Health Service also joined the project and delegated an officer to the Project Management Group.

The following table shows the minimum number of site visits agreed to be conducted during the project's rollout phase. The allocation broadly reflects the comparative size of the construction industry at the time of the project and the numbers of available inspectors dealing with construction sites within each jurisdiction.

Table 1: Proportional Allocation of the Project's Site Visits

Workplace safety authority	Allocated visits	Industry employment levels in state/territory*
ACT WorkCover (Australian Capital Territory)	30	10,560
NT WorkSafe (Northern Territory)	20	7,440
WorkCover New South Wales	200	246,000
Workplace Health & Safety, Queensland	150	156,120
Workplace Services, South Australia	80	49,710
Workplace Standards Tasmania	40	12,780
WorkSafe Victoria	180	184,500
WorkSafe Western Australia	100	84,050
Occupational Safety & Health Service, New Zealand	120	120,000
TOTAL	**920**	**871,160**

*Source: Australian Bureau of Statistics, Labour Force Figures

3.2 Project objectives

The objectives of the joint compliance project were to:

- Improve the level of compliance on falls prevention within targeted construction sectors and sub-sectors.
- Improve the capability of builders and targeted sub-contractors to recognise, manage and control fall-related hazards and risks.
- Increase builders' and targeted sub-contractors' perceptions of the risk of detection and sanctions where non-compliance with fall prevention requirements is permitted or encouraged.
- Identify and promote best practice and good innovations in managing and controlling the fall-related hazards and risks of the targeted work areas.

Although the project was an inspector-delivered operational compliance project, not a research project, it was also utilised to compile specific site data so that a falls prevention compliance benchmark across Australian and New Zealand could be established.

Left: The project management group at its first meeting in Melbourne, 25 September 2003.

Standing from left;
Ian Markos, South Australia,
Roger Perfrement, Northern Territory,
Tim Campbell, Queensland,
Kerry Whitehead, Tasmania.

Sitting from left;
John Sharpin, New South Wales,
Phil Court (Project Coordinator), Victoria,
Lucio Figueiredo, Western Australia,
Margaret Kennedy, Australian Capital Territory,

Not pictured (taking photograph); Barry Naismith, Victoria.

3.3 Targeted construction sectors and trades

In order to maximise the project's impact and effectiveness, the project management group agreed to focus the campaign within the construction sectors where inspectors have traditionally encountered a greater incidence of inadequately controlled fall hazards – the housing and small-scale commercial construction sectors.

Consequently, participating inspectors were advised to limit site visits for this particular project to:

- Housing construction sites up to three habitable storeys, and
- Small commercial construction sites with a project value of up to $2 million.

The project management group looked at available falls-related injury data to determine which occupation groups should be particularly focussed on.

It was agreed that participating inspectors would gather site data in relation to:

- Services installation contractors and workers – plumbing, gas-fitting, electrical, air conditioning, and
- Finish & fit-out contractors and workers – painting, plastering (including rendering) and glazing.

It was further agreed to pay particular attention to two issues of particular concern, namely:

- The installation of permanent balustrades or balconies and similar, and
- The construction/installation of permanent stairways and handrails.

3.4 Project tools

The project management group developed common documentation to assist inspectors in conducting project visits, to provide information on the project to employers and workers during visits, and to assist in the briefing of employer bodies, unions, inspectors and any other interested parties. These included:

- *Visit Summary Data Sheet* – to be used by participating inspectors to record data on falls prevention issues, specific work activities, targeted sub-contractors on site and action taken on non-compliance during project visits. (See Attachment F, page 56.)
- *Visit Flyer* – for inspectors to hand out during visits, explaining the project. (See Attachment B, pages 37 to 40 for examples.)
- *Project summary* – a PowerPoint presentation for use in stakeholder briefings and for posting on the participating workplace safety authorities' websites.

3.5 Guidance material to assist employers and workers

The project management group agreed that inspectors conducting project visits should take the opportunity to hand out relevant guidance material on falls prevention, wherever appropriate, to builders, sub-contractors and workers.

Each member of the project management group determined the appropriate guidance material for their particular jurisdiction.

See Attachment E on page 54 for a list of the fall prevention guidance material provided by each workplace safety authority's inspectors during their project visits.

3.6 Briefing the inspectors

A 9-page Inspectors' Briefing Paper was prepared in April 2004. It set out the reasons for the project, the scope of the project, the protocols for project visits, the timeframe for visits and other operational matters.

All participating inspectors were briefed during April, provided with the Inspector's Briefing Paper, the visit summary data sheets, the project flyers and the relevant guidance material for on-site distribution.

4. Project Implementation

4.1 Project launch

A generic news release was provided as a template to all participating workplace safety authorities, so that a coordinated campaign launch with a uniformly consistent message could be conducted within each jurisdiction.

See Attachment A, pages 26 to 36, for examples of news releases used for the project.

As the coordinating authority, WorkSafe Victoria set up a webpage for the project on its website, enabling the other participating workplace safety authorities' websites to link to it. (See Attachment C on page 41.)

Several authorities also set up their own webpage for the project, utilizing the common documents and providing direct links to their jurisdiction's relevant guidance material.

The project was publicly launched on 20 April 2004.

WorkSafe Victoria's weekly emailed newsletter, *Safety Soapbox*, carried regular reports throughout the campaign of inspector visits. (See Attachment D on pages 42 to 53.)

4.2 Stakeholders engaged

Each member of the project management group took responsibility to brief the relevant construction unions and employer associations within their jurisdiction on the project.

Organisations briefing included:

- Industry employer groups and unions in the ACT, WA, Queensland, South Australia, NSW, Tasmania and the Northern Territory
- Foundations for Safety in Victoria, the state's chief forum for raising OHS issues in the construction industry. Industry employer groups and unions are members of Foundations for Safety
- Industry bodies in New Zealand and the New Zealand Council of Trades Unions

For more information, see Attachment D "*Safety Soapbox* Project Progress Reports", starting on page 42.

Briefing key stakeholder organisations was an essential ingredient of the project and enabled them to inform their members of the project, the likelihood of receiving a visit and what inspectors would be targeting.

Several stakeholder organisations assisted by circulating project information to their members and/or posting project information on their websites.

During project implementation, it was found that 24% of the sites visited knew about the project through employer bodies or unions. (For more information, see 5.10 "Prior knowledge of the project …." on page 21.)

4.3 Site visits conducted

Inspectors' project visits commenced on 3 May and continued through until 31 May.

The minimum target for site visits – 920 – was well and truly exceeded, with a total of 1,347 project visits being recorded during May 2004.

The jurisdictions that contributed the bulk of the additional project visits were New South Wales, Queensland and the Northern Territory.

In total, 134 inspectors were involved in project visits.

As well as enforcing compliance, collecting data for the project and handing out guidance material, inspectors took photographs for the project to illustrate typical examples of dangerous non-compliance and good examples of fall prevention in practice.

4.4 Flexibility in the organisation of project visits

The manner in which project visits were allocated and organised was deliberately flexible so that the project's impact on each participating workplace safety authority's normal operating arrangements could be minimised. It suited most authorities to deliver their quota entirely (or overwhelmingly) through self-initiated (proactive) site visits, whereas it suited other authorities to utilise a mixture of response (reactive) visits and proactive visits to deliver their quota.

The use of proactive visits to deliver the project was particularly high in Queensland (100%), South Australia (99%), Tasmania (98%), Western Australia (98%), New South Wales (96%) and the Australian Capital Territory (96%).

Reactive visits were most utilised in Victoria (26%), the Northern Territory (10%) and New Zealand (7%).

Another example of the flexibility in delivery that the project allowed for was the mounting of joint border-area visits by inspectors from ACT WorkCover and WorkCover NSW, an initiative that served to strengthen ongoing operational cooperation between the two authorities.

4.5 Metropolitan and regional site visits

72% of project visits were to city and metropolitan construction sites, with 28% being to sites in regional areas. This broadly reflects the greater amount of building work in metropolitan areas.

As the local demographics would suggest, it is no surprise that the highest proportion of metropolitan site visits was in the Australian Capital Territory (100%), and the highest proportions of regional site visits were in Tasmania (57%) and Queensland (57%).

Table 2, below provides further detail.

Table 2: Location of project visits

Jurisdiction	City & metropolitan visits	Regional visits
ACT	100%	0%
NSW	61%	39%
NT	90%	10%
NZ*	64%	36%
QLD	43%	57%
SA	99%	1%
TAS	43%	57%
VIC	73%	27%
WA	72%	28%
Average	**72%**	**28%**

* regional centres in New Zealand have city status

4.6 The types of construction sites visited

Nearly 75% of project visits were to housing construction sites, with the remainder being to small-scale commercial sites.

The proportion of commercial construction sites visited was highest in Victoria (49%) and lowest in New South Wales (11%).

Around 88% of the housing sites visited were two to three storey buildings, with the remainder being single storey houses.

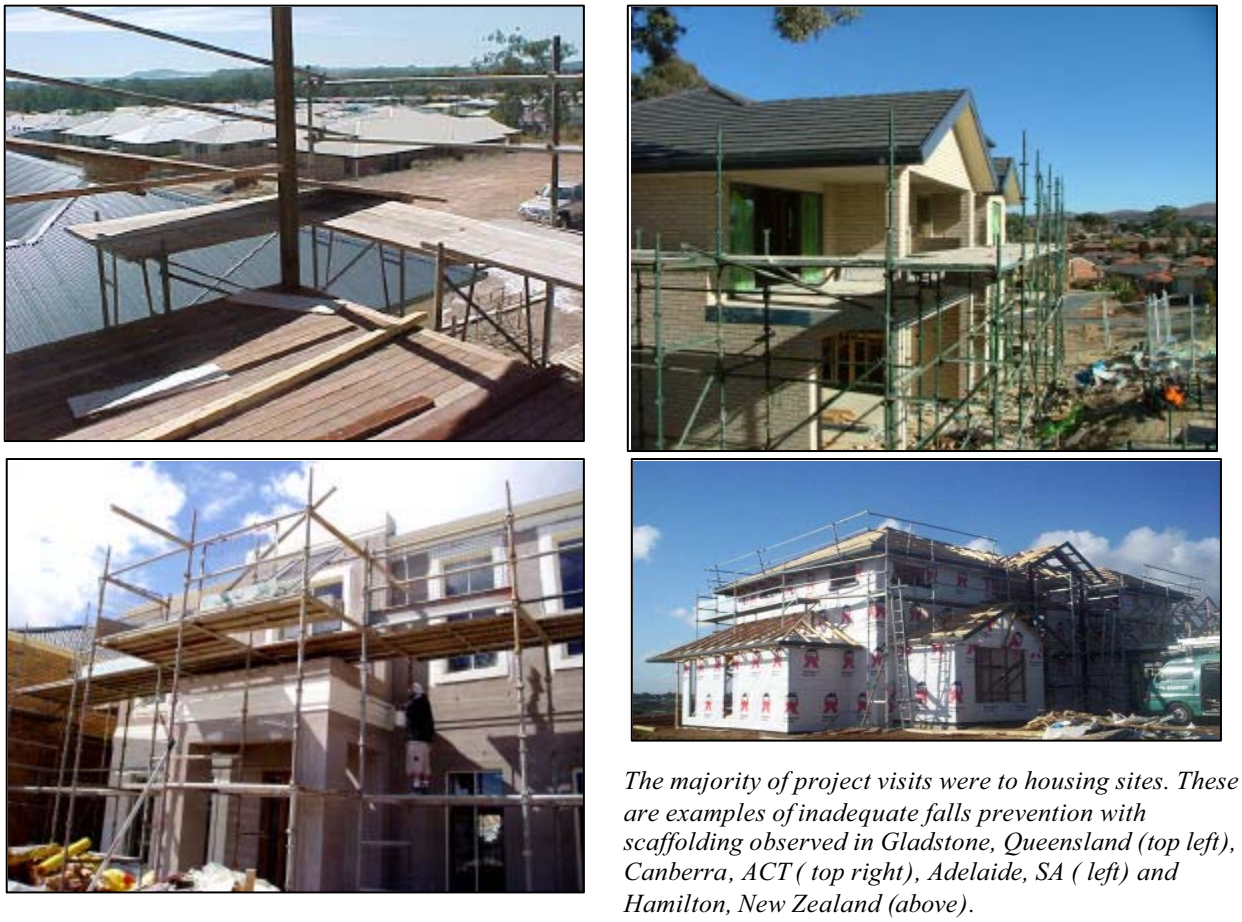
The proportion of single storey house sites visited was highest in the Northern Territory (42%), and lowest in the ACT (4%) and Queensland (7%).

The proportion of 2-3 storey housing sites visited was highest in Queensland (74%), Tasmania (73%) and Western Australia (72%).

Table 3, below, shows more detail.

Table 3: Visits by building type

Building type	ACT	NSW	NT	NZ	QLD	SA	TAS	VIC	WA	Average
Housing single storey	4%	28%	42%	17%	7%	27%	10%	10%	13%	**17%**
Housing 2 or 3 storey	50%	61%	42%	54%	74%	60%	73%	42%	72%	**59%**
Small Commercial	46%	11%	16%	29%	19%	13%	17%	49%	15%	**24%**



The majority of project visits were to housing sites. These are examples of inadequate falls prevention with scaffolding observed in Gladstone, Queensland (top left), Canberra, ACT (top right), Adelaide, SA (left) and Hamilton, New Zealand (above).

Small commercial sites were also targeted. Examples of lack of falls prevention at Townsville, Queensland, during roof plumbing work (above) and at a tilt-up factory project in New Zealand (right).

82% of all project visits were to new building projects, with the remainder being to renovation projects.

The proportions of visits to renovation projects were highest in the ACT (29%) and the NT (26%) and lowest in Queensland (8%) and South Australia (10%).

Table 4, below, provides more detail.

Table 4: Visits by type of project

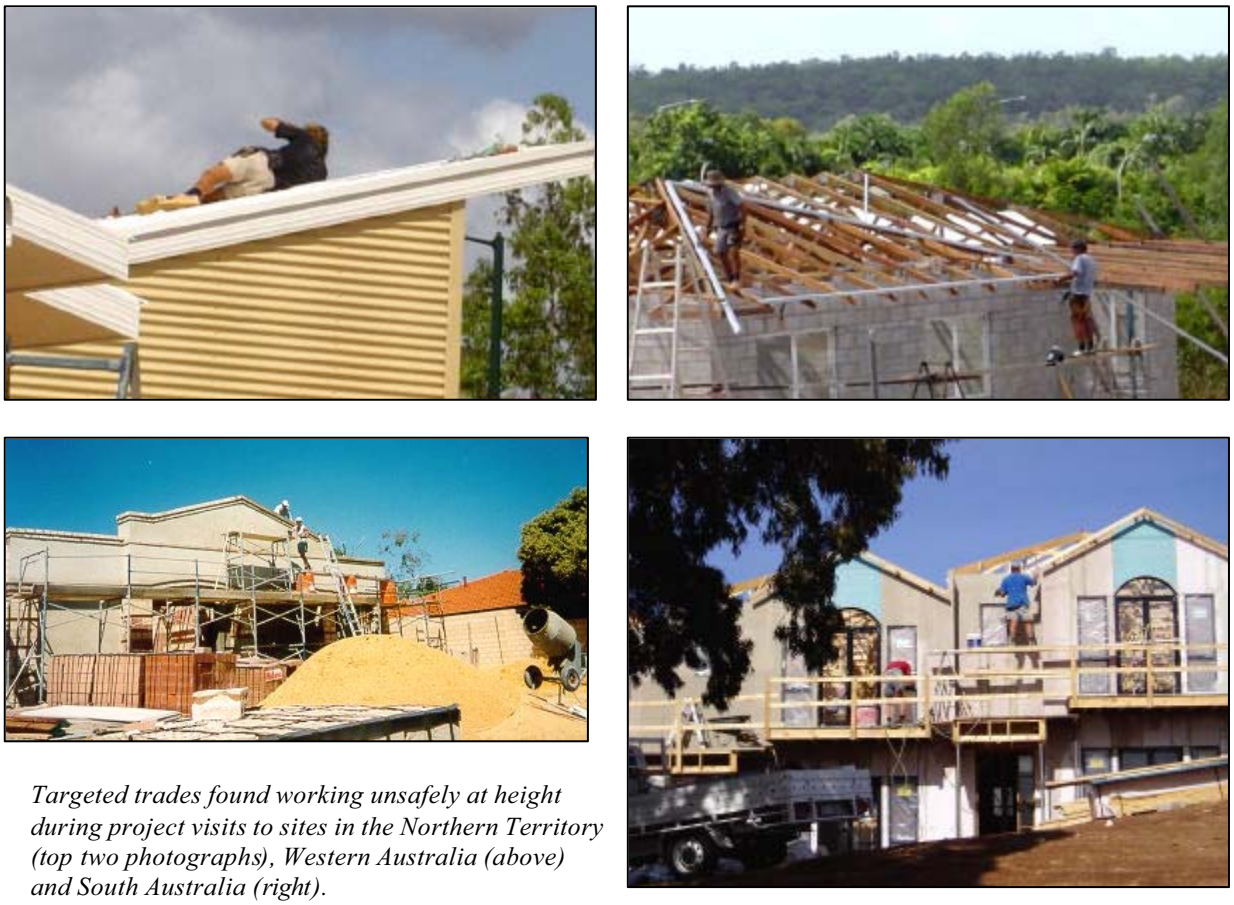
Project type	ACT	NSW	NT	NZ	QLD	SA	TAS	VIC	WA	Average
New building	71%	88%	74%	78%	92%	90%	85%	78%	84%	**82%**
Renovation	29%	12%	26%	22%	8%	10%	15%	22%	16%	**18%**

4.7 Trades found on site during visits

Plasterers, painters, plumbers and electricians were the most commonly encountered occupation groups found on site during project visits. Table 5, below, provides more detail.

Table 5: Targeted occupations on sites

Occupations	Numbers	Percentage
Plumbers	394	20%
Electricians	298	15%
Air-conditioning Installers	78	4%
Wall board plasterers	383	20%
Renderer plasterers	283	15%
Painters	423	22%
Glaziers	86	4%
Sub total	1,945	100%
Other trades	**369**	
Total- all trades	**2,314**	



Targeted trades found working unsafely at height during project visits to sites in the Northern Territory (top two photographs), Western Australia (above) and South Australia (right).

4.8 Post visits debriefing and data analysis

Following the project's site visits phase, the inspectors' data and other relevant project information was discussed at the project management group's third meeting in Melbourne on 30 June 2004.

The meeting provided broad instructions for the preparation of the project report.

The project management group held its fourth and final meeting in Melbourne on 4 August 2004, where it reviewed the project findings and gave final drafting instructions for the report.

The project management group held its final meeting in Melbourne on 4 August 2004 to review project findings.

Standing from left; Barry Naismith (WorkSafe Victoria), Bob Bills (Workplace Health & Safety Queensland), Phil Court (Project Coordinator, WorkSafe Victoria), John Sharpin (WorkCover NSW), Alan Barrett (Occupational Safety & Health Service, New Zealand), Roger Perfrement (NT WorkSafe).

Sitting from left; Mary Nizamis (Workplace Services SA), Julia Collins (ACT WorkCover), Lucio Figueiredo (WorkSafe Western Australia) and Brent Turner (WorkCover NSW).
Absent, but participating via teleconferencing; Kerry Whitehead (Workplace Standards Tasmania).

PART ONE ENDS