# ANALYSIS OF BIANNUAL DATA FROM ACCREDITED CONTRACTORS FOR THE JULY TO DECEMBER 2008 REPORTING PERIOD

Australian Government Building and Construction OHS Accreditation Scheme

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# **1 INTRODUCTION**

The role of the Federal Safety Commissioner (FSC) is to promote and foster improved occupational health and safety in the Australian building and construction industry, so that work is performed safely, as well as on time and on budget. The powers and functions of the FSC are outlined in the *Building and Construction Industry Improvement Act 2005* (BCII Act). The FSC is supported by the Office of the Federal Safety Commissioner (OFSC).

A key function of the OFSC has been to develop, implement and administer the Australian Government Building and Construction OHS Accreditation Scheme (the Scheme). Through the Scheme, the OFSC is using the power and influence of the Australian Government as a major client and provider of capital in the building and construction industry, to promote and improve positive health and safety outcomes.

# 2 SCHEME THRESHOLDS

Scheme thresholds apply to directly funded Australian Government projects with a value of \$3 million or more and include indirectly funded Australian Government building projects where:

- The value of the Australian Government contribution to a project is at least \$5 million and represents at least 50 per cent of the total construction project value; or
- The Australian Government contribution to a project is \$10 million or more, irrespective of the proportion of Australian Government funding.

Building work is considered directly funded where the Australian Government or a Commonwealth authority enters into a contract with persons who will carry out the building work, or who may arrange for the building work to be carried out.

Building work is considered indirectly funded where it is funded by the Australian Government or a Commonwealth authority through grants or other programs. This includes building projects where the Australian Government provides funding through a funding agreement or grants to a body that may then contract with persons who will undertake the building work or arrange for the building work to be carried out.

# **3 REPORTING**

Under Regulation 14 of the *Building and Construction Industry Improvement (Accreditation Scheme) Regulations 2005* (the Regulations), it is a condition of accreditation under the Scheme that accredited contractors comply with the reporting requirements of the OFSC.

Each accredited contractor is required to lodge biannual activity reports to document the operation of their OHS management systems even when no Scheme projects are currently being undertaken. The biannual report collects updated figures on a defined set of measures and is used to help the OFSC to assess the current OHS status of all accredited contractors, and to determine trends in accredited contractor OHS performance.

This report provides an overview of the analysis of the data collected from biannual activity reports for the period July to December 2008. Comparisons are also made with data collected in previous biannual periods.

It should be noted that data provided to the OFSC by accredited contractors under the Scheme has not been the subject of independent audit or verification and should be treated as indicative only.

# 4 ANALYSIS

Prior to the introduction of biannual reporting in the December 2007 reporting period, data was not split by type of project (Scheme/ non-Scheme). As a consequence, direct comparisons between biannual data and annual data are not practicable.

Where possible comparisons are provided to industry wide data, however, the availability of this data is limited and is often not available until much later than the data reported by the OFSC.

### 4.1 Contractors accredited

There was an 85 per cent increase in the number of accredited contractors providing biannual data with 66 companies reporting in the December 2007 period and 122 companies reporting in the December 2008 period. Of the 122 accredited contractors, 10 accredited contractors (8 per cent) reported nil projects.



## 4.2 Number of projects

Period	Number of accredited contractors with Scheme projects	Number of Scheme projects	Number of accredited contractors with Non- Scheme projects	Number of Non-Scheme projects
Jul to Dec 2007	25	42	58	1,019
Jan to Jun 2008	32	71	85	1,212
Jul to Dec 2008	44	103	107	1,416

- Between the December 2007 and December 2008 reporting periods the number of Scheme projects increased over 145 per cent, while the number of accredited contractors undertaking these projects increased by 76 per cent.
- Over the same time, the number of non-Scheme projects increased 39 per cent, while the number of accredited contractors undertaking these projects increased 84 per cent.

### 4.3 Number employed

Accredited contractors report the number of head contractor employees and subcontractor employees for both Scheme and non-Scheme projects.

Period	Number of Head contractor employees on Scheme projects	Number of Sub- contractors on Scheme projects	Number of Head contractor employees on Non-Scheme projects	Number of Sub- contractors on Non-Scheme projects
Jul to Dec 2007	1,562	20,492	37,736	200,587
Jan to Jun 2008	769	13,652	54,921	228,764
Jul to Dec 2008	6,053	20,338	77,194	230,752

- The total number of Scheme project employees increased nearly 20 per cent between the December 2007 and December 2008 reporting periods (from 22,054 to 26,391 employees).
- Non-Scheme project employees increased from 238,323 to 307,946 over the same period, an increase of 29 per cent.
- The total number of employees of accredited contractors (both Scheme and non-Scheme project employees) for the December 2008 reporting period accounted for approximately 48 per cent of all construction industry employees (the number of accredited contractor employees was 334,337 and the total number of construction industry employees was estimated as 701,687<sup>1</sup>) compared to around 39 per cent for the December 2007 reporting period.

<sup>&</sup>lt;sup>1</sup> Source: ABS publication no. 6291.0.55.003 – Labour Force, Australia, Detailed, Quarterly, Table 04: Employed persons by Industry. Construction industry stock, original. Calculated as 71 per cent of the average population for that biannual period. The estimated populations for the construction industry overall were: July to December 2007 - 669,661 employees; January to June 2008 - 699,092 employees; and July to December 2008 - 701,687 employees.

### 4.4 Injury frequency rates

Period	LTIFR Median on Scheme projects	LTIFR Arithmetic Mean on Scheme projects	LTIFR Winsorized Mean on Scheme projects	LTIFR Median on Non- Scheme projects	LTIFR Arithmetic Mean on Non- Scheme projects	LTIFR Winsorized Mean on Non- Scheme projects
Jul to Dec 2007	0.00	6.62	4.04	4.30	9.97	7.52
Jan to Jun 2008	0.00	9.24	8.72	4.95	10.41	9.05
Jul to Dec 2008	0.00	7.44	6.21	4.65	12.22	7.36

#### 4.4.1 Lost Time Injury Frequency Rate (LTIFR)

- The median LTIFR for Scheme projects has remained at zero since the inception of biannual reporting, while the median LTIFR for non-Scheme projects has remained relatively steady.
- For each of the three reporting periods, more than half of the accredited contractors reported no LTI's for Scheme projects, while around one quarter of accredited contractors reported no LTI's for non-Scheme projects.
- For both Scheme and non-Scheme projects there were extreme LTIFR values which suggest these observations could be treated as outliers.
- The 90 per cent Winsorized mean (a Winsorized mean is regarded as a more robust estimator of the central tendency as it is less sensitive to outliers see Glossary) for LTIFR for both scheme and non-scheme projects, improved in the last biannual period.

4.4.2	Medically	Treated	Injury	Frequency	Rate	(MTIFR)
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Period	MTIFR Median on Scheme projects	MTIFR Arithmetic Mean on Scheme projects	MTIFR Winsorized Mean on Scheme projects	MTIFR Median on Non- Scheme projects	MTIFR Arithmetic Mean on Non- Scheme projects	MTIFR Winsorized Mean on Non- Scheme projects
Jul to Dec 2007	1.75	12.57	9.53	21.44	53.47	23.32
Jan to Jun 2008	0.00	18.65	16.29	19.42	30.10	24.36
Jul to Dec 2008	2.78	21.79	14.50	13.18	21.10	16.67

- For each of the three reporting periods, around half of the accredited contractors reported no MTI's for Scheme projects, while around one quarter of accredited contractors reported no MTI's for non-Scheme projects.
- For both Scheme and non-Scheme projects there were extreme MTIFR values which suggest these observations could be treated as outliers.

• The 90 per cent Winsorized mean (a Winsorized mean is regarded as a more robust estimator of the central tendency as it is less sensitive to outliers – see Glossary) for MTIFR for both scheme and non-scheme projects, improved in the last biannual period.

### 4.5 Fatalities

Period	Number of Fatalities on Scheme projects <sup>2</sup>	Fatalities incidence rate on Scheme projects <sup>2</sup>	Number of Fatalities on Non- Scheme projects <sup>2</sup>	Fatalities incidence rate on Non- Scheme projects <sup>2</sup>	Number of Fatalitie s from ASCC construc tion industry dataError ! Bookmark not defined.	Fatalities incidence rate from ASCC constructi on industry dataError! Bookmark not defined.
Jul to Dec 2007	1	4.53	1	0.42	20	2.99
Jan to Jun 2008	0	0.00	6	2.12	16	2.29
Jul to Dec 2008	0	0.00	4	1.30	18	2.56

- There were no fatalities on scheme projects in the latest biannual reporting period leading to no scheme project fatalities for the 2008 calendar year.
- Between the December 2007 and December 2008 reporting periods, non-Scheme project fatalities increased as did the incidence rate, however, the incidence rates for accredited contractors were well below those for the construction industry overall.

### 4.6 Workers Compensation Claim Rates

Accredited companies report workers' compensation claim rates across their company for the biannual reporting period. Industry wide comparisons are provided below to statistics published by the Australian Safety and Compensation Council (ASCC) in their *Compendium of Workers' Compensation Statistics Australia 2006-07* report release in March 2009. Please note that the ASCC have since changed their name to Safe Work Australia (SWA).

For both the ASCC figures and for Scheme biannual reporting, serious claims are defined as those that involve either death; a permanent incapacity; or a temporary incapacity requiring an absence from work of one working week or more.

#### 4.6.1 Total Construction Industry Claim Rates

Based on the ASCC 2006-07 Compendium report figures, and specifically for the construction industry, preliminary data for 2006-07 shows there were 14,130 serious workers' compensation claims from a population of 638,400 classified as employees

in that year. This equates to 39 claims per day or a claim incident rate of 22 claims per 1000 employees for the full financial year.

Using the methodology provided in sub-section 3 below, a serious claim incident rate for the six month period at the end of 2008, for the construction industry as a whole, would be estimated to be around 9 claims per 1000 employees.

#### 4.6.2 Accredited Company Claim Rates

The average claim incident rate for accredited companies for the December 2008 reporting period is 6.6 claims per 1000 employees which is 27 per cent better than the industry average. Approximately 20 per cent of accredited companies exceed the industry average.

For the previous June 2008 bi-annual period the accredited company average claim incident rate was 10.6 claims per 1000 employees, which is just above the industry average for that time. In that period nearly 30 per cent of accredited companies exceeded the industry claim rate average.



1. Industry average sourced from the *Compendium of Workers' Compensation Statistics Australia 2006-07* published by the ASCC in March 2009. See section 4.4.3 for commentary on the calculation of the average for the construction industry.

2. Data on accredited company claims was sourced from their bi-annual reports to the OFSC and is defined as *the number of workers' compensation claims with a duration of one week or more which have been recorded for the period.* 

#### 4.6.3 Calculation of Current Industry Claim Rates

The claim rate reported by the ASCC in the 2006-07 comparative report was 22 claims per 1000 employees for the full financial year.

Additional analysis provided by Safe Work Australia (formally the ASCC) indicates that the incidence of serious claims in the construction industry between the first and second halves of the year is negligible, with a less than 4 per cent difference between each half. Australian Bureau of Statistics (ABS) data also indicates that employee numbers in the construction industry remain relatively constant through the year but with a small increase over time.

In order to calculate a comparative claim incidence rate as at the end of 2008, as figures provided in the ASCC report are for 2006-07 financial year, an estimate was made using the incident rates over time figures provided in the ASCC compendium report. This estimate was determined by using the average decrease in incident rate for the 2003-04 to 2006-07 periods, of 2.0, multiplied by the 2 years elapsed since June 2007 (giving 4.0). Assuming industry rates would continue to decline at this rate we deducted this from the 2006-07 figure of 22.1. This returns a final estimated claim incident rate for the 2008-09 financial year of 18.1 claims per 1000 employees.

Based on this estimated incident rate figure and the indication of equal data distributions, it can reasonably be concluded that the serious claim incident rate for the six month period at the end of 2008, for the construction industry as a whole, would be half the annual rate for 2008-09, that is, approximately 9.0 claims per 1000 employees.

# 4.7 Profile of injuries

Accredited contractors are required to report lost time incidents based on the mechanism of incident classification groups contained in the *Type of Occurrence Classification System, Version 3.1* (TOOCS3.1) published by Safe Work Australia (SWA).

The *mechanism of incident* classification is intended to identify the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury or disease.



- For the December 2008 reporting period, 802 incidents were reported by 87 accredited contractors compared to 693 incidents by 46 accredited contractors in the December 2007 reporting period, an increase of 16 per cent in the number of incidents and an 89 per cent increase in the number of accredited contractors.
- The top five mechanism of incident groups accounted for 95.6 per cent of all incidents for the December 2008 reporting period compared to 93.9 per cent for the December 2007 reporting period, with the mechanism of incident classifications and rankings the same for both periods.

#### 4.8 High risk construction work

Accredited contractors are required to report if they performed any *'high risk construction work'* as described in the *National Standard For Construction Work* [NOHSC:1016 (2005)] published by Safe Work Australia (SWA) and indicate whether

any such work resulted in an injury or near miss event that required the accredited contractor to notify the relevant OHS authority (under the OHS legislation covering notifiable incidents) in the jurisdiction in which the project was undertaken.



• There were 166 notifiable incidents reported by 44 accredited contractors to the relevant jurisdiction OHS authority for the December 2008 reporting period.

### 4.9 Workers Compensation Premium Rates

	Mean premium rate ACT	Mean premium rate NSW	Mean premium rate NT	Mean premium rate QLD	Mean premium rate SA	Mean premium rate TAS	Mean premium rate VIC	Mean premium rate WA
Period	%	%	%	%	%	%	%	%
Jul to Dec 2007	5.589	3.700	2.675	1.508	2.940		2.327	2.496
Jan to Jun 2008	4.962	3.394	2.355	1.789	3.037		2.143	3.348
Jul to Dec 2008	4.274	3.165	2.261	1.712	3.750	1.087	2.150	2.066
ASCC June 2007 <sup>4</sup>	NA	4.475	NA	2.246	3.5	3.73	2.891	3.09

- Between the December 2007 reporting period and the December 2008 reporting period the mean premium rates for accredited contractors decreased for the Australian Capital Territory, New South Wales, Northern Territory, Victoria and Western Australia and increased for Queensland and South Australia.
- For comparative purposes, the latest available premium rates for nonresidential construction across most jurisdictions have been included. The mean premium rates for accredited contractors are below those for the nonresidential construction industry for all periods, except South Australia in the December 2008 reporting period and Western Australia in the June 2008 reporting period.

#### 4.10 Positive performance indicators

Positive Performance Indicators (PPIs) are measures of actions or initiatives introduced to prevent workplace injury and disease. Accredited contractors report details of PPIs, as well as details of any peer or industry recognition for OHS performance and details of any key OHS initiatives implemented during the reporting period.

Examples of these indicators, recognition and initiatives for the December 2008 reporting period are provided below. It is important to note that information on PPIs is provided as free text so the response percentage is likely to understate the number of companies that implement these PPIs.

Positive Performance Indicator F	Frequency of Response
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<sup>&</sup>lt;sup>4</sup> Source: ASCC publication Comparison of Workers' Compensation Arrangements in Australia and New Zealand 30 June 2007, Table 4.6 Selected Industry Premium Rates as at 30 June 2007, pages 32-33.

Additional internal audit programs not conducted by the OFSC	Over 40%
Government agency safety awards	7%
State building association safety awards	12%
Training to Certificate III or better in	5%
OHS by employees	
Investment in research of OHS in	9%
construction	
Implementation of drug and alcohol	5%
programs	

# GLOSSARY

**Median** - The median is the middle of a distribution; half the scores are above the median and half are below the median. If the number of values in the data set is even, then the median is the average of the two middle values. The median is less sensitive to extreme scores than the average.

*Arithmetic mean* - The mean is the sum of all the scores divided by the number of scores.

**Winsorized mean** - involves the calculation of the mean after replacing given parts of a distribution at the high and low end with the most extreme remaining values, typically replacing an equal amount of both ends. Often 5 per cent of the ends are replaced. The Winsorized mean is a useful estimator because it is less sensitive to outliers than the mean but will still give a reasonable estimate of central tendency.

Incidence rate - Incidence rates are calculated as follows:

Number of incidences	V	100,000 (
Number employed	Х	100,000 (employees)
Frequency rate - Frequency	rates a	re calculated as follows:
Number of incidences	V	1,000,000 (hours)
	X	1,000,000 (nours)

Number of hours worked

**LTIFR (Lost Time Injury Frequency Rate)** - The number of occurrences of lost time injury that result in a fatality, a permanent disability or time lost from work of one day shift or more in the period. The number of hours worked refers to the total number of hours worked by all workers in the period, including overtime and extra shifts.

**MTIFR (Medically Treated Injury Frequency Rate)** - The number of occurrences of treatment by, or under the order of, a qualified medical practitioner, or any injury that could be considered as being one that would normally be treated by a medical practitioner. The number of hours worked refers to the total number of hours worked by all workers in the period, including overtime and extra shifts.

**Incident** - An incident resulting in an injury that is required to be notified by the OHS legislative requirement for notifiable incidents in the jurisdiction in which the project is being undertaken.

*Scheme Projects* - Projects that are directly funded by the Australian Government with a value of \$3 million or more, plus, projects that are indirectly funded by the Australian Government where:

- the value of the Australian Government contribution to the project is at least \$5 million and represents at least 50 per cent of the total construction project value; or
- the Australian Government contribution to a project is \$10 million or more, irrespective of the proportion of Australian Government funding

**Non Scheme Projects** – Projects where the accredited company is the head contractor, the value of building work is \$3 million or more, and the project is not a scheme project.