

# Barriers to implementing OHS reforms – the experiences of small subcontractors in the Australian Construction Industry

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## Abstract

In Australia, the introduction of the Occupational Health and Safety (OHS) Regulation in 2001 was meant to be a catalyst for improving the construction industry's poor health and safety performance. It represented a shift in OHS policy towards a more self-regulated, consultative, performance-based approach, placing much larger responsibilities on principal contractors and subcontractors for the effective management of OHS risks. The success of any self-regulatory system depends heavily on the receptivity, skills and knowledge of those who have to administer these greater responsibilities. In the case of major principal contractors, this is unlikely to be a problem. However, for the small sized subcontractors who represent the vast majority of firms in the Australian construction industry, many difficulties exist in adapting to this new regime. This paper explores the extent and nature of these challenges. It concludes that the main barriers to effective compliance have been implementation costs, a highly competitive environment and language barriers.

## Introduction

Every employee has a right to a healthy and safe working environment which enables them to live a socially and economically productive life. Yet in Australia, this is more assured in some industries than in others (see Table 1).

	No. of injuries	Incidence rate
Mining	656	43.5
Construction	5776	35.2
Transport & storage	4335	33.9
Agriculture, forestry & fishing	1652	32.5
Manufacturing	9746	28.9
Personal & other services	2063	22.1
Government administration & defence	1828	19.9
Health & community services	5789	19.7
Accommodation, cafes & restaurants	3052	19.5

**Table 1 – Comparison of Incidence Rates between Industries with a higher incidence rate than the average Incidence rate (18.5) in 2002/03 (Source: Workcover NSW Workers Compensation Statistics 2002/03)**

Table 1 illustrates that in relative and absolute terms, the construction industry has been unable to provide a healthy and safe working environment for its employees. While this record has improved in recent years (Table 2), the average national incidence rate in the construction industry remains over twice the all industry average of 18.5. Indeed, cynics would argue that recent declines in recorded injury rates are less likely to be due to performance improvements than to changes in

workplace compensation regimes which make successful injury compensation claims more difficult.

	TYPE OF INJURY						
	Fatal	Permanent Disability	6 Months and over	Less than 6 Months	Total Injuries	Incurred Cost \$	Time Lost (Weeks)
93/ 94	12	1, 557	139	1,691	3,399	45,295,071	14,443
94/ 95	9	1,827	163	1,890	3,889	67,281,233	16,147
95/ 96	11	1,912	195	1,744	3,862	68,834,061	18,756
96/ 97	15	1,212	214	1,528	2,969	50,205,045	19,403
97/ 98	15	1,044	201	1,720	2,980	55,629,245	19,175
98/ 99	13	1,050	225	1,711	2,999	54,600,742	18,634
99/ 00	11	1,230	168	1,466	2,875	65,810,882	15,553
00/ 01	8	1,433	150	1,274	2,865	63,851,228	14,342
01/ 02	6	1,245	94	1,218	2,563	74,724,000	10,264
02/ 03	5	741	113	1,215	2,074	48,020,000	11,722

**Table 2 – Types of Injuries in Construction 1993 – 2003 (Source: Workcover NSW injury statistics 2002/03)**

In Australia, the New South Wales’ (NSW) State Government’s response was to introduce a new OHS Regulation 2001, significantly simplifying a complex web of over forty laws and regulations which had accumulated in this area. The new OHS Regulation came into force on 1<sup>st</sup> September 2001 and marked a change in OHS policy towards a self regulating, performance-based regime, centred around effective risk management which shifts responsibility for OHS performance to those who create the risks. The regulations also have a major emphasis on effective consultation and are also accompanied by greater penalties for breaches of compliance. Although specific performance standards or methods for measuring performance are not specified, the regulations are based on the belief that: the identification and measurement of risk is the key to improved performance; that those who create risks must take responsibility for identifying and mitigating them and; that in the non-manufacturing, changing physical and social environment of a construction project, employers must become the primary caretakers of their own safety.

It is now four years since the regulations were introduced. The initial, one year transitional period for implementation and the two year probationary period for small employers have now lapsed and it is timely to investigate the problems that the industry has faced had in ensuring compliance. The problems faced by subcontractors are particularly worthy of investigation and are the focus of this paper. Subcontractors make up the bulk of the industry’s workforce, they typically account for over 90% of a project’s value and they often lack the resources, culture and skills to implement new reforms effectively (2,3). Given the likely high multiplier rate of any minor improvement of compliance on OHS performance, the aim is to make recommendations which can help to resolve these problems.

### **The relationship between subcontracting and OHS**

Subcontracting is a key feature of the construction industry, providing economic flexibility and technical expertise in a highly competitive, uncertain environment of increasing technical complexity. However, subcontracting has also created many management problems which have been widely recognised as contributing to inefficiencies in the industry, not least in the area of OHS because of the complex web of constantly changing contractual relationships which can confuse responsibilities for OHS management and reporting (4). The dominant culture of risk transfer which pervades the construction industry also ensures that any responsibilities for OHS handed to the

principal contractor are off-loaded incrementally in back-to-back contracts to subcontractors which often lack the expertise and resources to interpret and implement them effectively. The unlikelihood of compliance is exacerbated by the common practice of pyramid contracting and the highly competitive environment of subcontracting which often places untenable financial and time pressures on these small highly geared organisations (5). In Australia, the subcontracting industry is also characterised by a high degree of cultural diversity and there is evidence that many simply cannot understand the meaning of regulations, even when written in plain English (6). So not only is there a lack of time, inclination and resources to comply, but there may be a linguistic inability to do so. Finally, much of the subcontracting industry is not covered by union representation and the union negotiated collective agreements that govern safety. The collective result of these characteristics is ambiguity or even ignorance of OHS requirements and an undermining of safety systems and practices. The result is often reluctance to pay for safety training, long hours of work, low concern for quality and corner-cutting in management and construction practices (7,8,1).

### **An overview of the OHS Regulation 2001 – implications for subcontractors**

The OHS Regulation sets out specific requirements for those in control of workplaces to put in place effective systems to identify, assess and mitigate OHS risks. It also provides specific guidelines and requirements for them to consult with employees in doing so. There are many aspects to the new regulations, which are too extensive to review here. However, it is relevant to review those that directly relate to subcontractors, namely; *Part 8.2 – OHS induction Training – construction work* (clauses 214 and 215) and; *Part 8.3 Special workplace arrangements for construction work* (clauses 227 and 229).

#### ***Part 8.2 – OHS induction Training – construction work***

This part of the OHS Regulation imposes obligations on all employers (including subcontractors) to ensure that all construction workers have undertaken OHS induction training before they commence work on site. Accurate records of all training undertaken must also be kept for three years. There are three types of induction training required, namely; general OHS training; work activity OHS training and site specific training. An employer must also identify and respond to any changes in the workplace that demand new OHS training.

General OHS training is commonly known as the compulsory “Green Card” certification scheme. This is a general industry induction program delivered by WorkCover certified trainers (WorkCover being the governing authority for safety in Australia), which is meant to promote safety consciousness and familiarise employees with basic OHS principles and responsibilities. It covers issues such as the consultation requirements of managers, safety sign information, risk management, committee responsibilities, first aid and protective equipments requirements. It also offers information about workers compensation and injury management and is aimed at all new workers in the construction industry including; self employed persons, trades people, trainees and apprentices and supervisors.

Work activity OHS training is also delivered by WorkCover certified trainers. It is designed to familiarise employees with OHS issues associated with a specific trade and is based on communicating the principles of hazard identification, assessment and control. The training covers issues such as risk management processes, handling of materials, legislative responsibilities and common hazards encountered on site etc. Like general OHS training, the course must be documented and be redelivered if an employee leaves the industry for more than two years or if there are major changes to trade responsibilities.

Specific site OHS training is designed to familiarise any new worker entering a construction site with the specific hazards associated with that particular site. This must be done on the first day of arrival and is meant to take a few hours. The course does not have to be documented and does not need to be delivered by a certified trainer. This type of training is often delivered by Unions

officials or by a site supervisor with knowledge of OHS issues. A worker should not go through this training unless they have their Green Card.

**Part 8.3 – Special workplace arrangements**

This part of the OHS Regulation requires all subcontractors undertaking work which exceeds \$250,000 to provide a principal contractor with an OHS management plan before commencing work and to keep it up to date with any changes to their work activities. A major part of this plan is a safe work method statement (SWMS) which must be monitored closely by the principal contractor for compliance. A SWMS breaks down a job into its steps and identifies, assesses and controls the risks associated with them. It should also include a description of equipment used, associated maintenance regimes, standards and codes to be complied with and the qualifications and training requirements of people doing the work.

**Communicating the regulations**

The government has attempted to raise industry awareness of the new regulations in a range of ways. There have been extensive publicity campaigns and the government has also drawn assistance from a Memorandum of Understanding (MOU) on OHS developed between the NSW Government and 17 major principal contractors in NSW. This committed the signatories to work in partnership to improve OHS performance by sharing information and innovations, developing and implementing effective OHS systems on all projects (private and public), training their workforce in these systems, commissioning designs which seek to mitigate safety risks and providing assistance to subcontractors to develop and demonstrate OHS competence. This last commitment was supported by the “Subby Pack” (officially known as the NSW Construction Industry Subcontractor Safety Assistance Pack), a tool developed by WorkCover NSW and endorsed by GIO Insurance and the Principal Contractors Safety Alliance. This sets a minimum standard of OHS to be met by subcontractors and provides a step-by-step guide to help subcontractors develop systems which comply with their OHS responsibilities.

**Method**

In order to investigate the problems faced by subcontractors in complying with the OHS Regulation 2001, thirty semi structured interviews were conducted with a range of subcontractors from different trades. Given the possible sensitivity of the data being collected, face-to-face interviews were considered more appropriate than an anonymous survey. Where a Safety Officer role existed, they were interviewed. In other cases, the nominated safety manager was interviewed. The detailed sample structure is depicted in Table 3.

Trade		Number of employees		Years established		Safety Officer	
Plumber	4	< 5	6	< 2	5	Yes	6
Carpenter	4	6 – 15	14	3 - 5	6	No	24
Tiler	3	16 – 30	4	6 - 10	14		
Form worker	3	>31	6	> 10	5		
Electrician	3						
Air Conditioning	3						
Kitchen installer	2						
Steel fabricator	2						
Steel fixer	2						
Bricklayer	4						
<b>TOTAL</b>	<b>30</b>		<b>30</b>		<b>30</b>		<b>30</b>

**Table 3 Sample structure**

**Discussion of results**

Three years after the introduction of the OHS Regulation 2001, a surprisingly high proportion of our respondents (10%) had no knowledge of its existence, although 100% of our respondents had heard of the “Subby Pack” and were aware of a change in regulations. Further investigation revealed that the 10% who had not heard of the regulation had relied for compliance, entirely on specific requests for information from Principal contractors, rather than knowledge of the regulation itself. Whether this is something that affects levels of compliance is not clear, although it is reasonable to assume that first-hand rather than second-hand knowledge would ensure a higher probability of compliance. A common characteristic of these respondents was that they were from a non English Speaking background (NESB), supporting Trajkovski and Loosemore’s (6) research which indicated that language problems have an impact on OHS compliance rates in the industry (largely because there is currently no provision for Green Card training in languages other than English). Indeed, even the 90% of respondents who did know about the regulation believed that a principal contractor was “responsible” for informing them of how they could comply.

While the government/industry MOU on OHS recognises the importance of this process, it is likely that compliance would be better assured by more direct and continuing communication between WorkCover and the subcontracting fraternity. Distancing 95% of the construction industry from the governing authority for safety in NSW, by filtering communications through Principal Contractors is almost certain to result in lack of collective responsibility for OHS and variable OHS standards and practices throughout the industry.

Nevertheless, 100% of our respondents did appreciate that assistance was available from WorkCover to help implement the “Subby Pack”, although few directly sought it, relying on information provided by Principal contractors. On a positive note, most of our respondents found the “Subby Pack” and supporting information provided by WorkCover easy to understand and useful. However, a significant number thought that published material should be supplemented by more direct interaction with WorkCover through representatives visiting sites to check compliance, audit documentation and assist subcontractors to comply.

This was a particular concern of the NESB respondents and supports research on dealing with such groups which points to the dangers in relying on one medium of communication (9,10,11). Although training is required with registered WorkCover trainers to gain a Green Card and inductions are provided on each site (typically lasting between 15 and 30 minutes), most of our respondents found this to be of low value. This is reflected in the following quotation which represents the opinion of most respondents:

***“The Green Card Course is too broad ..... it doesn’t give the workers into any OHS issue which is discussed because there is basically too many areas in OHS to talk about”.***

The above sentiments were reflected in the relatively high levels of difficulty faced across all trades, in coping with the new regulation (Figure 1).

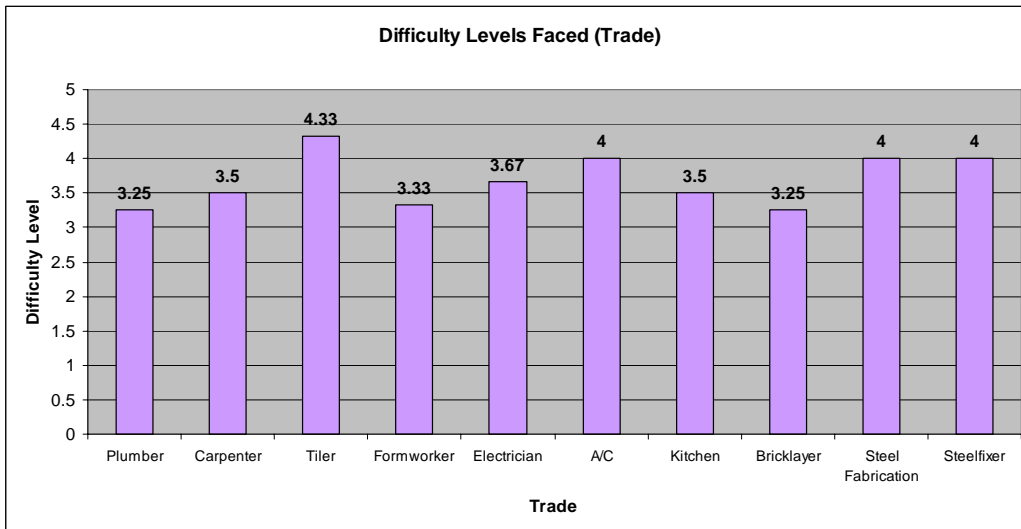


Figure 1 Difficulty levels by trade

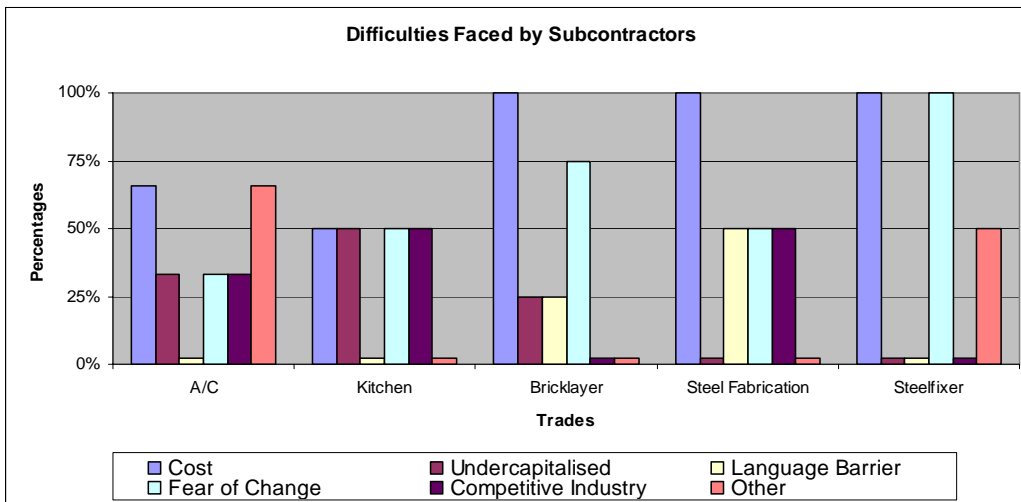
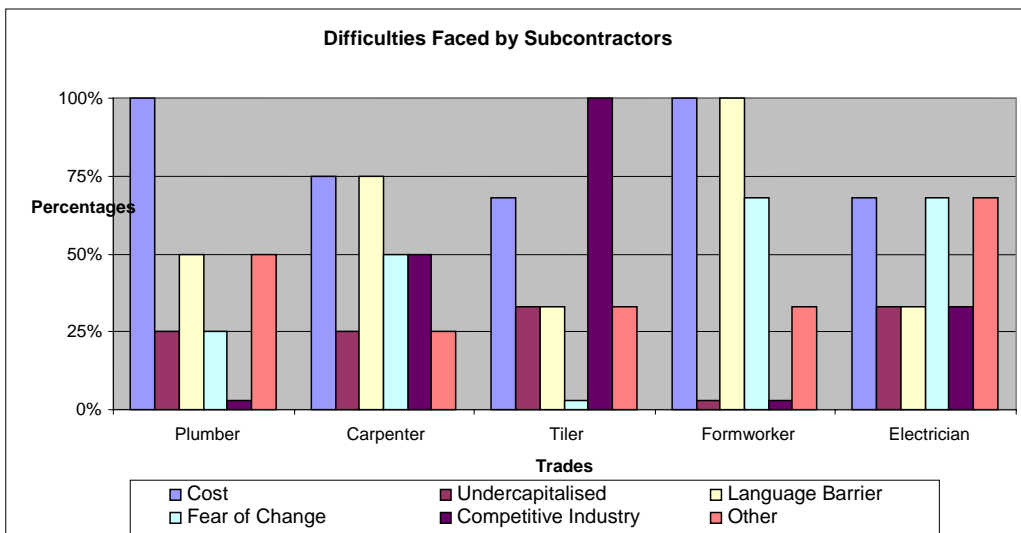


Figure 2 provides some insights into the specific



difficulties faced by each trade and possible reasons for variations. Figure 2 indicates that cost represents by far the greatest barrier to compliance (33%) – these being largely related to the direct

and indirect costs of training and extra administration, which are born by subcontractors. This is reflected in the following quotation from one respondent:

***“Cost is a major problem for me because it cost me over \$1000 to have my safety plan created, approximately \$1700 for all my employees to obtain a Green Card and I lost each worker for half a day to attend the course. I also lose about half an hour in the morning each time I arrive on a new site because my workers and myself need to get site inducted by the builder, plus Brain, my safety committee member stops work every Wednesday afternoon for at least half an hour for a walk around site. He also takes time once a month to organise toolbox talk meeting with the rest of the workers and needs to organise for my electrical equipment to get tagged. At the end of the day, all these hours add up and cost me out of my pocket.”***

Another major barrier to compliance is fear of change (19.8%), perhaps reflecting the relatively low levels of education in this sector and also the sense of separation from WorkCover, referred to in the previous section. Language barriers (13.9%), competitive pressures (12.2%) and under capitalisation (8.4%) also contribute significantly to non compliance reflecting the culturally diverse and intensely competitive nature of his sector.

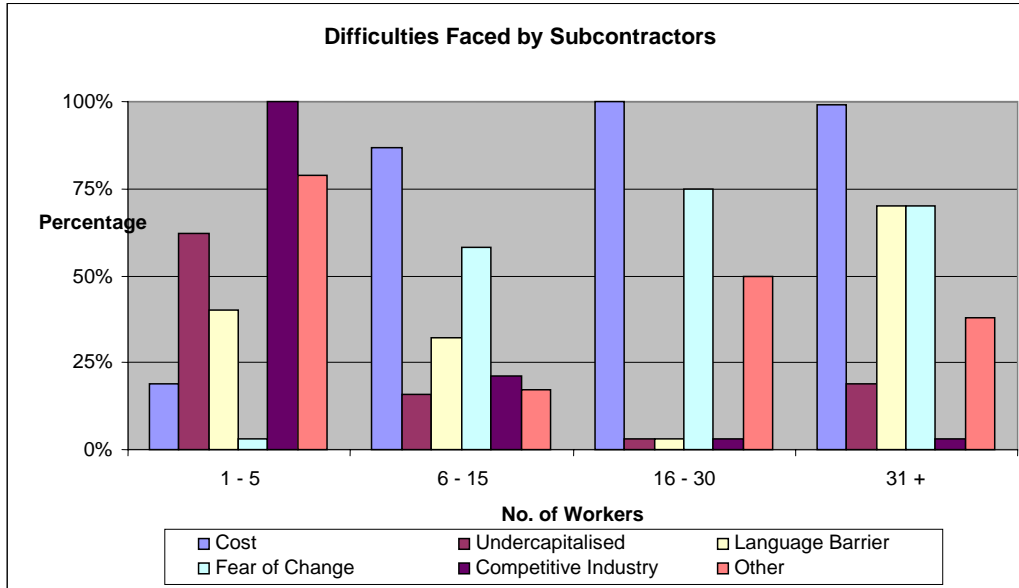
Figure 2 also illustrates that the extent of difficulties faced by different trades varies quite significantly. For example, although every trade has a significant issue with cost it is interesting that this is more acute in the areas of greatest difficulty (see Figure 1). It is also interesting that the relatively high levels of language-related problems in plumbing, carpentry, form working, electrical, bricklaying and steel fabrication reflect relatively high numbers of NESB workers in these trades. For example, Croations tend to dominate carpentry, Serbians dominate form working and Koreans dominate tiling. Insights into this problem are provided by the following quotation from one of our respondents which was typical of many.

***“Because OHS information can be a little difficult to comprehend at times, it is a real challenge for me to grab their attention at toolbox talks etc. and attempt to pass on any necessary information. A lot of workers do not understand the terminology that is put in front of them including basic words such as “hazardous” and “risk management”. The fact that I do not speak fluent Croatian means that I must be really patient when I am communicating with the workers. If I didn’t take my job seriously, then most of these workers would not learn anything when it comes to OHS”.***

Figures 3 and 4 illustrate difficulties experienced by company size.

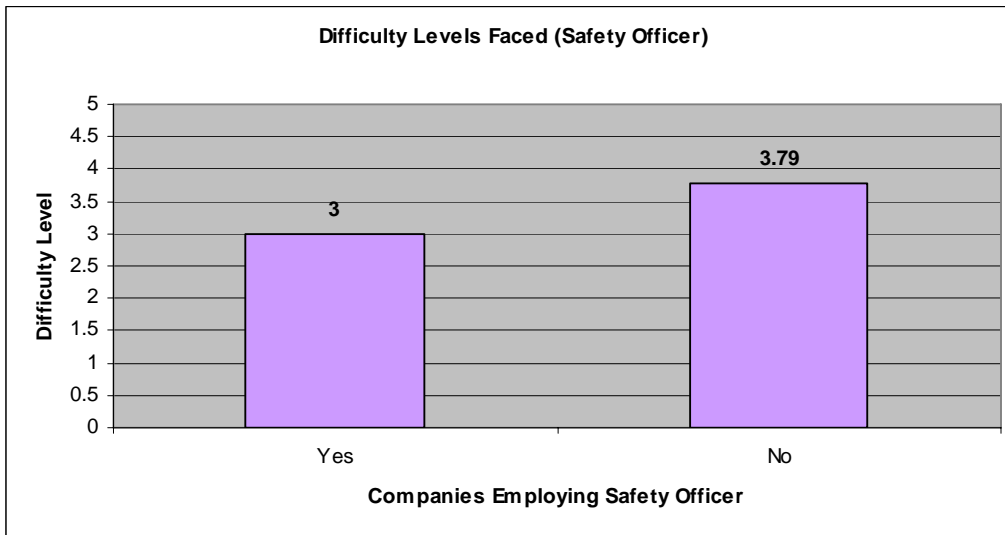


Figure 3 Difficulty levels by company size



**Figure 4 Types of difficulties by company size**

Figure 3 depicts a direct relationship between company size and difficulty, until company size becomes greater than 30 employees. This is directly related to the increased cost associated with managing greater numbers of employees through the training, inductions and tool box talks within an OHS program. This is reduced in the 30 plus company by a higher incidence of safety officers which surprisingly, seem to have a significant impact on reducing the costs of compliance (see Figure 5)



**Figure 5 Difficulty level per safety officer**

Figure 4 illustrates that the difficulties faced by subcontractors that employ between 1 and 5 people are very different to the other three groups. For example, cost is a relatively minor issue for this group, largely because of the fewer numbers of people employed. Fear of change is also a relatively minor problem, although the explanation for this is not clear. In contrast, excessive competition is a major problem since this is an easy sector to enter, where OHS practices are often difficult to monitor and sacrificed in order to get work (5). Finally, the relatively high score given to undercapitalisation indicates that these are likely to be the most highly geared and youngest group

of subcontractors which have had no time to build up capital reserves to respond to the new legislative demands.

Figure 6 indicates no particular relationship between the level of difficulty faced and the age of a company, although Figure 7 does show that the profile of problems facing the youngest companies are quite unique. As expected, these findings and the profile of difficulties faced are very similar to those discussed in the previous section, since the youngest companies are also likely to be the smallest.

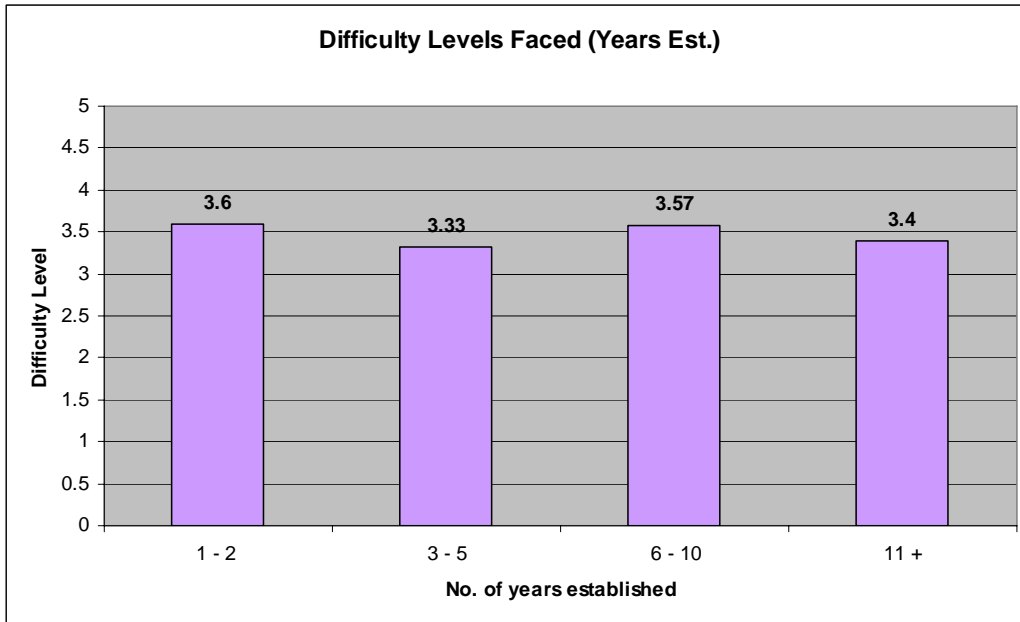


Figure 6 Difficulty levels by company age

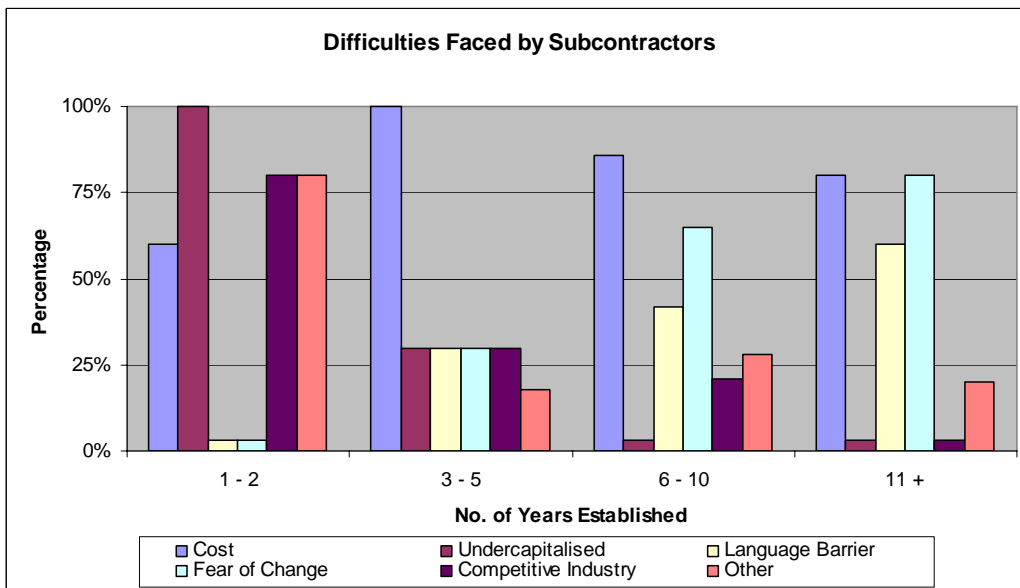


Figure 7 Types of difficulties by company age

## Conclusion

The aim of this paper was to explore the nature and extent of problems faced by subcontractors over the last four years, in implementing the OHS Regulation 2001.

Our results indicate a significant level of difficulty.

While this may have been expected within the first two years of implementation, this level of residual difficulty is of concern after four years. By far the most significant problem is cost, followed by education, language problems and excessive competition, although the impact of these factors seems to vary between different trades and industry sectors.

Addressing these problems is essential to improve levels of compliance within the subcontracting sector and thereby improve OHS performance in the construction industry.

In particular, since the majority of compliance costs appear to be training-related, initiatives are needed to reduce the cost burden. OHS training also needs to be made more effective.

For example, one way of drastically reducing training costs and increasing the quality of OHS knowledge, could be to require all TAFE and University courses in the construction industry to provide OHS training to a level which would comply with Green Card certification.

In the shorter-term, the cost of the Green Card training courses could be reduced; they could be delivered in languages other than English and companies over a certain size, compensated for the time their employees have to spend on these courses.

This could be done by removing OHS costs from the competitive element of tenders, thereby passing the costs of OHS to the client who is procuring the building (the true “employer” as defined by the legislation).

The damaging effects of competition at the very lowest levels of the industry can also be reduced by limiting pyramid contracting, better monitoring and greater penalties for non-compliance.

This would prevent unscrupulous companies undercutting those who take their OHS responsibilities seriously.

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