



# **The Generalist OHS Professional in Australia**

Core Body of Knowledge for the  
Generalist OHS Professional



**Safety Institute  
of Australia Ltd**



**Australian OHS Education  
Accreditation Board**

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The OHS Body of Knowledge for Generalist  
OHS Professionals has been developed under the  
auspices of the **Health and Safety Professionals Alliance**



The Technical Panel established by the Health and Safety Professionals Alliance (HaSPA) was responsible for developing the conceptual framework of the OHS Body of Knowledge and for selecting contributing authors and peer-reviewers. The Technical Panel comprised representatives from:



**The Safety Institute of Australia** supported the development of the OHS Body of Knowledge and will be providing ongoing support for the dissemination of the OHS Body of Knowledge and for the maintenance and further development of the Body of Knowledge through the Australian OHS Education Accreditation Board which is auspiced by the Safety Institute of Australia.





## Synopsis of the OHS Body Of Knowledge

### **Background**

A defined body of knowledge is required as a basis for professional certification and for accreditation of education programs giving entry to a profession. The lack of such a body of knowledge for OHS professionals was identified in reviews of OHS legislation and OHS education in Australia. After a 2009 scoping study, WorkSafe Victoria provided funding to support a national project to develop and implement a core body of knowledge for generalist OHS professionals in Australia.

### **Development**

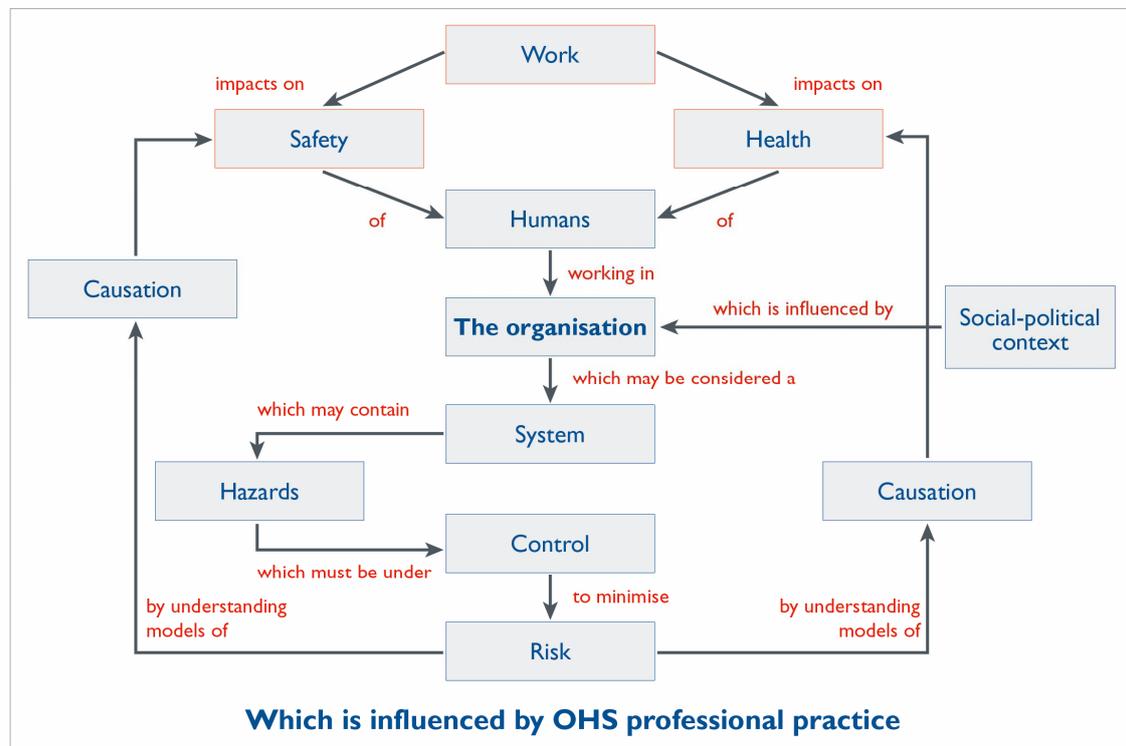
The process of developing and structuring the main content of this document was managed by a Technical Panel with representation from Victorian universities that teach OHS and from the Safety Institute of Australia, which is the main professional body for generalist OHS professionals in Australia. The Panel developed an initial conceptual framework which was then amended in accord with feedback received from OHS tertiary-level educators throughout Australia and the wider OHS profession. Specialist authors were invited to contribute chapters, which were then subjected to peer review and editing. It is anticipated that the resultant OHS Body of Knowledge will in future be regularly amended and updated as people use it and as the evidence base expands.

### **Conceptual structure**

The OHS Body of Knowledge takes a 'conceptual' approach. As concepts are abstract, the OHS professional needs to organise the concepts into a framework in order to solve a problem. The overall framework used to structure the OHS Body of Knowledge is that:

**Work** impacts on the **safety** and **health** of humans who work in **organisations**. Organisations are influenced by the **socio-political context**. Organisations may be considered a **system** which may contain **hazards** which must be under control to minimise **risk**. This can be achieved by understanding **models causation** for safety and for health which will result in improvement in the safety and health of people at work. The OHS professional applies **professional practice** to influence the organisation to being about this improvement.

This can be represented as:



### **Audience**

The OHS Body of Knowledge provides a basis for accreditation of OHS professional education programs and certification of individual OHS professionals. It provides guidance for OHS educators in course development, and for OHS professionals and professional bodies in developing continuing professional development activities. Also, OHS regulators, employers and recruiters may find it useful for benchmarking OHS professional practice.

### **Application**

Importantly, the OHS Body of Knowledge is neither a textbook nor a curriculum; rather it describes the key concepts, core theories and related evidence that should be shared by Australian generalist OHS professionals. This knowledge will be gained through a combination of education and experience.

### **Accessing and using the OHS Body of Knowledge for generalist OHS professionals**

The OHS Body of Knowledge is published electronically. Each chapter can be downloaded separately. However users are advised to read the Introduction, which provides background to the information in individual chapters. They should also note the copyright requirements and the disclaimer before using or acting on the information.

# The Generalist OHS Professional in Australia

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**Core Body of  
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## **Core Body of Knowledge for the Generalist OHS Professional**

# **The Generalist OHS Professional in Australia**

### **Abstract**

Occupational Health and Safety (OHS) is a complex field of practice. The generalist OHS professional is one of five key groups of professionals providing advice on the prevention and minimisation of work-related fatality, injury, disease and ill health. This chapter clarifies the difference between these roles and examines the environment within which the generalist OHS professional practices, and so sets the context for a profile of the generalist OHS professional and imminent changes to the profession. An appendix detailing the evolution of the role of the generalist OHS professional in Australia provides historical context for understanding the current situation and appreciating the importance of the impending changes.

### **Keywords**

OHS, occupational health and safety, profession, professional, accreditation, certification

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## **1 Introduction**

Occupational Health and Safety (OHS) issues are often complex and multi-factorial, and the development and implementation of strategies to prevent work-related fatality, injury, disease and ill health (FIDI) may require a range of specialist expertise. This expertise may be obtained from one or more of five groups of OHS professionals: generalist OHS professionals, occupational hygienists, occupational ergonomists, occupational physicians and occupational health nurses. Depending on the situation, advice may also be sought from other professionals such as engineers or occupational psychologists. Descriptions of the important allied roles highlight the variation in professional approach:

### **Occupational hygienists**

Occupational Hygiene is generally defined as the art and science dedicated to the anticipation, recognition, evaluation, communication and control of environmental stressors in, or arising from, the work place that may result in injury, illness, impairment, or affect the well being of workers and members of the community. These stressors are normally divided into the categories biological, chemical, physical, ergonomic and psychosocial.<sup>1</sup>

### **Ergonomists**

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of the interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well being and overall system performance.<sup>2</sup>

### **Occupational and environment physicians**

Occupational medicine is a medical specialty where highly-trained specialists focus on the effects of work on health and (conversely) health on work. It understands the full range of workplace and environmental hazards (chemical, physical, biological & psychosocial), associated risks of exposure to such hazards, and how these may cause an adverse impact on biological health, such as injury or illness. It covers all occupational/work groupings, and understands the nature of such work in terms of inherent task requirements, environment, and human ergonomics.<sup>3</sup>

As defined in the Introduction to the OHS Body of Knowledge, **generalist OHS professionals** have a specialist role in that they *apply a multidisciplinary body of knowledge in a unique way to provide enterprises with advice on the organisational arrangements that will lead to the systemic and systematic management of OHS to prevent work-related fatality, injury, disease and ill health (FIDI)*.<sup>4</sup>

While occupational hygienists, occupational ergonomists, occupational nurses and occupational physicians all have bodies of knowledge specific to their specialist roles, the OHS Body of Knowledge for generalist OHS professionals is about the *collective knowledge that should be shared by Australian generalist OHS professionals to provide a sound basis for understanding the aetiology and control of work-related fatality, injury, disease and ill*

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<sup>1</sup> Australian Institute of Occupational Hygienists <http://www.aioh.org.au/index.aspx>, viewed 23/9/2010

<sup>2</sup> Human Factors and Ergonomics Society of Australia, [http://www.ergonomics.org.au/resource\\_library/definitions.aspx](http://www.ergonomics.org.au/resource_library/definitions.aspx), viewed 23/9/2010

<sup>3</sup> Australian Faculty of Occupational and Environmental Medicine <http://www.racp.edu.au/page/racp-faculties/australasian-faculty-of-occupational-and-environmental-medicine/>, viewed 23/9/2010

<sup>4</sup> See *OHS Bok* Introduction

health (FIDI). It is about the key concepts and language, its core theories and related empirical evidence, and the application of these to facilitate a safe and healthy workplace.<sup>5</sup>

OHS in Australia is not a regulated profession; there are no educational or experience requirements for employment in an OHS role. Indeed, there is confusion around the generalist OHS professional role, which bears a variety of titles including ‘advisor’, ‘coordinator’, ‘manager’ and ‘consultant’. The objective of this chapter is to clarify the current role and status of the generalist OHS professional in Australia. The chapter begins by acknowledging the importance of an awareness of past events to understanding the present and refers the reader to the Appendix for an overview of the development of the generalist OHS role. The chapter then reviews the requirement for workplaces to access qualified OHS advice and considers environmental factors affecting OHS practice to provide a context for profiling the generalist OHS professional. The chapter concludes by heralding a time of change for the generalist OHS professional and describing the developments in train.

## **2 Evolution of the generalist OHS professional role**

To understand the present role and status of the generalist OHS professional it is necessary to consider the origins of safety in the workplace and the role of the OHS advisor, and how conceptions of workplace safety and the OHS role have evolved. As with all evolutionary processes, change is a consequence of environmental factors. The Appendix examines the evolution of the OHS professional in Australia in the context of events in the political, economic, industrial and legislative environments. It also provides historical context from the perspectives of management practice, community perception, the predominant OHS paradigm, the focus of the OHS professional role, and OHS education. Moodie-Bain, a researcher currently investigating the historical development of OHS, has likened the birth of the OHS profession to:

í a series of bastard children each with different fathers and several different mothers. Like all bastard children, the challenge now is to overcome this legacy and demonstrate legitimacy and gain respect in their own right. (D. Moodie-Bain, personal communication, August 2011).

## **3 The requirement for workplaces to have qualified advice**

The right for workers to have a workplace that is, as far as is reasonably practicable, safe and without risk is legislated for in the national model *Work Health and Safety Act* (WHS Act s 19) (p. 19) and, internationally, in the International Labour Organization (ILO) *Convention 155: Occupational Safety and Health and the Working Environment* (ILO, 1983). The latter is supported by *Recommendation 161: Occupational Health Services*, which calls for organisations to have access to ‘sufficient and appropriate expertise’ as a basic right of all

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<sup>5</sup> See *OHS Bok*: Introduction

workers (ILO, 1985). In Australia, OHS is recognised as a management responsibility. While the *Occupational Health and Safety Act 2004* (Vic) (s 22.2b) currently requires employers to engage or have access to suitably qualified advice, this specific requirement is not included in the national model legislation. Rather the national model WHSA relies on the implied interpretation that decisions about what is 'reasonably practicable' in ensuring health and safety should be based on suitably qualified advice (WHSA s 18).

## **4 The current environment**

OHS professionals do not practice in isolation; they work within an environment that includes the political, economic and industrial climate of the day as well as legislative requirements, management practices and the perceptions of others. For the generalist OHS professional there is also the environment set by the current paradigm or underpinning assumptions that inform practice. As a context for OHS practice, these environmental factors are examined below.

### **4.1 Economic and industrial environment<sup>6</sup>**

In 2008, Stewart-Crompton, Mayman and Sherriff outlined significant changes to the economy, the labour market, and the nature and organisation of work in Australia that have impacted on OHS. These changes have led to growth in casual, part-time and temporary work, outsourcing, job sharing and the use of labour hire and home workers. The representation of women in the workforce has increased, as have the numbers of small businesses (with fewer than 20 employees) and micro-businesses (with fewer than five employees).<sup>7</sup> Globalisation and new technology have seen organisations become more flexible and responsive. Efforts to address a labour shortage have included an increase in temporary skilled migration. An ageing workforce and the increase in home-based work, which involves 8% of the workforce employed only or mainly at home, present further OHS challenges (Stewart-Crompton, Mayman, & Sherrif, 2008).

The traditional model of OHS regulation and administration is founded on dealing with physical hazards in high-risk industries such as manufacturing and construction, and with workers in medium-to-large workplaces. Australia has experienced a decline in employment in the manufacturing industry in tandem with a growth in the services sector. New and emerging technologies are also impacting on OHS (Stewart-Crompton et al., 2008).

Trade unions have an important role, mandated by Australian OHS laws, in representing workers on OHS issues. Several studies have found that higher OHS standards may be achieved in unionised workplaces than in non-unionised ones. There is evidence that the

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<sup>6</sup> See *OHS BoK Socio-Political Context: Industrial, Technological and Business Imperatives*

<sup>7</sup> See *OHS BoK Global Concept: Work*

effective participation of workers in OHS issues is crucial to improving OHS performance and that this is enhanced where worker representatives are supported by trade unions. However, while union membership as a proportion of the working population peaked in the mid 1960s it has declined steadily since the early 1980s (Stewart-Crompton et al., 2008).

The movement away from manufacturing has been boosted by fundamental changes in the world economy, where simpler manufacturing processes are moving off shore to developing countries. In Australia, this has been counterbalanced since the start of the 21<sup>st</sup> century by a boom in mining which has increased the exchange rate, putting further pressure on industries open to international competition, such as manufacturing. This has impacted on the OHS profession by reducing some jobs in traditional sectors, but at the same time increased demand in the mining sector, particularly using fly-in-fly-out arrangements.

At the time of writing, the international economy is uncertain. While the Global Financial Crisis of 2008/09 did not significantly affect Australian industry, continuing threats of recession in Europe and the United States are depressing economic activity, including in Australia. This may impact on OHS and OHS professionals as companies focus on simplistic cost reductions. The opportunity exists for OHS professionals to examine cost restructures through fundamental job design by application of ergonomic principles that improve the competitive position of the organisation, while simultaneously improving work safety.

#### **4.2 Legislative environment<sup>8</sup>**

The biggest legislative change in OHS since the introduction of Robens-style legislation in the 1980s is poised to occur in 2012 with the introduction of harmonised OHS legislation based on a national model Act and model regulations promulgated in each jurisdiction.

OHS legislation, (where it existed) has always been a Colony (State) reserve power that was not contemplated when the Australian Constitution was framed, and so remains a state-based system. While there has been some similarity in OHS laws across the nine OHS jurisdictions, a multitude of laws relating to workplace health and safety have existed. While harmonised OHS laws, and the related regulatory regime should reduce red tape and compliance costs for multi-state employers, and provide regulatory-environment consistency for OHS professionals working across states in the long term, responding to the changes in legislation will create a short-term focus for all professionals.

#### **4.3 Management practices**

Growth in part-time, fixed-term and temporary employment arrangements ó which have the potential to adversely affect OHS ó are largely attributable to structural changes including higher female labour-force participation and the expansion of the service industries, and

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<sup>8</sup> See *OHS BoK Socio-Political Context: OHS Law and Regulation in Australia*

organisational/management practices such as outsourcing, downsizing, restructuring, privatisation, labour leasing and franchising (Stewart-Crompton et al., 2008, p. 9).

Also, management practices have resulted in an increase in the number of independent contractors (now the second-largest group of non-traditional workers after casuals) and labour-hire employees (with greatest use in traditional blue-collar industries, mining/construction, manufacturing, education, and health and community services). While labour-hire figures are difficult to obtain, there is evidence that suggests that the proportion of labour-hire employees has tripled in the past decade. A range of factors affecting the health and safety of labour-hire workers have been identified (Stewart-Crompton et al., 2008).

#### **4.4 National policy**

The Australian *National OHS Strategy 2002 –2012* is reaching conclusion. This strategy provided the framework for collective effort to improve OHS in Australia, established the vision of *Australian workplaces free from death, injury and disease* and, for the first time, set national priorities, targets and milestones (NOHSC (National Occupational Health and Safety Commission), 2002). While there has been improvement in the measures, achievement has fallen short of the targets; limitations in data collection and some volatility in results make it difficult to confirm the extent of improvement (Safe Work Australia, 2011b). It would be expected that the quality of advice available to and accessed by governments, peak bodies and workplaces would be recognised as a key factor in identifying and implementing appropriate actions for effective change, and that OHS professionals would play a key role in providing such advice. However, the role of the OHS professional was not mentioned in the National Strategy. Furthermore, the results of a 2006 survey of OHS professionals suggested that the role and activities of OHS professionals were not optimised to support achievement of the National Strategy (Pryor, 2006).

While details of the National OHS Strategy 2012-2022 are as yet unavailable, informal indications are that it may include recognition of the role of qualified OHS professionals in OHS advice provision.

#### **4.5 Perceptions of the generalist OHS profession**

##### **4.5.1 OHS policy makers and regulators**

Australian OHS legislation is based on the tripartite model introduced to the UK in the 1970s following a report by Lord Robens.<sup>9</sup> Robens saw the OHS professional as part of the advisory service to line management. The report of the committee (Robens, 1972, p. 17) stated:

í we are equally clear that there is an important role for the specialist safety advisor or safety officer, standing in the same relationship to line management as do other specialists such as personnel

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<sup>9</sup> See *OHS BoK: Socio-political Context: OHS Law and Regulation in Australia*

officers' [R]aising the status of safety advisors cannot be achieved by artificial means, least of all by measures imposed on industry from outside.

This view contributed substantially to the OHS professional's low profile with policy makers and regulators.

In 2007, this situation began to change when WorkSafe Victoria's 2008-2012 strategy incorporated 'repositioning the OHS professional,' establishing the Health and Safety Professionals Alliance (HaSPA) and developing the OHS Body of Knowledge project (WorkSafe Victoria, 2007).<sup>10</sup> WorkSafe Victoria has also advocated with other regulators and Safe Work Australia for OHS professional education, certification of professionals and the role of qualified OHS advice in the workplace. Outcomes of this advocacy have included heightened interest by Safe Work Australia in the OHS Body of Knowledge project, and the accreditation of OHS professional education and certification of OHS professionals.

#### 4.5.2 Management

Position titles and line of reporting often give an indication of the profile of a role in an organisation. Following three incidents that led to workplace fatalities on sites owned or operated in Western Australia by BHP Billiton Iron Ore and Boodarie Iron, a ministerial inquiry noted that while there were eleven vice-presidents covering functions such as commercial, external affairs, marketing and human resources, the most senior OHS professional position was 'Divisional Manager Occupational Health and Safety' (Ritter, 2004). While the vice-presidents reported directly to the president of Western Australia Iron Ore, the senior OHS professionals did not have a direct reporting line to the president. Also, OHS professionals at all port and rail operations reported to the relevant vice-president and to the Divisional Manager of Occupational Health and Safety.

Another perspective is gained by examining the independent safety review panel report into the 2005 BP Texas City refinery explosion that killed 15 people and injured more than 170 (Baker III et al., 2007). This report differentiated between process safety and personal safety, with process safety defined as the 'the prevention and mitigation of unintentional releases of potentially dangerous materials or energy from the refining process' and personal safety defined as involving risks:

is more directly related to individual workers' risks of various types of physical injuries, including slips, falls, struck-by incidents' Protection against a personal safety hazards is both relatively simple and, for the most part, at least nominally under the control of the potentially affected worker (Baker III et al., 2007, p. 21).

Interestingly, prior to the 2005 explosion, responsibility within BP for process safety and 'people safety' was designated Health, Safety, Security and Environment (HSSE) by BP and was

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<sup>10</sup> See *BoK*: Introduction

in separate operational groups; however, after the release of BP's interim investigation into the 2005 explosion, a new group-level function of 'Safety and Operations' was created with direct reporting to the Group Vice-President (Baker III et al., 2007, pp. 36-37).

Review of the literature suggests that the generalist OHS professional role tends to be characterised by a low profile in the organisation; the position carries a modest social status, is outside the 'management team', and its influence is often limited to technical matters. It appears to be dependent on the style and approach of management, and external factors such as economic pressure and union involvement.<sup>11</sup>

#### 4.5.3 Community

Anecdotal evidence suggests a lack of community awareness or understanding of the OHS professional role and, indeed, a negative perception of the role as trivial, bureaucratic or 'fun police'. The call for 'sensible risk' principles (Callahan, 2007) also presents a negative view of some OHS advice. While presenting at a Safety In Action Conference, Douglas (2010) described OHS professionals/practitioners as having a bureaucratic 'blocker/knocker' image and called on them to become observant, responsive knowledge and skill sharers integral to management solution-finding teams.

The lack of visibility of OHS in the community was demonstrated during the emergence of the concept of corporate social responsibility (CSR); OHS did not feature prominently in the scales used to measure corporate responsibility, nor did it appear in media reports related to CSR. Compounding the low awareness of the role of the OHS professional, is the misalignment of community perceptions of OHS with professional approaches. In Victorian, research revealed that workplace injuries were attributed seventh-place in importance behind issues such as public health, health and wellbeing, drug and alcohol addiction, road safety, and the education system (Sweeney Research, 2008), and that work-related injury and ill health are predominantly attributed to 'person' factors such as worker carelessness and lack of training (Cowley, 2006, p. 133). This 'invisibility' of the OHS role is likely to be a factor in the low level of school-leaver enrolment in OHS educational programs. The variety of OHS training and education options ranging from Certificate III programs of two-weeks' duration offered through the Vocational Education and Training (VET) sector to bachelor and masters degree university courses further adds to the confusion.

### **4.6 Major OHS paradigm**

Several 'ages of safety' have been identified as relevant to the evolution of OHS. Borys, Else and Leggett (2009) compared Hale and Hovden's 'technical age, human factors age and management systems age' with Hudson's 'technical wave, systems wave and culture wave'. Both approaches imply a sequential process. Another perspective was provided by Glendon,

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<sup>11</sup> See Appendix

who proposed that each age built upon its predecessor and posited a fourth 'integration' age of safety in which the previous ages meld and become sources of reflection as more complex perspectives develop. These 'ages of safety' are grounded in the dominant safety paradigm that assumes that safety is achieved by establishing safe systems and ensuring that managers and workers work inside the boundaries of those systems (Borys et al., 2009). Borys et al., (p. 19) argued that OHS has progressed into a fifth 'adaptive' age, which 'transcends rather than replaces the other ages of safety' and challenges the dominant paradigm by proposing 'a change in perspective from human variability as a liability and in need of control, to human variability as an asset and important to safety.'

The adaptive age requires an acceptance by organisational leaders that groups of workers may, through interaction with one another and the tasks they perform together, create their own shared meanings about what it is to work safely (Borys et al. 2009, p. 21).

Principles underpinning the adaptive age are:

Things go right because people:

- Learn to overcome design flaws and functional glitches
- Adapt their performance to meet demands
- Interpret and apply procedures to match conditions
- Can detect and correct when things go wrong.

Humans are an asset without which the proper functioning of modern technological systems would be impossible. (Holnagel in Borys et al., 2009, p. 21)

Evidence for the need for this change in perspective emanates from identified limitations in the effectiveness of safety management systems, and from discussions on the role of organisational culture, collective mindfulness and resilience engineering from which 'opinions are emerging that more safety rules and less variability in worker behavior does not necessarily equate with improved safety performance' (Borys et al., 2009, p. 23). The authors warned that this does not imply a 'free for all, rather it requires a more demanding standard of attention resulting in a more subtle, nuanced and refined appreciation of how OHS is managed that embodies the capacity to be adaptive rather than rule bound' (p. 22). They explained that it also depends on the manageability or controllability of the organisation, and the complexity of the socio-technical system associated with the organisation's activities. For example, within simple, stable systems that are easy to control and where the work is routine, the need for adaptability will be low. Alternatively, in complex systems subject to change there will be a greater need for adaptability (Borys et al. 2009).

While some OHS professionals may be anchored conceptually in one or perhaps two of the ages of safety,<sup>12</sup> this description of the ages of safety and the positing of a new age of adaptability highlights the need for the generalist OHS professional to be aware of and reflect on current thinking about OHS, participate in the discussion and consider the implications for practice.

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<sup>12</sup> See Appendix

## **5 The generalist OHS professional**

Clearly, understanding that the practice of OHS is not simple, nor as some would have it, merely ‘common sense’, impacts on the role of the OHS professional. The complexity and variability of human behaviour, technical understanding of hazards and work processes, and the interface issues between people, equipment and environments require the OHS professional to be knowledgeable and flexible in their thinking. In addition they need to conceive and develop control strategies containing the requisite variety and complexity that is inherent in the work environment they investigate.

### **5.1 Role and focus**

There is no clear agreement on the scope of the role of the generalist OHS professional within Australia or internationally. This is reflected in the range of OHS-position titles, such as ‘advisor’, ‘coordinator’, ‘manager’ and ‘consultant’. In 2005, an international survey indicated that although there was some commonality among core tasks related to technical issues and mechanical hazards, there was significant variation in the OHS professional role across Australian workplaces (Hale & Guldenmund, 2006). Compared with their international counterparts, Australian OHS professionals tended to deal with a broader spread of hazards, including stress and wellbeing, occupational disease and transport safety, and a greater workplace emphasis on safety management systems and safe design (Hale & Guldenmund, 2006). Unlike other countries, in Australia there was no differentiation between the task profiles of university-educated and vocationally educated professionals (Hale & Guldenmund, 2006). This finding reinforced the need for a defined body of knowledge to underpin the advice on which OHS-related decisions are made.

### **5.2 Work arrangements**

Results of the ‘Safety Professionals’ Task Questionnaire’ (Borys, Else, Pryor, & Sawyer, 2006) revealed that while the majority of OHS professionals worked as internal advisors across multiple sites in large organisations, a significant proportion were external consultants; 42% worked as sole practitioners or with only one other OHS professional. The major employer industries were, in descending order: manufacturing; mining, oil and gas; personal and other services; health and community services; transport, storage and communication; education; and construction. The OHS government regulators are also employers of OHS professionals.

### **5.3 OHS professional education**

Generally, OHS is studied as a secondary discipline by mature-age students on a part-time fee-paying basis. While 15 Australian universities offer OHS qualifications, OHS is not

highly valued as a discipline within universities, and there is difficulty in obtaining qualified and experienced OHS educators. There has been a lack of an agreed core body of knowledge, an emphasis on distance or mixed-mode teaching models, and substantial variation in OHS education provided by universities. Furthermore, the demise of some OHS bachelor-degree programs has negatively impacted the acceptance of OHS as a profession and the availability of researchers and future educators (Pryor, 2004; Toft et al., 2010).

Despite these issues in OHS education, the first decade of the 21st century saw an increasing demand for OHS professionals at all levels to hold formal OHS qualifications. A survey of OHS professionals employed within larger Australian companies (Safesearch, 2011) found that the proportions of those holding a bachelor degree or higher qualification in OHS were:

- 59% of OHS/Health Safety Environment (HSE) advisors/coordinators
- 79% of OHS/HSE managers
- 80% of national OHS/HSE managers
- 82% of general managers OHS/HSE.

There is also an increasing trend for higher-level professionals to hold masters degrees in OHS. While larger organisations are showing signs of understanding the benefits of employing university-qualified OHS professionals, small and medium enterprises generally do not appear to have the same understanding, and display confusion between VET and university qualifications discussed previously.

#### **5.4 Professional recognition**

Recognition as a generalist OHS professional by the Safety Institute of Australia (SIA) requires a bachelor degree, graduate diploma or masters degree in OHS plus three years of full-time or equivalent experience in an OHS role, support of two referees and continuing professional development. Those without the required qualifications, but with at least six years of experience and recognised continuing professional development may apply to complete a challenge examination. Also, the SIA recognises high-level professionals who undergo an assessment process as Chartered Fellows of the SIA. Currently, the SIA grading criteria do not recognise a separate practitioner role (SIA, 2011).

If remuneration is considered an indication of professional recognition, there are strong positive indications of the perceived importance of qualified OHS advice. Following a slight dip in 2008/09 that coincided with the Global Financial Crisis, OHS salaries have continued to rise. A national salary survey (Safesearch, 2011) revealed average total actual remuneration to be:

- \$96,851 for OHS/HSE advisors/coordinators
- \$136,004 for OHS/HSE managers

- \$173,474 for national OHS/HSE managers
- \$271, 310 for general managers OHS/HSE.

## **6 A new era for the generalist OHS professional**

The decision by WorkSafe Victoria to include repositioning the OHS professional in their 2008-2012 strategy (WorkSafe Victoria, 2007) and the publication of the *Victorian Code of Ethics and Minimum Service Standards for Professional Members of Occupational Health and Safety* (HaSPA 2009), which recommended the certification of OHS professionals acting as consultants providing advice, have ushered in a new era for the Australian generalist OHS professional. Supported by the advocacy of WorkSafe Victoria, the SIA's adoption of the code of ethics and service standards has brought these developments into the national arena.

Recognition that development and implementation of a professional certification process was inhibited by lack of agreement on the knowledge base required for certification, fuelled the advent of the OHS Body of Knowledge project with the objectives to:

- Define the core body of knowledge required by generalist OHS professionals
- Develop accreditation criteria and process for OHS professional education programs
- Develop criteria and process for certification of OHS professionals and practitioners.

### **6.1 The OHS Body of Knowledge**

A defined body of knowledge is required as a basis for professional certification and for accreditation of education programs giving entry to a profession. The lack of such a body of knowledge for generalist OHS professionals was identified in reviews of OHS legislation and OHS education in Australia. After a 2009 scoping study, WorkSafe Victoria provided funding to support a national project to develop and implement a core body of knowledge for generalist OHS professionals.<sup>13</sup>

### **6.2 Accreditation of OHS professional education**

The overall goal of the accreditation process is to ensure that education objectives and learning outcomes, educational design and review processes, and delivery of learning and assessment appropriately equip graduates with the knowledge and skills required to enter the workplace as entry-level generalist OHS professionals. The OHS education accreditation process will be administered through the *Australian OHS Education Accreditation Board*, which is auspiced by the SIA. The SIA By-Laws define the structure of the Board and clearly indicate its independence in setting standards, accreditation processes and in decision making regarding accreditation and related matters. The Board has broad geographical and

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<sup>13</sup> See *OHS BoK* Introduction

professional representation with members representing OHS professionals; OHS academics; education; the SIA; the Human Factors and Ergonomics Society of Australia (HFESA); the Australian Institute of Occupational Hygienists (AIOH); the Australian New Zealand Society of Occupational Medicine (ANZSOM) and the Australian Faculty of Occupational and Environmental Medicine (AFOEM); employers, unions and the OHS regulators.

Development of accreditation criteria and the assessment process involved comparative analysis of education accreditation processes applied by non-OHS and OHS professionals in Australia and internationally. Feedback on a draft proposal that considered the comparative analysis along with the Australian OHS and educational environments was sought from OHS educators, professionals and professional bodies. The final proposal was approved by HaSPA in December 2010; a registrar and Board members were appointed and the inaugural meeting of the Accreditation Board occurred in August 2011. Currently, the Board is refining and implementing the accreditation criteria and assessment process. A pilot program is planned for late 2011 and the first applications will be received in 2012.

To be eligible to apply for accreditation, programs will have to:

- Be an accredited sequence of study at the Australian Qualification Framework (AQF) Level 7 or above (excluding graduate certificate)
- Have OHS as defined in the OHS Body of Knowledge constitute more than 50% of the credit points and a minimum of one-year-equivalent full-time study.

The key principles underpinning the development of the assessment process are:

1. The accreditation process acknowledges that, fundamentally, the academic quality and standards of programs for education of professionals are primarily secured by the internal quality assurance processes of the institutions. Thus the accreditation process does not prescribe detailed program objectives or content, but requires providers to have in place their own mechanisms for validating outcomes and continually improving quality.
2. The accreditation process recognises that each institution and each program is unique and this is to be valued. Thus the criteria for accreditation will be outcome-based allowing institutions the maximum flexibility in achieving the required standards.
3. The accreditation process is intended to be constructive and to respect the expertise and academic autonomy of institutions providing OHS professional education.
4. The accreditation process will, as far as is possible, be aligned with institution quality processes with minimal complexity in the application process.
5. The accreditation process will be open to external scrutiny, conducted in a consultative and consensus-building collegiate fashion, transparent and fair, and balance academic priorities with those of the OHS profession.
6. The accreditation process will be based on self- and peer-assessment for the purpose of publicly and openly assuring adequate standards of education and training of OHS professionals and the constant improvement of quality in OHS professional education.
7. Only full programs will be accredited. The accreditation does not apply to individual courses or part programs.
8. Completion of an accredited OHS program is deemed satisfactory evidence of having completed the knowledge component of the requirements for entry-level OHS professional certification. (Australian OHS Education Accreditation Board, 2011)

## 6.3 Professional certification

### 6.3.1 Australia

The third objective of the OHS Body of Knowledge project involves development of the criteria and process for certification of OHS professionals and practitioners. As outlined in the proposal for professional certification, approved in principle by HaSPA in August 2011:

Certification of generalist OHS professionals and OHS practitioners will benefit Australian workplaces and the community by:

- Contributing to public assurance that those providing advice and support meet a certain minimum standard of knowledge and skills
- Providing a benchmark for knowledge and skills required to provide OHS advice and support
- Providing clarity on the role of the OHS professional and OHS practitioner
- Providing guidance to employers, clients and recruiters in selecting OHS professionals and practitioners
- Providing an avenue for lodging and addressing complaints about the professional nature of advice and support provided
- Providing employers employing certified professionals and practitioners with added company image and a potential competitive advantage in obtaining contracts and instilling public confidence.

OHS generalist professionals and practitioners will benefit through:

- Recognition of their education, knowledge and skills in a recognised field
- Employment advantage by demonstrating competence through an independent assessment
- Certified OHS Professionals will benefit by the ability to display the 'Certified OHS Professional' logo on professional reports and business cards
- Consultants being listed in the SIA on-line list of certified OHS consultants
- (May) provide a basis for international comparability and reciprocal recognition, thus promoting mobility of credentials
- Increased recognition of the OHS professional and practitioner roles by employers and the community. (HaSPA, 2011)

The proposal for certification of Australian generalist OHS professionals was developed through a comparative analysis and consultation process:

- A comparative analysis was conducted of the certification process and criteria for four non-OHS professional bodies, OHS certification in four international countries and three Australian OHS bodies.
- This comparative research formed the basis for two focus groups of OHS professionals who were also employers of OHS professionals and practitioners.
- The outcomes of these focus groups were then further developed by a group with representation from the Safety Institute of Australia (SIA), the Human Factors and Ergonomics Society of Australia (HFESA), the Australian Institute of Occupational Hygienists (AIOH) and the Australian New Zealand Society of Occupational Medicine (ANZSOM).
- The penultimate document was considered by the Boards of these associations.

- The final document was submitted to HaSPA for approval. (HaSPA, 2011)

The proposal is for three levels of certification:<sup>14</sup>

A **Chartered OHS Professional** is a person with high-level specialist skills in a specific area and/or high-level strategic skills. They are likely to be a designer of strategy and influential with senior management and/or policy makers. Their perspective embraces the broader organisational and social context of the advice.

A **Certified OHS Professional** is the core role of the profession. They are involved in problem solving; their advice is based on conceptual and technical knowledge mediated by experience, analysis of evidence and critical thought; and they understand how to use and access the evidence base and value professional collaboration. They are likely to work solo or give direction to others.

A **Certified OHS Practitioner** is an implementer of strategy and actions usually designed by an OHS professional; they oversee and drive compliance and monitoring, and are able to effectively employ a range of OHS tools and processes. They are likely to have a site or industry focus and usually work under supervision (which may be indirect). (HaSPA, 2011, p. 11)

The criteria for certification at each level addresses:

- Completion of an education program specified by the certification board  
OR alternative means of establishing required knowledge, expertise and competencies
- Minimum period of full-time practice or equivalent
- Demonstrated practical experience
- Continual Professional Development (CPD)
- Commitment to a code of ethics. (HaSPA, 2011, p. 11)

The OHS professional certification process will be administered through the *Australian OHS Professional Certification Board*, which will be an affiliated body of the Council of OHS Professional Associations (COHSPA), and an incorporated body with representation from the Safety Institute of Australia (SIA), the Human Factors and Ergonomics Society of Australia (HFESA), the Australian Institute of Occupational Hygienists (AIOH), the Australian New Zealand Society of Occupational Medicine (ANZSOM) and the Australian Faculty of Occupational and Environmental Medicine (AFOEM).

The following principles will underpin the professional certification process:

1. The role of professional certification is to assess and recognise people as being suitably qualified and meeting the stated requirements to practice in the professional field. It does not replace the role of the organisational recruitment processes to assess the individual's suitability for a specific role and fit with the needs of the organisation.
2. There are different roles and therefore different qualification and experience requirements for OHS professionals and OHS practitioners. Both roles are important in preventing work-related fatality, injury, disease and ill health and both roles should be recognised.

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<sup>14</sup> These are working titles only; final titles and associated post-nominals will be determined by the Australian OHS Professional Certification Board.

3. Professional certification requires that minimum standards are set as a hurdle and therefore that people will be excluded when they do not meet that standard.
4. The certification criteria should be set so as to not only address the current perceived needs of business, but to enable the OHS professional and practitioner to be integral in achieving change to improve OHS in Australian workplaces.
5. The standard and process for certification should be rigorous enough to make it desired and instill confidence in those relying on the certification as evidence of competence but not be so difficult that it is for an exclusive few.
6. The certification criteria and process will be clear and transparent, and applied in a consistent and equitable manner to all applicants with an appeals process available to those who are not satisfied with the outcome.
7. The certification body shall be structured and shall conduct the certification process so as to give confidence to interested parties in its competence, impartiality and integrity.
8. The certification criteria and process will be regularly reviewed to ensure that it meets the needs of industry and the OHS profession.
9. While there is currently no legislative structure for the registration of OHS professionals and practitioners and so certification is voluntary, it may be that due to competition, industry practice or other processes, certification becomes a defacto requirement for practice in particular industries.
10. The certification process for generalist OHS professionals is different to and independent of that for certification of occupational hygienists and ergonomists. (HaSPA, 2011, p. 7)

It is envisaged that, following a detailed planning process and communication activities, the certification process will begin during the financial year 2012/13 and will include specific activities to support transition of current OHS professionals and practitioners.

### 6.3.2 International

The International Network of Safety and Health Practitioner Organisations (INSHPO) is working towards a 'Passport to Practice' by setting minimum standards for recognition and transportability of OHS professional qualifications. The Australian OHS Body of Knowledge project and the associated accreditation and certification processes are among the activities being considered in the development of the 'Passport to Practice'.

Importantly, the Australian certification process has taken into account this international thrust for transferability of professional recognition; however, it has not been bound by the practices or directions taken in other countries thus ensuring a process that suits the Australian context while providing an example to other countries.

## **6.4 Relationships with other OHS professional groups**

One of the beneficial outcomes of the OHS Body of Knowledge project and the associated accreditation and certification processes is enhanced relationships with other OHS professional bodies. The Body of Knowledge highlights the importance for professionals in the various OHS disciplines to be aware of the respective roles and their potential interface, and the opportunity for liaison and engagement to optimise the OHS outcomes for workplaces, workers and organisations.

## 6.5 Relationships with OHS regulators and policy makers

It has been noted in other sections<sup>15</sup> that the OHS professional role has had a low profile with OHS regulators and the Australian OHS policy maker in its various guises ó the National OHS Commission, which was replaced in 2005 by the Australian Safety and Compensation Council, which, in turn, was replaced in 2009 by Safe Work Australia. There are now positive indications that Safe Work Australia and some other regulators may be prepared to take the lead of WorkSafe Victoria and engage with the OHS professionals through the professional bodies.

## 7 Summary

The generalist OHS professional has a key role in providing workplaces with advice on the prevention and minimisation of work-related fatality, injury, disease and ill health. While this role has evolved over more than 100 years, it is beleaguered by confusion, lack of clarity and a low profile in organisations and the community. The legislative requirement for workplaces to seek qualified OHS advice is implied rather than specific, and OHS professional education is inconsistent and vulnerable to resourcing issues. The current economic, industrial and legislative environments, and management practices such as outsourcing, downsizing, labour hire and restructuring present significant OHS challenges.

However, there are many positive indicators for the generalist OHS professional role, with an increasing demand for qualified professionals and competitive salaries. Also, there is increasing interest by regulators and Safe Work Australia in professionalisation of the role. The OHS Body of Knowledge project and the resultant accreditation of OHS professional education and certification of OHS will facilitate provision of quality OHS advice to Australian workplaces to prevent fatality, injury, disease and ill health, and herald a new era for the profession.

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## **Appendix Evolution of the role of the generalist OHS professional in Australia**

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*Acknowledgement:* Debra Moodie-Bain provided detail that informs the early periods in this Appendix.



## Summary

There was no identifiable conception of an Occupational Health and Safety (OHS) professional in Australia until after World War II when the fledgling role largely mirrored developments in the UK and, to a lesser extent, the US. However, the first Australian OHS-related legislation was introduced in 1854 to regulate worker conditions in the NSW coalfields; this was followed by British-style 'Factories Acts' legislation in Victoria in 1873. Four approaches to OHS emerged during the 1930-1970 period: a technical/engineering approach, which focused on issues such as machine guarding; a medical model, which was concerned with the care of individuals rather than groups, and treatment rather than prevention; and two industrial psychology approaches of work methods and issues such as repetition and boredom, and theories of accident proneness. The medical profession's dominance of the OHS role was mediated by the emergence of new disciplines, including occupational hygiene, ergonomics and 'safety engineering'.

The 1970s were a time of change for OHS in the UK and the US; this change filtered into Australia in the 1980s. The 1972 Robens report and the resultant 'Robens-style' legislation together with three major disasters in Europe set the scene for major regulatory change at a time when OHS was characterised by over-regulation, fragmentation and confusion, and was perceived as out of date and incomplete in hazard coverage and application. In the 1970s and 1980s, OHS research expanded its medical/insurance focus to include engineering and epidemiology, which impacted on design technology, personal protective equipment and occupational hygiene. Although there was an increase in demand for OHS personnel and specialist OHS education became available, there was ambiguity and confusion associated with the OHS role. Towards the end of the 1980s, workers' compensation was recognised as a major economic cost.

In the 1990s, a 'quality' approach dominated development of OHS management systems. There was recognition of a need to manage hazards of long latency. Effectiveness of the OHS role was debated; generalists with strong human relations and management skills were required. Political change, organisational downsizing, integration of OHS into mainstream management and outsourcing impacted on the number of OHS personnel and devalued OHS expertise. While options for OHS professional education expanded, the development of OHS education was fragmented, ad hoc, and vulnerable to the availability of expertise and garnered little interest from OHS regulators.

The 2000s saw the first national approach to OHS policy with the development of the *National OHS Strategy 2002 – 2012*; however, this was launched into an Australian OHS environment of diminished research capacity. At the organisational level, the publication of Australian Standards for OHS management systems supported consolidation of the quality-based management systems approach to OHS. National discussion on OHS culture was

characterised by lack of agreement on definition and parameters. There was increasing membership of the professional bodies and increasing professionalisation with stricter educational requirements for professional membership. WorkSafe Victoria's strategy to reposition the OHS professional and the development of the Health and Safety Professionals Alliance heralded a new era for the OHS professional.

## **A1 Introduction**

To understand the present status of the generalist Occupational Health and Safety (OHS) profession it is necessary to consider the origins of safety in the workplace and the role of the OHS advisor, and how conceptions of workplace safety and the OHS role have evolved. Compilation of a history of the generalist OHS profession is problematical by the virtual invisibility of the OHS role in historical descriptions, which tend to focus on either legislation or workers and their working conditions. Also, the content of historical accounts tends to reflect the discipline and country of origin of their authors and, consequently, rarely shed light on developments in the relatively youthful OHS profession in Australia. Perhaps not surprisingly then, to date there exists no definitive history of the role of the generalist OHS professional.<sup>16</sup> This Appendix does not seek to address this research gap; rather it provides a historical context for understanding the present role and status of the OHS professional.

Beginning with the industrial revolution in England, this brief review considers the historical context of OHS from the perspectives of:

- the political, economic and industrial environment
- the external OHS and legislative environment
- management practice and community perception
- the predominant OHS paradigm
- the role and focus of the OHS professional, and
- OHS education and professional recognition.<sup>17</sup>

## **A2 Before 1900**

There was no identifiable conception of an OHS professional in Australia until after World War II when the fledgling role largely mirrored developments in the United Kingdom and, to a lesser extent, the United States of America. Thus to understand the evolution of the OHS profession prior to 1900 it is necessary to review developments in the UK.

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<sup>16</sup> A major work to address this research gap is being undertaken as a PhD thesis by Debra Moodie-Bain, who provided input to this Appendix.

<sup>17</sup> The term 'OHS professional' is used for consistency even though this term was not in use at the time and the OHS personnel would not have been considered 'professional' by today's standards.

### **A2.1 Political, economic and industrial environment**

The origins of OHS are enmeshed with the beginnings of the industrial revolution in the UK in the late 1700s (see, for example, Weindling, 1985). Australia was colonised by the British in 1788 and did not experience an industrial revolution as such, although the infant colony and its industrial development were affected by the growing industrialisation in Britain. Much of the early industry in Australia was based on establishing agricultural systems and exploiting the country's rich natural resources (e.g. coal mining), so it is not surprising that the first Australian OHS-related legislation focused on regulating conditions for coal workers.

### **A2.2 External OHS and legislative environment**

The history of OHS legislation also can be traced to the UK; in 1802, legislation began to address the public health issues of child labour, working hours, sanitation and disease prevention (*Health and Morals of Apprentices Act*); in 1833, inspectors were appointed with powers to enter factories and examine workers (*Factories Act*); and, in 1884, minimum safety standards included a requirement for machine guarding, creation of a Medical Inspector of Factories responsible for occupational disease prevention, and establishment of a Dangerous Trades Committee that collected information and suggested regulations for the dangerous trades (*Factories Amendment Act*) (Oliver, 1906). The first Australian OHS-related legislation was introduced in 1854 to regulate worker conditions in the NSW coal fields; this was followed by British-style Factories Acts legislation in Victoria in 1873.

Commencing in the mid-1800s, the Great Exhibitions in Europe showcased progress in technology, manufacturing, design and the arts. These Exhibitions were often accompanied by congresses, which allowed participants to share their knowledge. In 1876, the International Exhibition and Congress of Public Health and Safety held in Brussels concentrated on spreading knowledge of the leading principles of health and safety; one of the ten classes of the Exhibition focused on hygiene and public health, while another addressed the means of maintaining the health and protecting the lives of all engaged in industrial pursuits ("International exhibition and congress of public health and safety, to be held in Brussels in 1876," 1875, pp. 251, 252).

### **A2.3 Management practice and community perception**

The medical opinion expressed in the following 1833 quote typified a prevailing view of workers that held well into the 20th century.

Intemperance, debauchery, and improvidence are the chief blemishes in the character of the factory work-people, and those evils may easily be traced to the habits formed under the present system, and springing from it almost inevitably. On all sides it is admitted, that indigestion, hypochondriasis, and languor affect this class of the population very widely. After twelve hours of monotonous labour and confinement, it is but too natural to seek for stimulants of one kind or another...The abuse of spirits is, indeed, one of the greatest evils of this class: many deaths occur annually in Manchester from excessive drinking. ("Factory Children. Extracts from The Medical Evidence of the Factory

Commission delivered to the House of Commons This Evening. July 17, 1833. From Dr Hawkins's Report of the Cotton Spinning District.," 1833)

#### **A2.4 Major OHS paradigm**

As the medical profession dominated what might be described as the "OHS role," the prevailing pre-1900 OHS paradigm was overwhelmingly medical.

#### **A2.5 Role and focus of the OHS professional**

Throughout the 19th century, the medical profession was prominent in campaigns and public debates for legislative changes to address problems associated with child labour and general conditions that affected the health of factory workers. The *Factories Act 1833* formalised this role by legislating for Certifying Factory Surgeons who monitored the age of child workers and, later, investigated factory accidents.

The 1800s saw the identification of problems that the OHS profession is still struggling with: the link between work and ill-health; inadequate statistical data on work-related injury and ill health; and psychosocial problems associated with work. Relevant to the first issue, William Guy (1843) declared to the Statistical Society of London:

It is extremely difficult to determine the real influence of employment upon health; for, on the one hand, employments closely resembling each other in character may be associated with very dissimilar habits of life; and, on the other, employments having nothing in common may be combined with some one bad habit which may be sufficiently powerful to render all of them unhealthy. Again, occupations, in themselves rather unhealthy than otherwise, may appear free from injurious results, in consequence of the temperate and regular habits of those who pursue them.

The effects of mental work also were being considered. In *Brain-Work and Overwork*, Wood (1880) argued that anxiety and excitement inherent in the work of bankers, brokers and stock speculators prevented their brains from recognising the need for rest ultimately leading to nervous exhaustion. In 1890, Dr BW Richardson proposed that although eight hours of work was reasonable, "when to physical work mental strain was superadded, as in the case of the engine-driver, then much less physical work and shorter hours of labour were required" ("Health in relation to work," 1890, p. 570).

#### **A2.6 OHS education and professional recognition**

The only professional education relevant to the OHS role was that received through medical training. For those who participated, the Great Exhibitions and congresses could be considered a source of professional development.

### **A3 1900 – 1930**

In the first quarter of the 20th century, there was an explosion of industrial growth and scientific, medical and management knowledge.

#### **A3.1 Political, economic and industrial environment**

In 1901, the Commonwealth of Australia was formed through the federation of six states under a single constitution. To boost manufacturing, and to avoid the crippling strikes that occurred during the depression of the 1890s, the Commonwealth Parliament, in agreement with industry leaders and the unions, implemented what has been known as the Australian Settlement (Kelly 1992). The essential elements of this Settlement included compulsory arbitration of industrial disputes (*Conciliation and Arbitration Act 1904*); protection of manufacturing through tariff walls (*Exercise Tariff Act 1906*), and migration limited to people of European origin (*Immigration Restriction Act 1901*). These arrangements stayed in place until well after World War II.<sup>18</sup>

From 1900 to 1914, great progress was made in developing Australia's agricultural and manufacturing capacities, and in setting up institutions for government and social services. However, World War I had a devastating effect on Australia. In 1914, there were fewer than 3 million men in the country, yet almost 400 000 of them volunteered to fight; an estimated 60 000 died and tens of thousands were wounded (DFAT, 2008).

The interwar period was marked by instability including the Great Depression (DFAT, 2008). A significant after-effect of World War I was industrial unrest, which characterised the 1920s in Australia. The union movement established the Australian Council of Trade Unions (ACTU) in 1927 in response to the Nationalist government's efforts to change working conditions and reduce the power of the unions. Social and economic divisions widened during the 1930s. The Great Depression exposed Australia's heavy dependence on primary exports such as wheat and wool, and resulted in high levels of unemployment and destitution. Many Australian financial institutions failed (DFAT, 2008).

#### **A3.2 External OHS and legislative environment**

In 1906, the International Commission on Occupational Health (ICOH) was established. In 1919, the International Labour Organisation (ILO) further raised the profile of worker health and safety (Eddington, 2006). In the US, insurance companies assumed an influential role in the management of worker health and wellbeing, particularly in safety-related areas.

There were two main impacts of World War I on the development of OHS. Firstly, much of the new wartime technology was implemented in industry and, secondly, reintegration of the

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<sup>18</sup> See BOK: Socio-political context ó Business, technological and industrial imperatives.

many injured and disabled soldiers into the workforce resulted in major medical advances in trauma management and rehabilitation that were readily adopted by industry.

### **A3.3 Management practice and community perception**

Indicative of the management attitude at the time was Sankey's (1937) opinion that while "safeguarding of machinery and operating procedures is no longer a problem in industry," the major factor in accidents is "those unfortunate individuals who, because of ineptitude, inability, carelessness, or misguided inquisitiveness, seemed fated to develop into causers of accidents to themselves and to their fellow workers."

### **A3.4 Major OHS paradigm**

The Safety First movement that originated in the US railways in the early 1900s had a major impact on OHS that, to some extent, continues today. Based on the premise that making employees more aware of the dangers they faced and of the avoidability of most injuries, it sought to reduce accidents through the instigation of non-union safety committees (Aldrich, 1997; Taksa, 2009).

### **A3.5 Role and focus of the OHS professional**

World War I provided the stimulus for several emerging areas of knowledge and expertise that contributed to the OHS profession. In the UK and the US, industrial medicine developed as a specialist area, industrial physicians were identified as having specialist skills and several specialist education programs commenced. Industrial hygiene, initially an offshoot of the medical profession, was established as a separate discipline by the 1920s. Time and motion studies, developed by FW Taylor and Frank and Lillian Gilbreth, together with implementation of the results of wartime research developed into another new discipline, ergonomics (or human factors as it was known in the US) (Shaver & Braun, 2008).

A new type of engineer – the safety engineer – evolved in the US:

Farsighted industrialists have, for some time, recognized accident prevention as both a humanitarian and economic necessity, and a new figure, that of safety engineer, or director, has appeared to cooperate with the foremen in performing a now indispensable function in the field of industrial and business operations - the reduction of the frequency and seriousness of our accidents. (Sankey, (1937, p.48)

### **A3.6 OHS education and professional recognition**

The American Society of Safety Engineers (ASSE) was founded in 1911 (initially as the United Association of Casualty Inspectors) following a New York clothing factory fire in which 146 female workers died (ASSE, 2011).

Safety-specific literature emerged in the US. In 1911, *The Journal of Industrial Safety* was issued by the Industrial Safety Association (a group of executive officers of associations of engineers) and, in 1917, the National Safety Council launched the *National Safety News*. *The Travelers Standard* journal was first published in 1912 by the Engineering and Inspection Division of the Travelers Insurance Company of Hartford, Connecticut, with the objective:

to deal with all engineering matters of all kinds, but it will be mainly concerned with safety engineering, as applied to construction work, manufacturing, mining, power generation and transmission, the electrical and chemical industries, and every other form of activity in which machinery or tools are used, or human life and limb are imperiled in the doing of productive work. ("Introductory," 1912, p. 1)

#### **A4 1930 – 1970**

Between 1930 and 1970, industrial safety morphed into occupational health and safety.

##### **A4.1 Political, economic and industrial environment**

From 1950 to 1972, Australian politics was dominated by the coalition of the conservative Liberal and Country parties (DFAT, 2008). The post-war years consolidated industry protection. Although the Liberals and Country Parties were closely aligned with business interests, including free enterprise, they remained advocates of the system of compulsory conciliation and arbitration, which was premised on state encouragement and protection of unions. The Coalition parties supported retention of the protection of Australian industries until the 1980s (Teicher et al, 2002). However, the White Australia part of the Australian Settlement was progressively dismantled with the removal of the infamous dictation test in the *Migration Act 1958*, and the *Racial Discrimination Act 1975* proscribed discrimination on the grounds of race, colour and national or ethnic origin, so establishing the basis for a multi-racial society.

However, gender bias was still strong. Limits placed on wage inequality within the award system were largely designed for male workers, based on a male breadwinner, with wife and children to support. Women's wages, for most of the century, did not provide a living wage (ACIRRT, 1999).

##### **A4.2 External OHS and legislative environment**

Following establishment of the ICOH and the ILO in the early 1900s, the 1948 creation of the World Health Organisation (WHO) raised the profile of worker health and safety (Eddington, 2006). While this increased interest was reflected to some extent in legislation, there was no coordination and little compatibility between the Australian jurisdictions, which had different OHS legislation and individual inspectorates. Also, some parts of the workforce were not covered by any legislation (Mayhew & Peterson, 1999, p. 14).

### **A4.3 Management practice and community perception**

Protected by tariffs, manufacturing grew strongly during the post war period which was seen as a golden age (see Kelly, 1992). Australia provided social welfare through sickness and unemployment benefits, intended to supplement failings in the labour market (ACIRRT, 1999). The period emphasised collective social values, and saw a peak in the proportion of workers that were unionised.

During the post-war boom, the demand for labour also boomed, and migration from Europe filled some of this need. Employers realised the value of investing in the management of personnel matters, as the threat of termination could no longer be relied upon as a form of motivation and control (Teicher et al, 2002). In a 1949 survey on the activities of personnel officers, the most developed practices concerned working conditions, safety, and social and recreational activities (Teicher et al, 2002). However, as the demand for these specialists greatly exceeded demand, those working in the field were often ill-equipped and inexperienced to make a worthwhile contribution. Subsequently, the introduction of concepts from the behavioural sciences in the 1960s and 1970s relating to job redesign provided the basis for improving workplaces with more fulfilling and rewarding work (Teicher et al, 2002).

### **A4.4 Major OHS paradigm**

There were four approaches to safety identifiable in the 1930s to 1970 period. The earliest was the technical/engineering approach, which focused on issues such as machine guarding. The second approach was the medical model, which was concerned with the care of individuals rather than groups, and treatment rather than prevention (Dwyer, 1992; Hale & Hovden, 1998; Quinlan & Bohle, 1991). The third and fourth approaches were industrial psychology based; one concentrated on work methods and issues such as repetition and boredom, and the other on theories of accident-proneness (Dwyer, 1992; Hale, 1995; Hale & Hovden, 1998; Quinlan & Bohle, 1991). After World War II, the more technical approaches of ergonomics and occupational hygiene expanded rapidly (Quinlan & Bohle, 1991).

Internationally, particularly in the US, safety research, during this period tended to be sponsored by insurance companies; however, in 1963 Haddon shifted the focus of safety research from behavioural psychology to engineering and epidemiology with his conception that injury prevention depended on the control of energy (Guarnieri, 1992).

### **A4.5 Role and focus of the OHS professional**

Pre-1970s the safety role had a practical technical/engineering focus with the medical profession perceived as dominant in shaping the perceptions of managers, legislators, workers and the general public on OHS matters (Quinlan & Bohle, 1991, p. 37).

In 1932, the first article on asbestosis was written in the Medical Journal of Australia. A study in Victoria by the Industrial Hygiene Division of the Victorian Health Department looked at back injuries in meatworkers with the cooperation of the Meat Workers' Union, trying to determine if there were differences between slaughtermen and labourers; however, no significant differences were found (de Silva 2000).

During this period, progress was being made in terms of measurement of chemical and physical hazards. The National Health and Medical Research Council (NHMRC) developed a model Radioactive Substances Act. A noise survey in Victoria in 1957-58 showed many cases of hearing loss, but many employers would not cooperate by allowing employees to have hearing tests (de Silva, 2000). In the 1960s, personal sampling pumps which enabled dust samples to be collected from the worker's breathing zone became available, allowing accurate measurement of such hazards as coal dust, asbestos and respirable free silica.

#### **A4.6 OHS education and professional recognition**

In 1945, the UK Institution of Safety Officers was established, becoming the Institute of Occupational Safety and Health (IOSH) in 1981. In 1949 in Victoria, the Accident Prevention Group was formed, later becoming the Safety Engineering Society of Australia and then the Safety Institute of Australia (SIA). Australia's first safety-related educational course – Safety and Accident Prevention – was conducted in Melbourne in 1949 (SIA, 2001) and the Safety Certificate course, developed by the Safety Engineering Society of Australia, was set up at a Victorian technical college and served as a model for safety education in other states (SIA, 2001).

### **A5 1970s**

#### **A5.1 Political, economic and industrial environment**

The 1970s were characterised by problems resulting from Australia's postwar boom and poor economic management by the McMahon Liberal government followed by the Whitlam Labor government; while extensive social reforms were introduced under the latter, the economy suffered as employment and inflation increased, unions became increasingly influential and industrial disputes proliferated. Another leg of the Australian Settlement was dismantled when the Whitlam government commenced the process of dismantling tariffs on imported goods.

#### **A5.2 External OHS and legislative environment**

The Robens report (Robens, 1972) in the UK and three disasters (in Flixborough, UK, in 1971; in Beek, Netherlands, in 1975; in Seveso, Italy, in 1976) set the scene for a major change in OHS legislation and responsibility (Vernon, 2005). Changes proposed in the

Robens Report were based on the following criticisms of the contemporary state of OHS regulation:

- It had resulted in too many detailed and technical rules which were difficult to understand and keep up to date, and *ad hoc* standard-setting that resulted in uneven coverage across workplaces;
- It did not encourage locally innovative solutions to OHS problems; and
- There was insufficient involvement by workers or unions (DHA, 2008).

The proposed 'more effectively self-regulating' system emphasised cooperation between employers and employees: 'There should be a statutory duty on every employer to consult with employees or their representatives at the workplace on measures for promoting safety and health at work, and to provide for the participation of employees in the development of such measures' (Robens as cited in DHA, 2008).

### **A5.3 Management practice and community perception**

In the 1970s, the 'master-servant' management style was still predominant in smaller organisations. Decision making in larger organisations tended to be hierarchical with a structured management approach often referred to as 'Management By Objectives' where management planned what they wanted to achieve and then measured their success in achieving the objectives (Blair, 1997).

In the broader community, the media profile for OHS issues began to rise (Mayhew & Peterson, 1999, p. 14) and began to change as the public saw itself as a potential victim and began making demands for worker representation (Dwyer, 1992). The union movement promoted interest in OHS with workers' health centres and education of workers about OHS (Mayhew & Peterson, 1999, p. 5).

### **A5.4 Major OHS paradigm**

Research in the 1970s questioned the dominant technical/medical approach to OHS (Dwyer, 1992); with a rise in probabilistic risk assessment there was a merging of the technical and person-focused approaches (Hale & Hovden, 1998). Several years of epidemiological and engineering effort had culminated in an 'avalanche of work with model systems and computers on cars, gloves, shoes, hard hats, sports equipment and eye wear' (Guarnieri, 1992). New 'types' of accidents relating to technology and the social relations and organisation of work were identified in the research literature (Dwyer, 1992).

### **A5.5 Role and focus of the OHS professional**

The 1970s saw an increase in demand for the services of safety personnel (Dwyer, 1992), who usually had a trade background and were often appointed following an OHS incident (Mayhew & Peterson, 1999, p. 7). However, OHS personnel were reportedly 'cracked by self-doubt, placed in ambiguous roles, subject to changing demands and suffering anxiety about

their status and role (Hardie in Dwyer, 1992). Such was the ambiguity that, in 1978, an American study reported that 124 titles were used to identify the 328 safety practitioners surveyed (NIOSH as cited in Brun & Loiselle, 2002).

### **A5.6 OHS education and professional recognition**

While the Robens report (1972) considered the status of the OHS professional to be on a par with other specialists such as personnel officers, in reality OHS professionals had a modest organisational status; the absence of a recognised hierarchical authority limited their ability to intervene in management decision making (Grimaldi & Simons as cited in Brun & Loiselle, 2002). Despite a significant increase in membership of professional bodies (Dawson, Poynter, & Stevens, 1984; Dwyer, 1992), this relative lack of status and recognition was bemoaned by OHS professionals in the UK and the USA who yearned for professional status (Dwyer, 1992).

In Australia, the need for specialised OHS qualifications was identified and endorsed by the government, safety certificate courses were set up in Queensland and NSW, and the first OHS course by distance was offered in Victoria (SIA, 2001).

## **A6 1980s**

### **A6.1 Political, economic and industrial environment**

With Labor governments at both national and state levels there was a trend to federalism and a commitment to social justice and tripartitism (Mayhew & Peterson, 1999, p. 16). The floating of the Australian dollar, reductions in tariffs and economic globalisation impacted the approach to management (Mayhew & Peterson, 1999, p. 16) which, together with high wage claims, contributed to a recession in the early 80s. The Prices and Incomes Accord led to improved industrial relations and wage restraint (NAA, 2007). This was followed by a move to decentralise wage fixing with the *Industrial Relations Act 1988* enabling enterprise bargaining, which was the dismantling of the final leg of the Australian Settlement of compulsory conciliation and arbitration. It has been asserted that these changes subordinated OHS, intensified work and individualised risk (Heiler, 1996, p. viii).

In the 1980s, the cost of workers' compensation became significant; the direct cost of workers' compensation was estimated at 1.6% of non-farm GDP (Mayhew & Peterson, 1999, p. 15).

### **A6.2 External OHS and legislative environment**

The *Sexual Discrimination Act 1984* and the *Human Rights and Equal Opportunity Commission Act 1986* established a wide based non-discrimination environment in Australia.

Key events impacting on the perception and management of OHS were the 1988 Piper Alpha oil rig explosion in the North Sea, which highlighted management responsibility and the need for a systematic approach to managing OHS supported by effective auditing (Appleton, 1993), and the world's first major repetitive strain injury (RSI) epidemic in Australia following the introduction of computers and word-processor technologies (Mayhew & Peterson, 1999, p. 15).

Introduction of Robens-style legislation moved OHS from a prescriptive and common law legal framework to the duty-of-care approach with general duties on employers and others including designers and suppliers (National Research Centre for OHS Regulation, 2002). It also introduced a tripartite model of government, employer and worker representation and consultation rather than a policing approach (Eddington, 2006). It was in this environment that the National OHS Commission was established in Australia based on a tripartite model, but with only an advisory and coordination role (Mayhew & Peterson, 1999, p. 3). It should be noted that OHS professionals were not seen as a formal part of the tripartite system although individual OHS professionals often represented the parties.

### **A6.3 Management practice and community perception**

Management practices in the 1980s were focused on quality, including Total Quality Management, and catchwords of the period included lean production, multitasking, and continuous improvement. Employee contribution to improving production processes were recognised in quality approaches.

Cost of insurance, compensation and rehabilitation were factored into employers' costs by statutory agencies (Mac Intosh & Gough, 1998). Legislative change and publicity campaigns by OHS regulators raised the media and community profile of OHS (Mayhew & Peterson, 1999, p. 18).

### **A6.4 Major OHS paradigm**

After a long period of stagnation, OHS in Australia advanced as a result of learning from approaches taken in the UK, the European Union and the US (Mayhew & Peterson, 1999, pp. 13, 16), and the introduction of Robens-style performance-based legislation placing the obligation for safety on the employer/line manager. However, as OHS was perceived as a compliance issue, the prime focus was limited to achievement of minimum standards (Dawson et al., 1984). Although the word 'accident' and its connotations of unpredictability had almost disappeared from the research literature, it was still associated with OHS in popular journalism and common usage (Guarnieri, 1992). Occupational epidemiology studies provided insight into occupational health problems, but did not lead to preventive activity in the workplace (Quinlan & Bohle, 1991).

## **A6.5 Role and focus of the OHS professional**

By the 1980s, most large organisations and government instrumentalities had an OHS department staffed by people ranging from highly qualified professionals to those who maintained basic records (Dawson et al., 1984). While OHS professionals were seen to have an advisory role; most specialists were mainly involved in processing information with very few undertaking strategy development, implementation or monitoring activities (Dawson et al., 1984). While there was pressure for greater integration of OHS professionals into management (Dwyer, 1992), there was also considerable disagreement between specialists and the various other workplace players as to the role of the safety specialist (Dawson et al., 1984)

## **A6.6 OHS education and professional recognition**

The numbers of OHS personnel ó from a range of backgrounds (security, blue collar, personnel or operations functions, or expert) ó continued to increase (Mac Intosh & Gough, 1998; Mayhew & Peterson, 1999). However, the professional bodies appeared to lose their former identities as they expanded membership to a broader group, and OHS professionals were described as õbeing lost in a sea of pre-theoretical confusionö (Dwyer, 1992). The influence of individual OHS professionals tended to be dependent on the relative importance attributed to OHS by an organisation's line manager (Dawson et al., 1984).

Australia's first tertiary OHS course commenced at the then Ballarat College of Advanced Education in 1979 (SIA, 2001). Curriculum guidelines for OHS education in Australia were developed during a workshop of OHS educators (Wigglesworth, 1984). By the end of the 1980s, 13 tertiary institutions were teaching OHS; the SIA reviewed and accredited all Australian OHS courses (SIA, 2001). Membership of the SIA required a relevant tertiary qualification or other approved criteria (SIA, 2001).

## **A7 1990s**

### **A7.1 Political, economic and industrial environment**

A recession in early 1990s, economic rationalism, privatisation of many government assets and functions, global economic competition and an increase in fiscal and political conservatism resulted in fewer resources for OHS. Furthermore, reduced union coverage led to weakening and/or removal of OHS regulatory controls (Mayhew & Peterson, 1999, pp. 8, 20). Employment patterns moved from the industrial to the service sector with a reduced public service (Ruschena, 2008b). The *Workplace Relations Act 1996* (Cth) continued the flexible approach to wage setting with enterprise agreements and individual contracts. Increased working hours, loss of handover time for shift workers, loss of expertise with

multitasking and reported dissatisfaction with work-life balance all had implications for OHS (Ruschena, 2008b).

### **A7.2 External OHS and legislative environment**

The 1990s were a quiet legislative period with the focus on refinement of enabling legislation. While Australia was working towards legislation for major hazard facilities, the 1998 explosion at the Esso natural gas plant at Longford in Victoria brought changes to the regulation of major hazard facilities. An Industry Commission report reinforced the economic benefits of sound OHS (Mayhew & Peterson, 1999, p. 22). Technological change and reliance on personal computers changed the nature of work and the demands on OHS professionals.

### **A7.3 Management practice and community perception**

Downsizing, flattening of management structures, outsourcing of non-core activities and a move to labour hire, casual employment and team-based work groups gave employers greater capacity to determine workplace arrangements and put pressure on organisations and OHS (Blewett & Shaw, 1996; Mac Intosh & Gough, 1998). Labour-market changes and management practices undermined the concept of company loyalty (Ruschena, 2008b), and the *Human Rights and Equal Opportunity Commission Act 1986* (Cth), *Disability Discrimination Act 1992* (Cth) and *Equal Opportunity Act 1995* (Vic) elevated community expectations regarding discriminatory workplace practices (Ruschena, 2008a).

Despite publicity campaigns by OHS regulators, OHS remained a middle order community concern, falling well below concern about road safety. While employer responsibility was recognised, there was a sense of inevitability about OHS incidents, and a perception of workers' compensation costs and a stigma attached to receiving workers' compensation (NOHSC, 1999, pp. 41-49).

### **A7.4 Major OHS paradigm**

In the 1990s, there was a move away from the engineering paradigm (Blair, 1997). Evidence that approaches to OHS management were relatively ineffectual led to a substantial rethinking of the national approach and a new paradigm based on quality techniques (Mayhew & Peterson, 1999, pp. 19, 21). OHS management systems became the focus of development and research (Hale & Hovden, 1998). While the quality-technique emphasis led to a focus on a due diligence paper trail, and the importance of managing hazards of long latency began to be recognised, neither of these innovations tended to be particularly well managed (Ellis, 1999). Standards Australia commenced development of an OHS management system standard based on the existing ISO9000 (Quality) and ISO14000 (Environment) standards.

The international OHS literature ó previously characterised by accumulated case studies, common sense and general management principles applied to OHS with little scientific basis ó began to be fortified by OHS research (Hale & Hovden, 1998). Although the National Occupational Health and Safety Commission (NOHSC) had sponsored OHS research in the 80s and early 90s to the extent that there were 45 full-time staff employed by the NOHSC Research, Science and Statistics Division (Mayhew, 2000), a change in the political climate and funding meant that by 1998 the amount of published Australian OHS research was minimal (Mayhew & Peterson, 1999, p. 25).

### **A7.5 Role and focus of the OHS professional**

To address identified concerns regarding the scope of their role, OHS professionals were advised to become an internal consultant; to create awareness, build OHS infrastructure; provide information and support managers in the development of OHS skills and knowledge (Blewett & Shaw, 1996). This new scope was reflected in the assertion that the OHS professional role should change from a technical expert to a generalist with strong human relations and management skills (Brun & Loiselle, 2002). The need to bolster OHS practice with management and communication skills was also recognised in the US (Blair, 1997; Eckenfelder, 1998; Nelson, 1994).

Research found that while the role and influence of the OHS professional impacted on OHS outcomes, the nature and extent of the influence was affected by factors such as management style, economic pressure and level of union involvement (Mac Intosh & Gough, 1998). Political changes and organisational 'downsizing' impacted on the numbers of OHS professionals and devalued OHS expertise (Mayhew & Peterson, 1999, pp. 7, 8). The integration of OHS into mainstream management, an increase in the range of managers and other organisational personnel involved in OHS, and outsourcing of the OHS function further detracted from the OHS professional profile. Outsourcing resulted in large OHS departments being replaced by smaller 'line' units or solo practitioners advising line management (Ellis, 1999) and a concomitant increase in external consultants. Also, this period saw other functions such as quality and environmental management being attached to the OHS role (Eddington, 2006).

Reportedly, OHS professionals often found themselves caught in a decisional dilemma due to the divergent needs of OHS and of management (Nelson, 1994). Resolution of this conflict was difficult as OHS professionals did not effectively communicate the cost and profit benefits of safety and few people were listening (Eckenfelder, 1998).

### **A7.6 OHS education and professional recognition**

A plethora of OHS qualifications were attainable at a variety of educational institutions; these included graduate diplomas (15 universities), masters degrees (10 universities) and

undergraduate degrees (8 universities) (Quinlan, 1995, p. 7). A national curriculum was introduced for the VET OHS diploma in the early 1990s (SIA, 2001), and the first national conference of OHS educators from Australia and New Zealand was held in 1994 (Quinlan, 1995, p. 17). Despite publication of a guidance note on tertiary-level OHS courses (NOHSC, 1994), development of OHS education was considered to be fragmented, ad hoc and partly dictated by the availability of outside expertise. There had been little attempt at planning to ensure appropriate balance of programs in terms of specialisation or coverage<sup>19</sup> (Quinlan, 1995, pp. 12,13). Ellis (1999) questioned the quality, relevance and delivery of OHS courses at both higher-education and VET levels. There was little OHS-regulator interest in OHS education and, although the need to upgrade the skills of OHS inspectors had been identified, this was usually addressed via short courses (Quinlan, 1995, p. 9).

## **A8 2000s**

### **A8.1 Political, economic and industrial environment**

At the beginning of the decade, the Howard Liberal-National Coalition government (that remained in power until 2007), introduced a broad-based Goods and Services Tax (GST) (NAA, 2007). According to Edey (2007), an expanded economy was marked by 'reasonably stable growth, low inflation and falling unemployment,' with businesses citing labour shortages as the main constraint on activities. While all states were performing well, the 'resources boom' was driving much of this expansion (Edey, 2007). New jobs were often part-time or casual. There was a strong, largely unmet, demand for skilled workers, a continued fall in unionism and a burgeoning 24/7 culture with employers seeking workplace flexibility.

### **A8.2 External OHS and legislative environment**

The 2000s brought change to the OHS environment. The publication of Australian Standards for OHS management systems (SA/SNZ 2001a; SA/SNZ 2001b) provided criteria for auditing and certifying an OHS management system and for supporting the push for external accreditation of OHS management systems. The *National OHS Strategy 2002–2012* signed by all Commonwealth and State workplace relations ministers set the agenda for OHS activity for the decade (NOHSC, 2002).

A 2005 amendment to the *Workplace Relations Act 1996* removed unfair dismissal and the 'no disadvantage test' for workplace agreements, and granted employers greater flexibility in setting wages and conditions with, in some cases, loss of holidays, work breaks and penalty pay for 'unsociable' hours (Ruschena, 2007). Generally, OHS legislation was marked by a lack of uniformity that was seen to create an unnecessary burden on business. One of the first

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<sup>19</sup> A similar situation was reported in the US (Blair, 1997)

actions of the new Labor government in 2007 was to undertake a review of legislation with a view to harmonisation.

### **A8.3 Management practice and community perception**

Two workforce developments impacting on OHS were the increasing use of labour hire, which was associated with a high rate of claims and confusion over who had responsibility for OHS risks (Ruschena, 2007), and the *Age Discrimination Act 2004* outlawed discrimination based on age, making the concept of compulsory retirement redundant (Ruschena, 2008a). From the management perspective, the emergence of the concept of corporate social responsibility (CSR) tempered the principle of shareholder primacy/profit, but OHS did not feature prominently in media reports related to CSR.

Community perceptions of OHS remained similar to those that prevailed in the 1990s; the cause of work-related injury and ill health was predominantly attributed to person factors such as worker carelessness and lack of training (Cowley, 2006, p. 133). In Victoria, research demonstrated that workplace injuries were attributed seventh-place in importance, behind public health, health and wellbeing, drug and alcohol addiction, road safety and the education system (Sweeney Research, 2008).

### **A8.4 Major OHS paradigm**

In 2000, Australia was considered to have slipped from being a major contributor to OHS knowledge to the status of a developing country (Winder, 2000). In 2006, it was observed that further diminution and de-skilling of the Australian OHS research capacity seriously threatened the Australian OHS research capacity (Mayhew, 2000).

The safety culture debate began in earnest, but there was a lack of consensus on definition and parameters (Borys, 2007, pp. 30,31). Towards the end of the 2000s Borys et al. (2009, p. 19) argued that OHS has progressed into new adaptive age, which transcended rather than replaced the previous technical, human factors, management and culture ages or waves of OHS.<sup>20</sup>

### **A8.5 Role and focus of the OHS professional**

In 2006, a survey of Australian OHS professionals found that most were involved in people-focused approaches, and human-error and compliance issues (Borys, Else, Pryor, & Sawyer, 2006). While the majority of OHS professionals worked as internal advisors in large organisations, a significant proportion were external consultants; 42% worked as sole practitioners or with only one other OHS professional. The major employer industries were manufacturing, mining, health and welfare (Borys et al., 2006; Pryor, 2006). The core OHS

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<sup>20</sup> See main chapter *OHS BoK The Generalist OHS Professional in Australia*

tasks reflected a conventional view of the technically oriented OHS professional not far removed from the view that prevailed 50 years ago (Hale & Guldenmund, 2006). This traditional view was also reflected in the US where Adams (2000) declared that the OHS professional needed to be both an engineer and a manager.

### **A8.6 OHS education and professional recognition**

Generally, OHS was studied as a secondary discipline by mature-age students on a part-time fee-paying basis. While 17 Australian universities offered OHS qualifications, OHS was not highly valued as a discipline within universities, and there was difficulty in obtaining qualified and experienced OHS educators. The demise of many OHS degree programs threatened the acceptance of OHS as a profession and the availability of researchers and future educators. There was a lack of an agreed core body of knowledge and an emphasis on the distance-teaching mode (Pryor, 2004). In 2008, the Australian Learning and Teaching Council funded a study to map the strengths, challenges and gaps in OHS education (Toft et al., 2010). The project outcomes informed the Health and Safety Professionals Alliance (HaSPA) and the OHS Body of Knowledge project and provided the stimulus for establishing the Academy of University OHS Education and Research as a subgroup of the SIA OHS Education Chapter. The Academy was formed to provide a platform for a community of practice for OHS educators that evolved from a forum of university-based OHS educators and researchers (Toft et al., 2010).

Nationally endorsed competencies were developed for OHS practitioners at the Certificate IV, Diploma and Advanced Diploma qualifications and changes to the requirements for training providers meant that vocational OHS qualifications could be delivered by government-funded Technical and Further Education (TAFE) bodies or private providers.

While membership of OHS professional bodies increased (Lawson-Smith, 2008), the essential roles, functions and responsibilities of OHS professionals often went ignored (Brun & Loiselle, 2002). This low, often non-existent, profile was confirmed by a survey that revealed that HR managers did not perceive OHS professionals to be part of the management team and that the OHS function could be outsourced as it had no added value (Hill, 2002). In a Canadian survey of OHS professionals, only 50% reported that their managers frequently asked their opinion on safety matters and, even then, this consultation was often limited to technical matters such as PPE; only 17% reported having their advice sought regularly on strategic matters such as equipment purchases; and 40% were never consulted on strategic matters (Brun & Loiselle, 2002). Similarly, a survey of Australian OHS professionals revealed evidence of limited strategic influence; although 90% of OHS professionals communicated at least monthly with senior managers, 21% communicated with senior managers on safety and risk yearly or less (Pryor & Sawyer, 2009). However, reported increases in salaries for OHS professionals indicated a heightened awareness by senior managers of the need for qualified OHS professionals (Safesearch, 2008).

In the early 2000s, the requirements for professional members of the SIA had been revised; to remove the Associate member grading and any recognition of the Certificate IV in OHS, with professional membership requiring a diploma or university-level qualification in OHS (SIA, 2007). The 2007 creation of HaSPA sponsored by the Victorian OHS regulator, and the publication of minimum service standards requiring certification of OHS professionals providing consultancy services (HaSPA 2008) heralded a new age for the OHS professional. In response to this call for increased professionalism, further changes to SIA membership criteria in the late 2000s set the minimum educational requirements as a bachelor degree or graduate diploma in OHS (SIA, 2011).

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