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The Missing Link – Regulating Occupational Health and Safety Support

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Introduction

This paper examines the need for Australian workplaces to have, or to have access to, sufficient occupational health and safety (OHS) knowledge, capability and specialised services to be able to fulfil their legal responsibilities and to effectively protect the health, safety and welfare of people at work. The paper is about the role, in all its diversity, of the providers of OHS 'know-how' and expertise, who go by an equally diverse range of names. As generalist OHS practitioners they are OHS 'advisers', 'officers', 'coordinators', 'managers' or 'consultants'; as integrated services they are 'occupational health (and safety) services' or 'units', 'preventive services' or 'OHS support'; and as specialist OHS professionals they are ergonomists, occupational hygienists, safety scientists or engineers, occupational physicians, occupational health nurses, occupational psychologists, occupational physiotherapists and occupational therapists. By whatever title, and the names are not mutually exclusive, this paper is concerned with providing access to OHS support, as well as the role and functions, organisation and funding, professional competence, quality and effectiveness of this support.[1]

As in most developed countries, some form of OHS 'department', 'unit' or 'service', staffed by OHS professionals, has been a feature of many larger organisations in Australia, for some years. Initially, these resources were more typically established in-house but more recently, consistent with the 1980s-1990s trend to outsource non-core business, part or all of these services may be engaged externally through some combination of OHS consultants or corporate health services. As Ellis (2001, p 366) says, "[w]hether health and safety expertise is made available by employing people in the workplace who have OHS qualifications or by means of subcontracting appropriate services is not the significant issue … What is important is that organisations do have access to sufficient and appropriate expertise", something which, twenty years ago, the International Labor Organisation called for as a basic right of all working people in its Convention 161 on *Occupational Health Services* (ILO 1985).

What is equally crucial to note is that in Australia, access to OHS expertise is the preserve of larger organisations and, for the most part, is an unattainable luxury for smaller firms, while being almost unheard of for the self-employed. It is uncertain what proportion of employers actually provide or engage OHS support, or what proportion of workers are covered, but there are strong reasons to believe that a majority of Australian employers and a large proportion of the workforce do not have the benefit of OHS support.

Admittedly there are some more widely available sources of advice and information. For example, Australian OHS regulators usually offer: a telephone and/or email 'hotline' or advisory service; publications on legislation, hazards and other OHS guidance; training resources; and websites providing access to these materials and other resources. Some regulators also have a public access library of OHS resources

[1] In this paper, the term 'OHS support' is used when referring collectively to the different types and forms of OHS expertise. Specific terms, such as 'occupational health service' (OH service) are used when referring to the arrangements in particular countries or as set down in particular guidelines or conventions.

and some fund limited consultancy assistance to smaller firms.[2] The Australian federal government has also committed funds, $7 million over two years, to establish a network of OHS advisers to small business (DEWRSB 2005). Other sources are employer or industry associations which may provide: telephone and other information services; advocacy on OHS issues on behalf of members; training courses and consultancy services. Other than membership fees, these services may be provided free or there may be an additional cost on a fee for service basis (Ellis 2001, p 22). A similar range of support is provided by unions for their members, and workers' compensation insurers may also provide OHS advice in addition to their claims management role. However, these sources are not the same as active engagement, by qualified and experienced OHS professionals, with workplaces on an ongoing basis, helping to lead and resource preventive initiatives, and facilitate organisational change in OHS.

One of the reasons for the limited access to, and use of, specialist OHS support in Australia is that legislative provisions in this area are rather basic and piecemeal. The provisions, which in some cases might easily be overlooked by the uninitiated, can be found either in tandem with first aid provisions in codes of practice in the Commonwealth, Queensland, South Australian and Western Australian jurisdictions, or in regulatory provisions requiring employers to obtain or access information (New South Wales), or in provisions of OHS statutes or regulations requiring employers (or certain employers), to appoint a person to perform OHS functions, as is the case in the OHS legislation in the Northern Territory, Victoria and also in Queensland. (See the section below, **The Relevant Provisions Under Australian OHS Legislation**, for details). In addition, the demands of complying with self-insurer performance standards, for organisations managing their own workers' compensation claims, might provide an incentive to establish or engage OHS specialist support to oversee OHS prevention, rehabilitation and claims management programs. Similarly, firms seeking to implement OHS management performance standards, might voluntarily engage OHS support to facilitate the establishment and implementation of management systems.[3]

The problem with the current arrangements is two-fold. On the one hand some of the legislative provisions are vague about what is required. On the other hand, some of these provisions, as well as the workers' compensation/OHS performance standards, are oriented to larger organisations. Moreover, the cost involved in establishing a dedicated in-house resource or contracting external providers may be a deterrent and, where services are engaged, this may be on an ad hoc, 'as needs', basis rather than as an ongoing resource. The lack of OHS support particularly affects small and medium sized firms (SMEs) but, due to the absence of comprehensive standards in this area,

[2] For example, Worksafe Victoria offers up to three hours free consultancy to firms with less than 50 employees (Worksafe Online 2005), and Worksafe WA similarly provides three hours free consultancy to firms with less than 20 employees, in certain identified high risk industries (DOCEP 2005a).

[3] Some examples of self-insurer or OHS management performance standards are the Queensland Division of Workplace Health and Safety *Tri Safe Management System Audit* (WHSQ 1999), WorkSafe Western Australia's *WorkSafe Plan for Assessment of OHS Management Systems*, Worksafe WA 2003), NSW WorkCover's *Occupational Health and Safety Model for Self-Insurers* (NSW WorkCover 2005), South Australian WorkCover's *Safety Achiever Business System Performance Standards* and *Code for the Conduct of Exempt Employers under the WorkCover Scheme* (SA WorkCover Corporation 2001a and b), and Victorian WorkCover Authority's *SafetyMAP : Auditing Health and Safety Management Systems* (Victorian WorkCover Authority 2002).

even larger organisations may experience difficulty in accessing the range and quality of services and support that they require.

The weaknesses in current arrangements for OHS support are particularly stark when considered in the context of the style of Australian OHS legislation, which is principally structured around general duties and process-based standards, with some use of specification and performance-based standards. (See Bluff and Gunningham 2004, pp 17-27, for a discussion of the types of standards). Of these four main types, only specification standards tell duty holders precisely what preventive measures to take and require little judgment on their part. For this reason they have particular attractions to smaller firms, which may lack the capability or resources to apply broader based, less precise standards, to the particular circumstances of their own operation (Mayhew 2000, pp. 301). On the other hand, with all the other types of standards, there is a degree of ambiguity about either the preventive measures to take or the standard of care to be achieved. Thus, the general duties are very broad, requiring duty holders to take all (reasonably) practicable measures and entailing considerable uncertainty about both the measures to protect OHS and the standard of care to be achieved. Process-based provisions, such as requirements to identify hazards, assess and control risks, simply offer a process to follow in the pursuit of OHS and provide no clarification either about the standard of care or the measures to protect OHS. The fourth type of standard, performance-based provisions, currently used sparingly in Australian OHS legislation, also have an element of uncertainty. They may be measurable performance targets (such as exposure standards for noise or hazardous substances), or descriptive performance outcomes which specify the outcome of the OHS improvement or the desired level of performance. In either form performance-based standards leave open the question of what concrete measures should be taken to adequately protect OHS.

While there are arguments to support the flexibility offered by general duties, process and performance-based standards, as they allow duty holders to determine preventive measures to suit their own circumstances, complying with such legislation does present significant challenges for any firm that lacks OHS know how and capability, and in particular for SMEs. The problem is amplified when it is considered that the small business sector has grown in recent years in Australia, with approximately one third of the Australian workforce now employed by micro-organisations with less than 10 workers, one third working for small organisations (10-49 employees) or medium-sized organisations (50-250 employees), and a third working for larger organisations with more than 250 workers (NOHSC 2003; Walters 2001, p 31).

Indeed, against this backdrop, it seems rather odd that so little attention has been paid to OHS support in Australian OHS legislation and that, for the most part, arrangements are voluntarily used and market-driven. There is almost a conspiracy of silence – if too much is said about the need to have or to engage sufficient OHS support, might this expose a fatal flaw in the legislation? Less cynically it might be argued that the limited attention to specific OHS know-how and capability reflects a desire not to sideline OHS management into specialist services and to encourage its integration as part of the management function. Certainly, active senior management involvement is crucial in order to provide leadership and drive the management of OHS, but OHS know-how and capability is nonetheless necessary to support and resource these activities. Access to OHS specialist support is associated positively

with OHS performance (Hale and Hovden 1998, pp 147-148). In Norwegian research, Nytrö, Saksvik and Torvatn (1998) surveyed 1184 private and public organisations to investigate what organisational factors predict success in managing OHS. Amongst this group, of which 82% were SMEs, the strongest predictor of success was whether the organisation had assistance from personnel competent in OHS and with professional training, because to establish the novel procedures for systematically managing OHS "the enterprise needs know-how and a certain set of skills to assess work environment conditions and to design effective intervention processes to remedy uncovered OHS problems" (Nytrö et al 1998, p 299).

Thus, this paper takes up the challenge of considering how OHS support might be provided more comprehensively and effectively in Australian workplaces. The next section of the paper begins by summarising existing obligations under the Australian OHS statutes and regulations, and the recommendations of regulators provided through codes of practice[4] or guidelines. In the following section, the paper then explores some overseas approaches to providing OHS support.

In examining the overseas' regimes, the paper explores some particular questions. First, what is the scope of the role and functions of OHS services: is it prevention of occupational injury and ill health, surveillance of workers' health or the working environment, provision of treatment or rehabilitation of those adversely affected, or otherwise? Second, what types of specialised knowledge and capability are provided; for example, are services multidisciplinary or do they focus on particular areas of specialisation such as OHS management, occupational hygiene, ergonomics, occupational medicine, safety engineering, and so on? Third, what kinds of approaches are there to organising OHS support and how is it funded? Fourth, are providers of OHS support required to meet certain performance standards, professional development requirements or to work in particular ways? Fifth, how can OHS support be provided that is accessible to and meets the needs of smaller firms, the self-employed and workers in non-standard employment?

In the final section, the paper revisits the perceived weaknesses in the Australian system and considers whether overseas' experience offers any insights that might be applied in this country. Some questions are raised about possible future directions for providing OHS support and readers are invited to contemplate alternative futures. The crucial issue is whether OHS support should continue to be market driven, with providers responding 'case-by-case' to requests for assistance as defined by particular employers, or is there a role for OHS regulation to influence access to and use of OHS support, and the activities of providers?

The Relevant Provisions Under Australian OHS Legislation

The Australian legislative provisions relevant to OHS support can be found variously in OHS statutes (in Queensland and Victoria), in regulations (in New South Wales, Northern Territory, Queensland and South Australia), and in approved codes of practice (in the Commonwealth, Queensland, South Australia and Western Australia). The provisions are, as has already been said, rather piecemeal and do not represent either a comprehensive or a consistent approach to providing and using OHS support.

[4] Codes of practice were formerly known as advisory standards under the Queensland *Workplace Health and Safety Act* 1995.

The relevant provisions are identified in Table 1. Following the table is a description of the relevant provisions, and a further table which summarises the scope of the provisions and differences in approach (see Table 2 below).

Table 1: Relevant Provisions of OHS Statutes, Regulations and Codes of Practice

Commonwealth	*Approved Code of Practice for First Aid in Commonwealth Workplaces* 1999 (ACOPFA (Cwth), cls 14.7 and 14.9)
New South Wales	*Occupational Health and Safety Regulation* 2001 (OHSR (NSW), r 16(1) and (2))
Northern Territory	*Work Health (Occupational Health and Safety) Regulations* 1992 (WH(OHS)R (NT), r 29(3)(c))
Queensland	*Workplace Health and Safety Act* 1995 (WHSA (Qld), ss 91 to 98) *Workplace Health and Safety Regulation* 1997 (WHSR (Qld), rs 30 to 32) *First Aid Advisory Standard* 2004 (FAAS (Qld), cl 2.2.3)
South Australia	*Occupational Health, Safety and Welfare Regulations* 1995 (OHSWR (SA), rs 1.1.5 and 2.11.1) *Approved Code of Practice for Occupational Health and First Aid in the Workplace* 1991 (ACOPOHFA (SA), s 8 and app 7)
Victoria	*Occupational Health and Safety Act* 2005 (OHSA (Vic), s 22(2)(b))
Western Australia	*Code of Practice First Aid Facilities and Services* 2002 (COPFAFS (WA), para 1.3)

Occupational health services

In broad terms, two approaches can be discerned in the relevant provisions. The first approach, which might be termed the 'occupational health service approach' is evident in the Commonwealth, Queensland, South Australian and Western Australian OHS legislation. It involves extending the role of an organisation's arrangements for first aid treatment to include some form of occupational health centre or service, organised either in-house or through an external agency that provides specialised advice or services. Thus, the Commonwealth first aid code offers employers the option of organising an occupational health centre which, in addition to providing emergency and first aid treatment, could also provide advice and training in ergonomics and occupational hygiene, analyse accidents and occupational diseases, provide advice to the OHS committee on analysis of accident data, conduct health surveillance and support vocational rehabilitation (ACOPFA (Cwth), cls 14.7 and 14.9). The Queensland advisory standard on first aid suggests that in organisations with certain high risk situations or organisations with more than 300 staff, employers

could provide an occupational health service, staffed by an occupational health professional. In addition to first aid responsibilities, the service could conduct workplace assessments, perform health surveillance, analyse the frequency and incidence of work-caused injury and illness, conduct training and health promotion activities, and coordinate rehabilitation of ill and injured workers (FAAS (Qld), cl 2.2.3). Similarly, the WA code on first aid advises that in certain high risk situations, and/or large organisations, consideration should be given to providing an occupational health service which is 'a specialised service for conserving, promoting and restoring the health of a person at a workplace (COPFAFS (WA), para 1.3). In addition to first aid and medical services, the OH service might undertake health promotion, health surveillance, counselling, and pre-placement and ongoing physical assessment.

The approach under the SA OHS regulations and code on first aid is somewhat more developed. The regulations define an occupational health service as a service that, in addition to first aid or emergency treatment, has essentially preventive functions and is responsible for: advising on the requirements for establishing and maintaining a safe and healthy working environment for optimal physical and mental health at work; promoting the adaptation of work to the capabilities of workers in view of their physical and mental health; and providing vocational rehabilitation, health surveillance, or first aid or emergency treatment (OHSWR (SA), r 1.1.5). Occupational health services are part of the facilities that must be provided by an employer (OHSWR (SA), r 2.11.1). The approved code of practice on occupational health and first aid then advises that an occupational health centre may be needed in larger workplaces (more than 600 at the workplace at any one time or more than 300, depending on the type of work performed), and also in workplaces where there is a specific hazard, or organisations with a scattered workforce. The code indicates that it is desirable that health centre professional staff have a relevant post-graduate qualification and, in addition to the provision of treatment, would also perform preventive functions. The code draws on the International Labor Organisation's Convention 161 on *Occupational Health Services* (ILO 1985) to suggest that the service should be multidisciplinary and might include identification and assessment of risks to health, surveillance of working environment factors and practices which may affect workers' health, advice on planning and organisation of work, programs for the improvement of work practices, health surveillance, vocational rehabilitation, information and training, and analysis of accidents and occupational disease (ACOPOHFA (SA), s 8 and Appendix 7).

OHS advisers

A different approach, requiring employers (or certain employers), to obtain or access information, or to appoint a person to perform OHS functions, is taken in the OHS legislation in New South Wales, the Northern Territory, Victoria and also in Queensland (where this approach applies in tandem with the occupational health service provisions outlined above).

The simplest version of this requirement applies under the NSW OHS regulation which requires that an employer must obtain information, that is reasonably available from an authoritative source, to enable him/her to fulfil the employer's responsibilities in relation to identifying hazards, assessing risks arising from those hazards, eliminating or controlling those risks and providing information (OHSR (NSW), r 16(1) and (2)). A broader requirement applies under the 2005 Victorian OHS statute

(OHSA (Vic), s 22(2)(b)), which also applied under the 1985 Act (OHSA (Vic), s 21(4)). This requires an employer to, so far as is reasonably practicable, employ or engage persons who are suitably qualified in OHS to provide advice to the employer concerning the health and safety of employees of the employer. A similar but more limited provision applies under the NT OHS statute which establishes that regulations may provide that a prescribed employer or prescribed class of employers must employ or engage a suitably qualified person to provide advice to the employer in relation to the health and safety of the employer's workers.

A somewhat different approach is taken under the Queensland OHS statute and regulations. The Act requires an employer to appoint a qualified person, who holds a prescribed certificate of authority, as a workplace health and safety officer (WHSO) for any workplace prescribed by regulation, if 30 or more workers are normally employed at the workplace (WHSA (Qld), s 92 and 93). A similar obligation applies to the appointment of a WHSO by the principal contractor for construction workplaces (WHSA (Qld), s 94)). The functions of WHSOs are: to advise on the overall state of OHS; to conduct inspections to identify any hazards and unsafe or unsatisfactory OHS conditions and practices, and report to the employer or principal contractor on these; to establish appropriate OHS educational programs; to investigate, or assist the investigation of, all workplace incidents; to help inspectors in the performance of their duties; to report any workplace incident or immediate risk to the employer or principal contractor; and any other function prescribed by regulation (OHSA (Vic), s 96 and 96A). The WHSO also has rights to be provided with information, to be included in any interview with a worker about an OHS issue, to be consulted about changes at the workplace, to be assisted in seeking advice on issues affecting OHS, to perform the WHSO functions in normal working hours, to have access to resources to fulfil the WHSO functions (WHSA (Qld), s 97). The Queensland regulations then prescribe the industries in which WHSOs must be appointed. These include all the major industry groupings, that is, the building and construction industry, community services, electricity, gas and water, financial, property and business services, manufacturing, public administration, recreational services, personal and other services, retail and wholesale trade, transport and storage (WHSR (Qld), r 30).

Over and above the legislative provisions, several OHS regulators also provide guidelines on selecting and using OHS consultants. The Queensland guidelines encourage the use of consultants when the necessary skills are absent in the organisation (DTIR 1992, p 2), and outline the steps to engaging a consultant from defining the requirements of the consultancy to identifying, choosing and reaching agreement with the consultant about the terms of the contract. An appendix to the guidelines outlines the functions and areas of expertise of the principal OHS professions including: OHS management, occupational hygiene, safety, ergonomics, occupational medicine, occupational health nursing, occupational therapy and physiotherapy. The Victorian guide (WSA 2001) offers advice on using OHS consultants when the right skills and knowledge to handle a problem are not available within the workplace. The guide suggests an approach to selecting consultants that involves considering the consultant’s previous experience, education and qualifications, professional affiliations and code of ethics, specialised knowledge, fee structure and insurance, as well as issues such as ownership of material, confidentiality and conflict of interest. The guide also summarises areas of expertise

of the different professions, as in the Queensland guide. A similar guide to selecting an OHS consultant is provided by Worksafe WA (DOCEP 2005b). Worksafe Victoria also provides an online directory of health and safety consultants in different specialty areas including chemicals management, OHS management, occupational hygiene, plant and equipment, and ergonomics.

Table 2 below summarises the type of support required or suggested in each jurisdiction, when this is needed and the types of activities to be undertaken by those providing OHS support. While particular providers or services might undertake additional functions in practice, these are the minimum required by Act or regulation, or suggested by approved code of practice in each jurisdiction.

Table 2: Type of Support and Activities Undertaken by Providers

Juris-diction	Type of support	When needed	Haz Id	AdvTr	Inv	HS	Reh	Data	FA	HP
Cwth	OH centre	Optional		√		√	√	√	√	
SA	OH centre or service	>600 or >300 at workplace at one time, high risk or scattered w'force	√	√		√	√	√	√	
WA	OH service	High risk or large organisations				√	√		√	√
Qld	OH service	High risk or >300 staff	√	√		√	√	√	√	√
	WHSO	All employers and principal contractors if > 30 workers at w'place	√	√	√					
NSW	Author-itative source	All employers	√	√						
NT	Persons suitably qualified in OHS	Prescribed employers		√						
Vic	Persons suitably qualified in OHS	All employers		√						

HazId = surveillance of work and the work environment to identify hazards and risks, assessment of the workplace, work environment and/or risks; **AdvTr** = provision of information, advice and training (or arranging training) in OHS; **Inv** = incident investigation; **HS** = health surveillance; **Reh** = vocational rehabilitation; **DA** = recording and analysing data on work-related injury and ill-health; **FA** = arrangements and training for first aid, emergency treatment and response; **HP** = general health promotion including immunisations and life style advice

Summary of the Australian provisions

Drawing a composite picture of where, when and how Australian organisations might be required or encouraged to use OHS support, several things are clear. The current provisions are not comprehensive in defining the scope of the role of OHS support, in the sense that they may or may not cover core elements of OHS prevention, provision of information and training, health surveillance, work environment assessment and monitoring, treatment and vocational rehabilitation. There is also no consistency in defining the type of OHS support, how it is organised, whether this is multidisciplinary and when it is needed. For employers not touched by the relevant statutory or code provisions, the choice to implement such arrangements is purely voluntary. Thus, providers are more likely to act in response to the requirements of particular employers (a market driven approach), whether they are in-house or external services, rather than helping to shape and direct OHS improvements across workplaces, consistent with the regulator's policy, strategy and priorities.

A further consideration is that providers of OHS support are not currently required to meet any particular performance standards and, as a result, the quality of services can vary across a spectrum from high quality to poor. While relevant professional bodies[5] play an important role in determining standards of professional conduct, oversight of professional qualifications and assessment, setting professional entry criteria, ongoing professional certification and professional misconduct procedures, these arrangements are self-regulatory in nature (Ellis 2001, p 24; and see Pryor 2001, for a discussion of the role of the Safety Institute of Australia in this area). There are also, of course, established professional qualifications. For more generalist OHS professionals there are certificate, diploma, degree or postgraduate level programs in OHS, which educate professionals to have an overview of OHS management, legislation, OHS risk management and an understanding of particular types of risks. There are also postgraduate qualifications for OHS specialists with particular expertise, including: ergonomists, occupational hygienists, safety scientists, occupational physicians and occupational health nurse. (See Winder and Abdullah 2004 for a recent survey of OHS programs and courses offered by Australian universities). These qualifications provide the basis for admission to particular professional bodies and professional bodies, as well as regulators, are typically consulted in program or course accreditation processes. Nonetheless, education providers have considerable discretion in determining course content and assessment.

Thus, there are a number of areas in which current arrangements for using and providing OHS support might be enhanced and, in this context, it is interesting to consider how the provision of OHS support operates in some other countries.

[5] Relevant bodies include the Australian Faculty of Occupational Medicine, the Australian and New Zealand Society of Occupational Medicine, the Australian College of Occupational Health Nursing, the Australian Institute of Occupational Hygienists, the Australian Ergonomics Society, the Safety Institute of Australia.

Comparative Analysis of Overseas and Australian Arrangements for Providing OHS Support

Overview of models and regimes for OHS support and services

This section of the paper reviews some different country systems as well as an international model for providing OHS support. The country systems reviewed in this paper are those of Finland, Norway, The Netherlands, Denmark, Germany, Sweden and the United Kingdom (UK). The particular model considered is the guideline for *Basic Occupational Health Services* (BOHS) developed in response to a decision of a joint committee of the International Labor Organisation (ILO) and the World Health Organisation (WHO), in collaboration with the International Commission on Occupational Health (Rantanen 2005). The objective of the BOHS is to provide affordable services for all workplaces, regardless of sector, firm size, location and nature of employment contract (Rantanen 2005, p 5).

The model and each of the country systems are discussed with reference to the role and functions of OHS support, the types of specialised knowledge and capability provided, how they are organised and funded, strategies to develop the competency of those providing support and approaches to monitoring the quality of services provided, and special arrangements to make OHS support available and to encourage its use by small firms and the self-employed. The country systems and model are all European-based, or have their origins in Europe, because these are the most well-developed, by virtue of the long standing arrangements for occupational health services (OH services) in a number of European countries, and more recent developments implementing the European Union's *Framework Directive* (European Commission 1989). This Directive 'on the introduction of measures to encourage improvements in the safety and health of workers at work', the *Framework Directive*. Article 7 of this Directive provides that an employer must designate one or more persons, with the necessary capabilities and means, from within the undertaking to provide protective and preventive services. Alternatively, if such arrangements cannot be made, through lack of competent personnel in the undertaking, the employer must engage competent external persons or services. In either case, there must be sufficient people designated or engaged to organise the protective and preventive measures for the organisation, taking into account the size of the undertaking, the type of hazards and their distribution throughout the undertaking.

Member states are required to implement the Directive although, in practice, Article 7 has been given widely differing interpretations (Lie, Baranski, Husman and Westerholm 2002, p 3 and 10). Indeed, in a number of countries requirements in relation to OH services pre-date the *Framework Directive*. Thus, the provision or use of OHS support is strongly influenced by particular country traditions, and these also influence the extent to which employees are covered by OH services or support. Before beginning a more detailed comparison of arrangements, it is useful to identify the legislative basis for providing OHS support in each of the countries reviewed, and the coverage of OH services/support, where this is known. This information is summarised in Table 3.

Table 3: Legislative Basis and Coverage of OH Services

Country	Legislative basis	Coverage
Finland	*Occupational Health Services Act* 2001 - all employers must use OH services (first legislation 1972)	90% of employees
Norway	*Work Environment Act* 1977 – industries and firms with particular hazards must use OH services	60% of employees
The Netherlands	*Working Conditions Act* 1980 (as amended in 1996) – all high risk employers must engage a certified OH service since 1996 and all others since 1998	100% of employees (was 42% when use of OH services was voluntary)
Denmark	*Working Environment Act* 1975 – regulations require certain employers to affiliate with an approved OH service and all required to by end of 2005	33% of employees
Germany	*Occupational Safety Act* 1974 and accident prevention regulations – all employers must appoint occupational physicians and safety specialists	Employee coverage not available
Sweden	Not mandatory but encouraged. Amendment to *Work Environment Act* in 1999– employer must provide/ engage the OH services which working conditions demand	75% of employees when subsidised by government (pre-1992); dropped to 50% without subsidy 72% of employees since 1999 amendment
United Kingdom	Not mandatory but *Management of Health and Safety at Work Regulations* 1999 - each employer must appoint one or more 'competent persons' to comply with legislation	Employee coverage not available Data for firms - 15% use or provide for OHS information and risk management; 3% use or provide for OHS training, modifying work activities, monitoring hazards and health surveillance

As Table 3 indicates, of the countries reviewed, all except Sweden and the UK have a legal requirement to provide or use OH services, in some form. In several countries this is required for all employers (Finland, The Netherlands and Germany), while in Norway and Denmark this is required for particular industries or firms, although in Denmark all employers should be affiliated to an approved OH service by the end of 2005. For the countries for which information is available, coverage of employees by OH services ranges from 33% in Denmark (although this is now increasing), to more than 90% in Finland and The Netherlands. It would appear that coverage is higher in those countries that have longstanding requirements for all employers to provide or use OH services although, interestingly, in Sweden where the use of OH services has

never been mandated, but has enjoyed strong industry and union support, as well as a period of government subsidy, coverage is also high (more than 70%). The specific details for each country are as follows.

In Finland, OH services originated in the 19th century as workplace based services in larger workplaces. These services were incorporated as part of primary health care through the *Primary Health Care Act* of 1972 which was followed by the first *Occupational Health Services Act* in 1978, and amended by the *Occupational Health Services Act* 2001 (OHSA (Fin)). Under the current Act the employer has a duty to make sufficient use of OH services. The number and use of OH services in Finland has progressively increased over time and the country now has approximately 1,000 OH service units, involving about 5,700 professional staff. Services are provided to both private and public sector organisations and their employees, and studies by the Finnish Institute of Occupational Health indicate that nearly 90% of wage earners are covered by these services (Husman 2005a, p 3).

The legislative basis for OH services was also established early in Norway, with the legal requirement for OH services in industries and firms with particular hazards introduced in 1977, under the *Work Environment Act*, and other firms encouraged to use such services voluntarily (Lie 2001, p 221). Today, about 60% of the workforce are covered by OH services.

In The Netherlands, since 1998 all employers have been required to engage a certified, multidisciplinary OH service (Arbodiensten). This obligation is established under the *Working Conditions Act* 1980 (as amended in 1996), which also defines the role of OHS specialists. Previously, the use of OH services was voluntary and it is estimated that under these voluntary arrangements only 42% of the workforce was covered by OH services. The obligation to use OH services became mandatory for high risk firms in 1996 and for all others from 1998 (Popma, Schaapman and Wilthagen 2002, p 195). Coverage of employees, at least, is now 100% (Verbeek 2001, pp 216-217). Self-employed workers may also make their own arrangements to use OH services.

In Denmark, the 1975 *Working Environment Act* provided the legislative basis for OH services, establishing that the Ministry of Labour can make rules requiring an enterprise to affiliate with an approved OH service, or for groups of enterprises to affiliate with joint services, when these are necessary to ensure employee OHS. Rules or statutory orders, made by the Ministry's Work Environment Authority, also address the organisation, responsibilities and scope of activities, functioning, staff qualifications, size, financing, quality management and approval of OH services (Matthiasen 2001, pp 143-144). The obligation to use an OH service has been introduced to different industry sectors progressively and it is estimated that about 17% of enterprises use these services, covering about 33% of employees. Of the enterprises obligated to provide OH services, 66% (11% overall) are small firms with less than 10 employees (Matthiasen 2001, p 146). Enterprises may also affiliate to OH services voluntarily. Through political negotiation, agreement has now been reached to require all organisations to affiliate with an OH service and universal coverage is to be achieved by the end of 2005 (Riis and Jensen 2002, p 75).

The use of OHS specialists is also mandated in Germany where the federal *Occupational Safety Act* 1974, supplemented by federal accident prevention

regulations developed for implementation by the 75 accident insurance funds, require employers to appoint occupational health physicians and safety specialists, either internally or as external resources. Initially applying only to employers with 30 or more employees, regulatory amendments in the 1990s required the progressive extension of these obligations to all employers.

Unlike the countries above, the use of OH services has never been mandated in Sweden although they have enjoyed strong tripartite support and, in the past, there was government subsidisation of their use. At their peak, during the period of subsidisation, OH services reached around 75% of that country's employees (Frick 2002, p 222 and 225). However, when the government subsidy was removed in 1992, the use of these services became completely market driven and their coverage dropped to around 50% by the year 2000 as fewer smaller workplaces, in particular, engaged these services. Nonetheless, there has been a resurgence in Swedish OHS services since the *Work Environment Act* (WEA (Swed)), was amended in 1999 making the employer responsible for the existence of the OH services which working conditions demand (WEA (Swed), s 2b). It is now estimated that approximately 72% of all employees are covered by an OH service, although it is still the case that of those that are not, the majority are employees in small firms (Antonsson and Schmidt 2003, p 1). Further legislative amendments are proposed and, if successful, these are expected to provide additional impetus to use OHS services. They will provide for official recognition of OH services by the regulatory authority, strengthen specialist vocational training and establish the tax deductibility of using OH services. However, the proposals will still not extend to requiring employer affiliation with OH services.

In the UK, in response to the *Framework Directive*, regulators introduced rudimentary requirements for 'health and safety assistance' under the *Management of Health and Safety at Work Regulations* 1999 (MHSWR, r 7). The regulation simply require that every employer appoint one or more 'competent persons' to assist him/her in complying with the relevant statutory obligations. However, in practice, the establishment and use of OHS services in the UK is voluntary, and their role, activities and the qualifications of personnel providing services are market-driven, being left to the discretion of employers and their perceived needs (Harrison 2001, p 263; Walters 2002, p 255). In this voluntary, market-driven system, the key players have been in-house OH services in larger organisations, and independent OHS consultants, contracted as needed. A Health and Safety Executive (HSE) study of the use of occupational health support estimated that 15% of UK firms have in-house resources or access OHS support in relation to hazard identification, risk management and provision of OHS information, but only 3% provide or access more comprehensive OHS support incorporating these services together with OHS training, advice on modifying work activities, measuring workplace hazards, and monitoring trends in health (Pilkington et al 2002, pp vi to viii). Not surprisingly, more large firms[6] provided or used the more comprehensive OHS support. Of those firms not using OHS support, key reasons given were the perception of a lack of relevant hazards at their workplace, the cost of services and the view that there were more important priorities to be addressed. Amongst those providing or using some form of OHS support the key motivations were concern about employee OHS and wellbeing, litigation and costs of work absence.

[6] For this study large firms were defined as those with more than 250 employees.

More recently, the Health and Safety Commission (HSC) established the Occupational Health Reference Group (OHRG)[7] to, amongst other matters, advise the Commission on developing occupational health services and competencies. The *Report and Recommendations on Improving Access to Occupational Health Support* (HSC and DoH 2000) provided 30 recommendations aimed at building the infrastructure to provide OHS support. A model has been developed for providing independent OHS support through regional, local or industry partnerships, especially to smaller and hard to reach firms.

The details of each of these national systems or models for OH services or OHS support (as named in the relevant country) are now discussed.

Role and functions

The ILO/WHO model for BOHS envisages a wide ranging advisory and support role, embracing occupational health as well as safety; prevention activities as well as treatment and rehabilitation; and addressing specific hazards as well supporting organisational change in OHS (Rantanen 2005, pp 7-13). The activities proposed in the BOHS model are:

1. *Orientation and planning* to familiarise with the type of work, potential risks, past problems, planned changes and workforce characteristics.
2. *Work environment surveillance* to identify hazardous exposures and existing control systems, with the emphasis on a multidisciplinary approach to identify and evaluate ergonomic, physical, chemical, biological, psychosocial and work organisation factors, as well as risk factors for accidents and major hazards.
3. *Health surveillance* to assess suitability to carry out certain tasks (pre-employment examinations), to assess health impairment and cases of disease which might be work-related (periodic examinations and referrals to specialists as needed), to assess work capacity after injury or illness (return to work examination), and to assess workers' health at the end of service (termination examination).
4. *Health and safety risk assessment and preventive action*, which draws on information from the work environment and health surveillance activities to analyse how hazards might affect workers, identify individuals and groups affected, evaluate available prevention and control measures, make recommendations for risk control and management, in consultation with management, workers and their representatives, and document findings.
5. *Information and education* for managers and workers about risks and preventive measures required, for OHS representatives and committee members, and to OHS authorities in relation to any statutory reporting.
6. *First aid and emergency preparedness* which includes making arrangements for provision of first aid and for response in emergency situations, and training of workplace personnel in these.
7. *General health care, curative and rehabilitation services* are activities which might be undertaken and include immunisations, health promotion activities, and the treatment and rehabilitation of work-related injuries and ill-health.

[7] Formerly the Occupational Health Advisory Committee (OHAC).

8. *Record keeping* which includes records of activities undertaken, exposures detected or measured, risk assessments and recommendations, and statistics on occupational ill-health and injuries.
9. *Evaluation* of activities to determine their effectiveness in preventing OHS hazards and the quality of service provision.

Some proponents of OH services suggest an even broader role for these services, contributing to the promotion of public health more generally and helping to reduce health care costs by tackling a combination of occupational, environmental, life style and social health determinants. This approach entails a shift in emphasis from a particular focus on the prevention of occupational injuries and disease to broader health protection and promotion initiatives which use the workplace as the point of preventive and promotion activity (Lie et al 2002, pp 2 and 7-8). The term HESME (Health, Environment, Safety and Social Management in Enterprises) is used to describe a multidisciplinary approach to promoting occupational health and safety, whilst also addressing the impact of the workplace on neighbourhood health, on the health and environmental impact of an organisation's products and services, and on preservation of the general environment.

Existing national arrangements are more or less ambitious in the range of support or services provided. Table 4 compares the role of OH services in each country reviewed and the comprehensive BOHS model.

Table 4: Comparison of the Role and Functions of OH Services

Model/Country	Or	HazId	Prev	AdvTr	HS	Reh	FA	HP	Doc	Eval
BOHS	√	√	√	√	√	√	√	√	√	√
Finland		√	√	√	√	√	√	√		√
Netherlands		√	√	√	√	√				
Denmark		√	√	√		√				
Germany		√	√	√		√	√	√		
Sweden		√	√	√	√	√				
United Kingdom		√	√	√	√	√				
Norway	Functions not specified by law but a mix of prevention and treatment is common									

Or = orientation and familiarisation with work, workplace, workforce and risks; **HazId** = surveillance of work and the work environment to identify hazards and risks; **Prev** = analysis of hazards/risks and determination of prevention and control measures; **AdvTr** = provision of information, advice and training (or arranging training) in OHS; **HS** = health surveillance; **Reh** = vocational rehabilitation; **FA** = arrangements and training for first aid, emergency treatment and response; **HP** = general health promotion activities including immunisations and life style advice; **Doc** = keeping records of activities, exposure data, risk assessments and recommendations etc; **Eval** = evaluation of effectiveness of OHS activities

As Table 4 suggests there are certain functions that are more commonly undertaken by OH services. These include the preventive functions of hazard identification and assessment, determining prevention and control measures, and providing advice and

training, as well as vocational rehabilitation for work-related injuries and ill-health. Health surveillance is sometimes a function, while making arrangements for first aid and emergency response, and providing general health promotion services are less common. However, each country, through legislation or government guidelines, places particular emphasis on specific functions, or emphasises particular approaches or types of problems to be addressed, and so it is important to consider the detail of the roles and functions of OHS services/support in the respective countries.

As defined by statute, the role of the Finnish OH services is to promote the prevention of work-related illnesses and accidents, the healthiness and safety of the work environment, the functioning of the workplace community, and the health, working capacity and functional capacity of employees (OHSA (Fin), ss 3 and 5). The particular tasks of OH services include: conducting workplace visits and surveys; investigating, assessing and monitoring work-related health risks; assessing and monitoring employees' health, working capacity and functional capacity; suggesting improvements; providing information, advice and guidance; monitoring and supporting the ability of disabled employees; providing first aid; assisting in planning and organising rehabilitation measures; and assessing and monitoring the quality and impact of the OH service itself (Husman 2005b; Jahkola and Huuskonen 2005; Peurala, Manninen and Kankaanpää 2005). Thus the Finnish approach is a more holistic one but focused on occupational health.

In Denmark OH services are regarded as principally preventive services with their role being to support affiliated enterprises with their management of OHS (Matthiasen 2001, p 143). A statutory order of 1993 describes the objectives and functions of OH services. Specifically, OH services are to facilitate the prevention of work environment problems and promotion of health through technical, ergonomic, medical and psychological support to enterprises, and support for the development of preventive activities, in cooperation with affiliated enterprises. Particular tasks of OH services are workplace assessment, workplace surveys, technical measurement, ergonomic workplace design, development and training of those with OHS roles and responsibilities in firms, monitoring of chemical and biological agents, advice on psychosocial issues, process consultation and rehabilitation (Matthiasen 2001, p 147). Their role is workplace focused, as highlighted in the public debate about their role in which it was emphasised that 'it is the workplace that is the patient not the worker' (Riis and Jensen 2002, p 168).

Until the early 1990s in Sweden employers and unions jointly specified the role of OH services and promoted their coverage (Frick 2002, p 218). As in Denmark the emphasis was placed on prevention through workplace interventions. However, when OHS services became completely market driven in Sweden, with the removal of the government subsidy in 1992, their coverage not only dropped but they also took on more of a health surveillance and treatment role, at the expense of prevention, and an orientation to the individual rather than tackling workplace problems (Frick 2002, p 226; Antonsson and Schmidt 2005). Moreover, to the extent that OH services did deal with workplace issues they tended to have a narrower focus on the physical work environment rather than taking on organisational issues, dealt with existing problems rather than preventing new ones, and whilst often being separate from the management function, and not necessarily consulted about prominent OHS problems, were nonetheless expected to take on OHS responsibilities when management,

including at the line level, failed to do so (Frick 2002, pp 219-220; Westerholm and Berstedt 2005). Attempting to tackle these problems, the amended Swedish Act of 1999 defines OH services as an independent expert resource in prevention and occupational rehabilitation which shall, in particular, work for the elimination of health risks at workplaces, and shall have the competence to identify and describe connections between the working environment, organisation, productivity and health.

In The Netherlands, OH services are required to fulfil at least five key tasks which includes a mix of prevention, rehabiliation and medical examination functions. They must provide: an inventory of health risks and hazards; consultation time for workers; periodic health examinations; pre-employment examinations; and rehabilitation and return to work assistance for sick and injured workers (Verbeek 2001, p 214).

The role and functions of OH services in Germany are prevention and rehabilitation-oriented. Although one of the core specialists in German OH services is medically trained, their tasks do not include medical treatment (Froneberg 2001, p 176). The legislated tasks of these services are: identification and assessment of workplace hazards; promotion of health; planning and replacement of workplaces, work materials and procedures, and personal protective equipment; advice on occupational physiology, psychology, ergonomics and hygiene; provision of first aid; facilitating job changes and reintegration of workers; and advice on OHS legislation (Hämäläinen, Husman, Räsänen, Westerholm and Rantanen 2001, p 38).

In Norway, while there is a requirement to use OH services that applies to certain employers, there is no regulation of the content or activities of these services. It is up to the employer to determine their needs and engage services based on the regulatory requirement to implement 'internal control', the systematic management of health, safety and environment activities (Lie 2001, p 221). Many services offer a combination of preventive services as well as medical treatment.

In contrast, in the UK, OH services are not regulated but a particular approach and types of functions have been emphasised. Indeed, the UK OHS policy maker, the Health and Safety Commission, has suggested a different terminology in order to emphasise a multidisciplinary role in prevention. As discussed, the term 'occupational health service' is used in a number of countries (as translated from the local language), although it is clear from descriptions of their role and functions that a wider involvement in occupational safety as well as health matters is envisaged. Nonetheless, in the UK, the *Report and Recommendations on Improving Access to Occupational Health Support* (HSC and DoH 2000) expressed concern that the term 'occupational health service' is traditionally associated with medically based services led by doctors and nurses, and considered that this is too narrow to meet employers' needs for OHS advice and support. Different terminology was considered essential to appreciating a broader OHS support role, hence the UK emphasis on 'OHS support' rather than 'OH services'. As discussed above, OHS support is not specifically mandated in the UK, although employers must use competent persons. However, approaches to providing OHS support currently being trialled in that country incorporate a full range of advice, covering hazard identification, risk management, best practice control measures, information and training, measuring workplace hazards, monitoring health trends, and case management of sick and injured workers (Smith 2004, pp 1-2). Crucially, the emphasis is on proactive prevention of risks to health and safety, to provide a robust and sustainable approach to OHS improvement

in the longer term, rather than the more traditional medical and treatment emphasis of services provided by doctors or nurses.

Types of specialised knowledge and capability provided

The ILO/WHO model for BOHS suggests that OH services should be multidisciplinary, addressing not only health matters but also safety, ergonomic, psychosocial, organisational and technical aspects of work (Rantanen 2005, p 6). This multidisciplinary approach might be achieved by involving different types of OHS professionals within a particular service, or by providing multidisciplinary training to BOHS personnel. For example, generalist OHS practitioners might receive training and development in specialised areas such as ergonomics or addressing psychosocial aspects of the work environment. Alternatively, generalist OHS practitioners might enlist specialists through referrals to independent contractors.

These and other approaches are found in existing national arrangements. Table 5 summarises the types of OHS specialists encouraged or required to be provided by OH services in the countries reviewed.

Table 5: Comparison of Specialised Knowledge Provided by OH Services

Country	Gen	Med	ON	Erg	Hyg	Eng	PS	P	Org	Phy	Oth
Finland		√	√	√	√	√	√	√		√	√
Norway		√			√	√					
The Netherlands		√			√	√	√		√		
Denmark		√	√	√	√	√	√	√		√	
Germany	√	√				√					
Sweden		√	√			√		√		√	
United Kingdom	√	Other specialist support on as needs basis on referral from OHS generalist adviser									

Gen = generalist OHS advice; **Med** = occupational medicine; **ON** = occupational health nursing; **Erg** = ergonomics; **Hyg** = occupational hygiene; **Eng** = safety engineering or safety science; **PS** = psychosocial aspects of work; **P** = psychology; **Org** = organisational issues; **Phys** = physiotherapy; **Oth** = other (eg occupational therapy, optician, dietician, speech therapy, agricultural advice)

As Table 5 suggests, most of the countries considered either require or permit OH services to be provided by a range of types of specialists. Specialties common across most of the countries are medicine and safety engineering/safety science, with occupational hygiene, psychosocial or psychology expertise, ergonomics or physiotherapy, and occupational health nursing also playing a role. However, in particular countries greater emphasis may be placed on certain professions over others. What is particularly striking is that the range of activities undertaken by OH services (as outlined in the previous section on **Role and functions**), might be undertaken by professionals whose primary specialty is in a different area, as, for example, with medical doctors undertaking preventive functions. Thus, the typical

approach is for specialists in a particular field, in addition to their specialty area, to take on a more generalist role in providing OH services. The only country to take the opposite approach is the UK where the model for OHS support, currently being trialed, emphasises the role of OHS generalist advice as the first 'port of call', with referrals to other OHS specialists (or specialists in other areas), as required. In view of the diversity in approaches it is important to appreciate the nuances of the different country systems, as set out below.

In Finland OH services are defined, by legislation, as the activities of particular 'professionals' (OHS physicians or other doctors and nurses with OHS training) and 'experts' (physiotherapists, psychologists, and others including occupational hygienists, ergonomists, agricultural technicians, opticians, dieticians, speech therapists or other technical experts). In practice, the basic team of OH service professionals is the occupational physician and OH nurse, with physiotherapists and psychologists often also involved in providing services. Other experts are called upon as deemed appropriate but, of the range of possible expertise available, only agricultural technicians and opticians are used regularly, while other experts are seldom used (Husman 2005b; Manninen and Piirainen 2005).

In The Netherlands, a multidisciplinary staffing profile is required in order to achieve certification of an OH service. While each service must employ an occupational physician, on a full or part-time basis, each service must also employ a senior safety expert, an occupational hygienist, and a psychosocially oriented work organisation expert (Verbeek 2001, pp 214 and 216). This ensures a range of expertise for the services' combined prevention, rehabilitation and medical examination roles. Each type of specialist must complete certain official courses or diplomas (Verbeek 2001, p 217).

In Germany also, the statutory requirement to appoint an occupational physician ensures that in this country a core qualification of OH service providers is occupational medicine. The medical specialist is either trained and certified as an occupational physician or a medical specialist with additional qualifications in occupational medicine (Froneberg 2001, p 176). The second core professional is the safety specialist who may be a qualified safety engineer (15% are) or a person with an academic education who has undertaken the standard four week training as an OHS specialist (Froneberg 2001, p 172 and 176). In larger firms or larger OH services covering several regions there may be additional specialists in other OHS-related disciplines (Froneberg 2001, p 177).

In Denmark the staffing of OH services is less medically oriented. A statutory order of 1998 required that OH service personnel have technical, health care or other equivalent qualifications that enable them, when employed as part of a multidisciplinary team within an OH service, to collectively carry out preventive activities in relation to physical, chemical, biological, ergonomic and psychosocial aspects of the work environment. The composition of staff is controlled through the OH service approval process (see the section below on **Developing and monitoring OH services**), but overall approximately 25% of OH service staff are engineers or hygienists, 25% are ergonomists or physiotherapists, 15% are environmental or laboratory technicians, 10% are psychologists and 5% are doctors or nurses, with the remaining 20% being managerial or clerical staff (Matthiasen 2001, p 148).

In Sweden, although the range of expertise is not defined by law, OH services are often multidisciplinary. Typically they are organised into teams of occupational physicians, occupational health nurses, safety engineers, physiotherapists and behavioural scientists. This combination of expertise enables the service to take on a range of medical, technical and psychosocial aspects of the work environment, as required by their functions (Bohlin 2001, p 251).

In Norway, as for the functions of OH services there is no regulation of the type of OHS professionals involved as service providers. Many services involve occupational physicians although there is a long tradition for services to work in a multidisciplinary way, also involving occupational hygienists and safety personnel (Lie 2001, pp 222-223).

While in Denmark, Germany and The Netherlands OHS professionals typically work for particular OH services, in Finland, Sweden and Norway, these professionals might either work for an in-house service, be employed by an external OH service, or in a new model of multidisciplinary preventive services in which different types of OHS professionals operate as independent, self-employed individuals, contributing their expertise as needed, in areas that might include safety engineering, occupational hygiene, ergonomics, OHS risk management, rehabilitation and toxicology, as well as the more traditional areas of occupational medicine and OH nursing (Lie et al 2002, pp 11, 40 and 44).

The use of a wider network of different types of OHS expertise, called upon as needed, has also been emphasised in the developing UK approach to OHS support. Following the *Report and Recommendations on Improving Access to Occupational Health Support* (HSC and DoH 2000), the new approach has sought to move away from the traditional model of medically based services led by doctors and nurses. Projects currently being trialled have as their starting point the provision of generic OHS advice and assistance with problem solving from professionally trained OHS advisers, who might then refer on to a 'virtual network of specialist support'. Thus, employers might access support from ergonomists, engineers, case managers, physiotherapists and other specialists, according to their needs but, in all cases, generic OHS support would be provided (Waterman 2004 and 2005). Referrals might be made for specialised advice on risk control systems, safe design issues, assistance in raising concerns with the employer, and even particular services such as the use of an appropriately experienced plumber for the decontamination of a hazardous site. An early pilot of an OHS support scheme is a UK construction industry consortium, *Constructing Better Health*, which provides advice on OHS issues, as well as on-site risk assessments and advice on what specialist services are available to better manage workers' exposure to key health risks. The approach is 'needs-based', shaping the type of support to the needs of a particular construction site or contractor, based on the on-site risk assessment (Waterman 2004 and 2005).

Organisation and funding

There are a number of different approaches to organising OH services and support, ranging from: provision of work-focused services within public health settings, as part of outpatient clinics or community health centres; to in-house OHS units within larger firms; to group services organised jointly for employers in particular industries or regions; and services provided by private professionals or groups of professionals

engaged on a contractual basis by employers (Hämäläinen et al 2001, p 11). Likewise there are various options for funding these services including purely employer funded arrangements, insurance funding of private or publicly run services, public funding of publicly run services, and government subsidisation or reimbursement of fees for private or public sector services (Hämäläinen et al 2001, p 16; Lie et al 2002, p 45). Table 6 compares the organisation of OH services and funding arrangements in each of the countries reviewed.

Table 6: Comparison of Organisation and Funding of OH Services

Country	Organisation							Funding
	IH	G	M	PH	In	P	H	
Finland	√	√	√			√	√	Employer pays but 50% of cost is reimbursed through Social Security Institution
Norway	√			√		√		Employer pays for service and Confederation of Business and Industry has funded development of some services through Norwegian Work Environment Fund.
Netherlands	√	√			√			Employer pays fee for service
Denmark	√	√						Employer affiliated to service pays fixed sum per employee for base service; additional fee for extra service
Germany	√				√	√		Employer pays fee to receive certain services for each employee
Sweden	√	√						Employer pays for service. Subsidy by government of one third of cost until 1992. Proposed new law to make costs tax deductible.
United Kingdom	√	√				√		In-house services are funded by employer. On trial are industry and government funded initiatives with goal to secure industry funding for initial free service and employer to pay for additional. Some employer expenditure on specialist advice and health care is tax deductible.

IH = in-house OH services; **G** = OH services or support organised jointly for a group of firms in a particular area or industry; **M** = OH services offered by municipal or community health centres; **PH** = OH services offered as outpatient services through occupational medicine departments of public hospitals; **In** = OH services offered by insurance companies; **P** = private providers offering services, 'on the open market', to a range of client firms; H = hybrid forms organisation combining two or more of these arrangements (eg municipal centers providing services using own staff and private providers).

As Table 6 indicates, the most common forms of organisation of OH services and support are the establishment of in-house units in firms in both the private and public sectors. Also common, and a way to provide services to smaller firms, is the organisation of services for employers in a particular industry or geographical location. Private providers offering services on the open market to a range of firms are part of the system in a number of countries, although regulatory requirements for services to be approved and/or to be staffed in particular ways reduce the significance of these in some countries (for example, The Netherlands and Denmark, and see also the section below on **Developing and monitoring OH services**). The other forms of organisation tend to be a feature of particular national systems. Thus, for example, Finland has a strong tradition of providing OH services through municipal health centres, and in Germany OH services are provided by the industry insurance funds.

It should be noted that while particular forms of organisation appear to be more common when looking across countries, it is the prevalence of each form within each country that really determines the most popular forms of organisation. Thus, for example, the in-house organisation of OH services exists in all of the countries reviewed but is mostly confined to larger firms. In view of differences both within as well as between country systems, it is important to appreciate how arrangements are organised and funded in each country. These are set out below.

In Finland, the OH professionals are employed by or work on contract to employers within in-house OH services, in services owned jointly by several firms, in municipal (community) health care centres or services run by private providers, which may be part of a large chain of clinics (Peurala et al 2005; Hämäläinen et al 2001, p 157). The majority of firms access OH services through the municipal centres (61%), with 33% using private sector services. Four percent of employers use jointly run services and 2% of employers have company-run services. The municipal centres cover 37% of employees, private services cover 32%, joint services cover 6% and the remainder are covered by the in-house services of very large employers. New hybrids have developed more recently including services run jointly by more than one municipality, municipalities buying services from private providers, services jointly run by municipalities and private providers, and cooperative networks in regional areas. The Finnish OH services are paid for by the employer but, provided they are used in accordance with legislative requirements (set out in OHSA (Fin)), the employer is entitled to reimbursement from the Social Security Institution for up to 50% of incurred costs. This is funded through the Sickness Accident Fund which is financed by employers (30%), employees (36%) and the government (33%) (Rantanen, Jalonen and Husman, 2005).

In Denmark, OH services have no connection with the primary health care system. They are established independently either as internal units in particular, usually larger, enterprises, as industrial units for enterprises in a particular industry or trade, or as local units that provide joint services enterprise in a particular area (Matthiasen 2001, pp 143 and 145-146). Particular service units are managed by a board consisting of an equal number of employers' representatives and employees' representatives. Because the number and composition of staff is regulated, there is a trend to fewer and larger OH service units (see also the section above on **Types of specialised knowledge and capability provided**). The OH services are funded by affiliated enterprises which pay a fixed sum for each affiliated employee, as determined by the service board. In return

each enterprise is entitled to certain consultant services and advice free of charge, with additional services provided on a fee for service basis. A minimum of 1.3 hours is to be spent per employee, per year. There is no government subsidy paid towards the costs of providing OH services.

In The Netherlands, until the use of OH services became mandatory, they were organised as non-profit making bodies, providing services to several firms, and administered by management and labour representatives from those firms. Since the universal obligation to use OH services was introduced in 1998 these services have become market-based (Verbeek 2001, pp 216-217; and see also Popma et al 2002, p 195). Services may be organised in-house, as services to a single firm or as group services to a number of firms. Some are owned by large financial institutions such as insurance companies. Services are paid for by employers who purchase services on a fee for service basis, for particular activities undertaken (Verbeek 2001, p 215).

In Germany OH services are either organised within the enterprise level or contracted from external providers, including medical services, or services established by the statutory accident insurance funds (Hämäläinen et al 2001, pp 61-62). Services are paid for by the employer, and in return for the fee paid, services are received on the basis of 0.1 to 1.2 hours per insured person, per year, with the amount determined on the basis of the risk of the relevant work.

In Sweden, OH services may be organised as services for larger firms, as joint services for small and medium firms, or for groups of firms within a geographical area. There are some industry specific OH services whose work is directed at firms within a particular industry sector (Bohlin 2001, pp 251-252). Swedish OHS services enjoyed a government subsidy for many years until by 1990 the state was subsidising around one third of the cost of OHS services (Frick 2002, p 218). However, the subsidy was removed in 1992 and from that time employers were required to meet the costs of these services themselves. Concern about a resulting decline in the use of OH services has triggered a proposed new law on OHS services in Sweden which would establish that the costs of enterprises contracting OHS services are deductible from taxation on the condition that the OHS services involved are officially recognised.

In Norway, the majority of OH services are organised in-house by industry and government institutions for their own employees, although there are some private sector providers that mainly service smaller firms required by law to utilise these services (Lie 2001, p 222). The National Institute of Occupational Health also provides OHS information, and undertakes work environment monitoring, and six regional clinical departments of occupational medicine provide outpatient services on occupational health. Employers are required to pay for OH services, although the Confederation of Business and Industry has also funded the development of OH services through the Norwegian Work Environment Fund (Lie 2001, pp 222-224).

In the UK, the model for providing OHS support, which is under development and currently in the trial stage, involves providing support through independent services which might be established on a regional, local or industry partnership basis, and either in the public or private sectors. The goal is that, over time, independent OHS support would be provided nationally, to all employers, through a combination of arrangements, and that initial access to generic OHS advice and support would be free to users, while further referral for specialist support, through the virtual network of

expertise, would be chargeable to the employer. At this stage it is uncertain whether these ambitious goals of the UK model can be achieved, as intended, without government funding or subsidy. The construction industry consortium, *Constructing Better Health*, currently running a pilot OHS support scheme, is funded through industry and government contributions (Waterman 2004 and 2005). The UK tax system also provides for employers' expenditure on specialist advice and health care for workers to be an allowable deduction against business profits (HSE 2005). Thus, it might be the case that although the employer must initially meet the costs of particular support services, to some extent these can be offset against business profits for taxation purposes.

Developing and monitoring OHS services

Whatever way OH services and support are organised, there may be a role for the regulator to oversee the competency of providers and the effectiveness of their activities. In particular, regulators may be involved in: ensuring that providers have the requisite knowledge, skills and experience to carry out their tasks; reviewing the required competencies for OHS professionals and ensuring that they are sufficient for performing the functions required'; and ensuring that OHS professionals undertake continuous professional development (Lie et al 2002, p 42). The professional development and competency requirements, as well as requirements for monitoring OH services in the countries reviewed, are summarised in Table 7 (over page).

Several of the countries reviewed (Finland, The Netherlands and Denmark), require specific education and training for the professionals providing OH services. The other countries do not regulate for specific qualifications but professional associations play a role in developing curriculum or criteria for OHS professional practice (Norway, Germany and the UK), and in Sweden it is proposed to give the National Institute of Working Life a coordinating role in the specialist education of OHS professionals. Those countries which regulate the education of OHS professionals also require some form of evaluation or certification of OH services against defined standards. This entails either self-evaluation (Finland), or third party certification (The Netherlands and Denmark) against a regulator developed quality assurance tool. There is also a proposal to amend Swedish law to require official recognition of OH services. In the other countries the provision of OH services (Norway and Germany), or support (UK), is self-regulating and the choice to undergo any form of quality assurance or evaluation of effectiveness is voluntary. In the UK there has been some discussion of the establishment of a Centre of Excellence for OHS support but the role of such a body, if established, is not yet clear.

Following Table 7 is a more detailed description of the role of regulators, in each of the country' reviewed, in relation to the educational development and oversight of the effectiveness of OH services and support.

Table 7: Comparison of Professional Development, Competency and Monitoring of OH Services

Country	Development	Monitoring
Finland	Mandatory 7 week course for doctors, nurses, physios and psychologists; and 1 week course for other professionals	Mandatory self-evaluation by services of quality and impact of activities, against ISO 9001 based instrument
Norway	No regulation of education of OHS professionals. Professional associations have developed criteria to fulfill to become an OHS specialist	Labour inspectorate has oversight of quality and effectiveness of OH services but not actively involved with. Application of quality systems is voluntary
The Netherlands	Specific course and diplomas required for certificate to work in OH services	Services must be certified against the regulators' ISO 9000 quality standards for OH services with certification by private bodies
Denmark	Mandatory that OH service personnel have academic or semi-academic qualification in prescribed area (physical, chemical, biological, ergonomic or psychosocial aspects of work environment); and 4 week post-graduate course, 9 day OH service course, 7 day course in counselling, and 10 day course in work environment training	OH services must be approved by Danish accreditation authority, against National Work Environment Authority guidelines re type of guidance provided, specialist qualifications and approved quality system documenting compliance
Germany	Professional bodies set training curriculum. Training for several years required for board certification in occupational medicine.	Certification of professional or services not required by law. Voluntary system for competency assurance for physicians and safety specialists, and quality of OH services.
Sweden	Mandatory for OH services to be competent in identifying and describing connections between work environment, organisation, productivity and health. Proposed law to give National Institute of Working Life coordinating role in specialist vocational training of OHS professionals	Proposed law to establish procedure for official recognition of OH services
United Kingdom	Broad definition of 'competence' as sufficient training, experience, knowledge and other qualities. Professional bodies establish competencies for key OHS disciplines.	Proposal to establish a National Centre of Excellence to oversight provision of OHS support.

In Finland, in addition to requiring the use of OH services, legislation (OHSA (Fin)) makes provision for the education of professionals and experts working with OH services. Physicians, nurses, physiotherapists and psychologists working with OH services must complete at least a seven-week course within two years of starting work in the service. This training includes OHS process planning and evaluation, workplace risk assessment, health promotion, improvement and maintenance of work ability,

occupational and work-related diseases, the operating environment of OHS, and improvement of OHS activities (Mukala 2005). Other experts working with OH services must undertake a one-week training course covering the operating environment of OH services, the effects of work on employee health, the role of the expert in OH services, and work environment and workplace surveys. In regard to monitoring, there is also a statutory requirement for OH services to assess and monitor the quality and impact of their activities (OHSA (Fin), s 12) and, to this end, the Finnish Institute of Occupational Health has developed an ISO 9001 based instrument for self-evaluation by OH services (Jouttimaki and Leino 2005).

In Denmark, the qualifications of OH service personnel are regulated and they must have a basic academic or semi-academic qualification in one of the five prescribed areas of expertise (physical, chemical, biological, ergonomic and psychosocial aspects of the work environment) (Matthiasen 2001, p 148). Moreover, within the first three years of employment in an OH service, all new employees must complete a four week, post-graduate course, a nine day course in OH services, a seven day course in methods of counselling, and a ten day course in specialist training in the work environment field. Over and above the qualification requirements for staff of services, there is a requirement for OH services to be approved, a task which is undertaken by Danish Accreditation (DANAK), under the Danish Agency for Trade and Industry (Matthiasen 2001, pp 143 and 150). Approval is assessed against guidelines set by the National Work Environment Authority and is conditional on the OH service complying with requirements regarding the nature of guidance provided, the required specialist qualifications, and establishment and maintenance of a system that documents how these requirements have been met. Each service must also have an approved quality management system to document compliance with the requirements of the statutory order and ensure ongoing quality of services.

In Sweden, the amended Act of 1999 now requires that OH services have the competence to identify and describe connections between the working environment, organisation, productivity and health. This comes in response to findings of a National Institute of Working Life study of the quality of Swedish OHS services which identified that these services are often not consulted in the management of prominent OHS problems, and that the competence of OH service professionals is perceived as strong on ergonomics and rehabilitation but less so on work organisation and psychosocial aspects of work (Westerholm and Berstedt 2005; and see also Frick 2002, p 226 and 229). The need for those leading and supporting OHS change to understand processes of organisational learning and change has also been emphasised in Danish and Norwegian studies of workplace assessment and OHS management (Jensen 2002, p 223; Nytrö et al 1998, p 299; Saksvik, Torvatn and Nytrø 2003, p13). Support for the wider professional development of OH service providers is provided in the proposed new law on OH services in Sweden which would establish a procedure for official recognition of OHS services and give the National Institute of Working Life a coordinating role in strengthening the specialist vocational training of OHS professionals.

In the Netherlands, in order to be certified to work in OH services, occupational physicians, hygienists, safety and work organisation experts must complete specific courses and diplomas. In addition to the basic OHS specialties, Dutch law requires OH service providers to have expertise in the operation and proper management of OH services, and the provision of expert assistance. Amendments to the *Work*

Conditions Act passes in 1994 establish the basis for certifying OH services against the ISO 9000 quality management system. While the Dutch Ministry of Social Affairs and Employment has established quality standards for OH services, the certification process is currently undertaken by private certifying bodies and, as a consequence, is difficult for the regulator to review (Verbeek 2001, pp 217 and 219).

In Germany, the responsibility for the training curriculum for occupational physicians rests with the National Chamber of Physicians. For board certification in occupational medicine a professional must complete two years training in internal medicine, 21 months in occupational medicine and three months in theoretical training in occupational medicine (Froneberg 2001, p 176). There are competency assurance systems for both physicians and safety specialists, and the quality of OH services is also assessed with reference to established parameters and assessment criteria for good practice and service delivery (Froneberg 2001, pp 173 and 180). Some OH services in larger firms and some of the larger OH services are certified in accordance with ISO 9000. However, neither certification of OH services nor professionals is required by law, and compliance with assurance standards is voluntary.

As discussed, Norway does not regulate the involvement of particular types of OHS professionals and nor are their educational qualifications regulated. Physicians are not required to have formal post-graduate education in OHS, and nor do occupational health nurses, occupational hygienists, physiotherapists or other professionals require special training to provide OH services. Nonetheless, the professional associations of each of these groups have developed criteria to fulfill in order to become an OHS specialist, and the National Institute of Occupational Health teaches at undergraduate and postgraduate levels in OHS (Lie 2001, p 223). In practice, many OH service personnel have been trained in OHS, although there is nothing to prevent a person who has not been trained from starting work in an OH service. In regard to oversight of the quality and effectiveness of OH services, the labour inspectorate is responsible for ensuring the use of OH services by firms required to do so, and the health inspectorate is responsible for ensuring that health services have a quality management system. However, in practice neither of the inspectorates has been actively involved with OH services, and the quality system requirement only applies to any health service component of OH services (Lie 2001, pp 222 and 224). Any wider application of quality systems to OH services is voluntary and largely confined to OH services that are integrated within firms with certified quality systems.

In the UK also, legislation is less specific about the training and development of providers of OHS support. The regulations simply require the employer to ensure that the number of persons appointed, the time available for them to fulfil their functions and the means at their disposal are adequate having regard to the size of the undertaking, the risks to which employees are exposed and the distribution of those risks throughout the undertaking (MHSWR (UK), r 7). 'Competence' is defined broadly as meaning that a person possesses 'sufficient training and experience or knowledge and other qualities to enable him *(sic)* properly to assist in undertaking the measures referred to' (that is, complying with OHS obligations). However, professional development might be taken further under the UK model for OHS support which includes the establishment of a 'National Centre of Excellence' to provide overall management and facilitation of the provision of OHS support. There are also competencies established by professional bodies for key OHS disciplines,

including occupational medicine, occupational safety, occupational hygiene and occupational health nursing (Harrison 2001, p 268).

Special challenges of small firms and the self-employed

Even in countries with well-developed OH services, particular challenges are recognised in providing support to small firms, the self-employed and the growing number of workers in non-standard or precarious employment, including temporary, mobile and home-based workers. In part, the problem is one of funding in that if the financial responsibility for providing OHS support rests with the employer or self-employed individuals, there are concerns that they will not have the capacity to purchase this support. In part, the problem is also one of encouraging these sectors to utilise OHS support, given competing priorities. There is concern that without some new forms of initiatives to support these sectors of employment, a large proportion of working people will not have access to any form of OHS support (Hämäläinen et al 2001, p 9).

Even in a country like Finland which has a network of municipal OH services and 50% reimbursement of costs, services have been under-utilised by smaller firms and the self-employed and it has been suggested that there may be a need to go further and provide services free of charge, to establish alternative arrangements integrated with vocational and workplace training, or to establish workers' health clinics along the lines of child and family health services (Husman 2005b). Interestingly, one sector within this hard to reach group where the uptake of OH services has increased in the last ten years is Finnish farmers. This group has responded to the establishment of specific OH services for the rural sector (Taatola, Husman and Kinnunen, 2005). About 40% of insured farmers have joined farmers' OH services, for which they receive a farm visit to check on working conditions every four years, an interview and a health check every second year. A crucial element of these services and their uptake by farmers is the involvement of an agricultural adviser in conjunction with the usual OH professionals. There are further initiatives to increase use of OH services by other self-employed and small employer groups, currently undertaken by the Finnish Institute of Occupational Health. These involve appointing persons responsible for work well-being to work with local industry associations and act as coordinators to encourage the use of OH services (Saarni, Oksanen and Kalanen 2005).

Some insights about difficulties reaching small firms are also provided by Sweden's market-based system. In that country, where employers purchase a contract to provide certain OH services, there is a tendency for those small firms that do utilise these services to purchase only limited assistance in the form of access to telephone advice and a written newsletter, or to use individually oriented medical services rather than workplace-focused preventive services (Antonsson and Schmidt 2005). Moreover, Swedish experience indicates a vicious cycle where because the cost of providing services to smaller firms tends to exceed the fees that can be reasonably charged, providers of OH services tend not to market their activities to small employers. As a consequence small firms have limited awareness of the role that OH services might play and in turn small firms do not create a demand for services that are tailored to meet their needs (Antonsson and Schmidt 2003, pp 1-2). These researchers identify the need both for proactive services suited to small firms, provided by staff with OHS competencies adapted to the needs of small firms, and financing to support the provision of services to the small business sector. In regard to the development of

competencies, the Nordic Institute for Advanced Training in Occupational Health offers a short course for OH professionals in methods to improve the work environment in small firms which emphasises the structural differences of small firms, their culture and characteristics, and the implications of these for reaching small firms and designing preventive interventions for them (NIVA 2005).

Likewise in The Netherlands there is concern that for small firms, the cost of engaging OH services is too high. It has been suggested that the cost to small firms could be reduced by developing standard methods for risk assessment for particular industry sectors, and by adopting collective contracts between OH services and organisations representing smaller firms (Verbeek 2001, p 219).

Worldwide there are a number of examples of successful initiatives to support OHS in small firms. For example, in an Australian intervention project small, fabricated metal product companies were provided with expert support and documented guidance, and an ongoing support network was established between the participating organisations to exchange information about managing OHS and solutions to problems (Pearse 2000). Similarly, Walker and Tait (2003) investigated the effectiveness of simple OHS initiatives in 24 small enterprises in the UK. Participants were able to successfully implement OHS policy, risk assessment and risk control measures, with information and support. In Germany, Lehman (2001) used a consultancy network to provide easy-to-understand self help to small businesses. It appears that simplified approaches to OHS can be successfully implemented in smaller firms but a balance is required, incorporating participative, locally based activity and decision-making, together with OHS know-how and support. The key is not to 'tell them what to do' but to facilitate planning and develop a systematic approach through organisational participants, within a framework that encourages those participants to broaden their horizons, and shift to a more comprehensive and proactive approach to managing hazards.

However, this poses a dilemma. While such specifically designed interventions might work when provided with dedicated support, is it possible to provide such support and assistance to tailor make OHS interventions for a wider range of firms?

Initiatives under development in the UK have also recognised the particular difficulties reaching small firms, the self-employed and workers in precarious employment. A key focus of the current UK deliberations is how to make OHS support more readily available to these groups, and how to motivate them to seek such support. Thus, the initiatives being trailed emphasise raising awareness of and creating a demand for access to OHS support with hard to reach groups, as well as providing different and flexible 'access points' for users (Waterman 2004 and 2005).

In general, advocates of extending OHS support to hard to reach groups have proposed the need for innovative approaches to make OHS support both more available and more accessible to them. This might involve local alliances of OHS and health authorities, large enterprises, private providers, industry and trade associations (Lie et al 2002, p 5). It might also involve extending the OHS resources of larger organisations or central players in supply chains to provide OHS support in relation to the contractors, hired workers, franchisees, and so on that contribute to their undertaking (see Johnstone 2005 for a discussion of OHS responsibilities in complex organisational structures and supply chains). This approach involves making use of

dependency and contractual relationships between organisations and their clients, customers and suppliers as well as others with whom small firms and the self-employed interact in daily business. After all, any OHS 'failures' by these externalised workforces can cause major headaches for a principal contractor, host employer or franchisor. A different kind of initiative to provide preventive occupational health surveillance to workers not receiving this from other sources might involve the development of health surveillance protocols for general practitioners. Finally, it seems unlikely that hard to reach and under-served sectors of the workforce will receive OHS support without public intervention and the establishment of special funds (Hämäläinen 2001, p 9; Ivanov 2005; Rantanen 2005, p 15).

Shaping the Future of OHS Support in Australia

This working paper is grounded on the premise that there is a need for Australian workplaces to have, or to have access to, sufficient OHS knowledge, capability and specialist support to be able to fulfil their legal responsibilities and to effectively protect the health, safety and welfare of people at work. Australia, for the most part, has had a tradition of voluntarism and self-funding in regard to the use of OHS support, and self-regulation in regard to the roles and functions, professional competence and effectiveness of providers. One of the consequences of these twin traditions is that access to OHS support is largely the preserve of organisations that are larger in size and more committed to addressing OHS effectively. Other consequences are that for those that do decide to commit funds to engage specialist support, it may be difficult to know where to start or how to guarantee that the services purchased will be of high quality, will provide the assistance needed, and that the results of interventions will be effective.

This paper invites anyone interested, whether as an OHS regulator, an OHS professional, an industry or union representative, or otherwise, to contemplate the possibilities for improving the provision of OHS support in this country. The paper stops short of advocating any particular approach but suggests that there is considerable food for thought in the ideas of international bodies advocating universal coverage of workers by OHS support, and in the arrangements and experience of the various national systems for providing OHS support.

If we take each of the areas examined in this paper and set that information against the Australian experience, some important questions emerge.

First, Australia's Commonwealth, state and territory jurisdictions take different approaches to whether and, if so, how access to OHS support is required or encouraged. We do not have reliable estimates of the use of OHS support in this country but we can be confident that coverage is far from universal. In the overseas countries reviewed, a combination of mandatory requirements to use OH services and/or strong support for OH services by regulators or national OHS authorities has yielded high usage of these services. Is there then a case to regulate for universal use of OHS support? Is there also a case for greater recognition of the positive contribution that might be made by OHS specialist support?

Second, the current Australian provisions are rather piecemeal in regard to their approach to defining the role and functions of OHS support. They may, or may not,

cover core elements of OHS prevention, information and education, health surveillance, first aid and treatment for work-related injury and ill-health, vocational rehabilitation and the systems for planning, recording and evaluating these activities. The international model for *Basic Occupational Health Services* suggests a comprehensive role that covers these core elements, and a number of the countries reviewed also regard these as core functions (with the possible exception of treatment and first aid services). Is there merit then in defining the range of OHS support required, and considering how these functions might be fulfilled (not necessarily by an employer using a single provider)?

Third, Australian providers of OHS support, in general, are not required to have any particular qualifications or experience. Certainly, there are professional qualifications at university (postgraduate and undergraduate), or vocational education level (diplomas and certificates), and OHS professional bodies encourage the use only of qualified providers. One of the strengths of Australian education of OHS professionals is that it is typically multidisciplinary, with programs incorporating OHS management, legislation, occupational health, ergonomics, occupational hygiene, mechanical safety and other aspects of safety science, and rehabilitation. Certainly, this paper is not suggesting a preference for the systems of some European countries which emphasise medical or nursing qualifications. However, what is of concern is that there is little to prevent an unqualified person from setting up as a provider of OHS support. Is there merit then in requiring certain qualifications or competencies as pre-conditions of practice? And, would regulation is this area help to build the numbers of qualified providers, something that would be needed if OHS support is to be provided more widely than larger organisations?

Fourth, OHS support in Australia is generally provided through in-house resources, in larger organisations, or though private consultants whose services are contracted on a fee for service basis. The European experience indicates a wider range of options and, in particular, group services where OHS professionals provide OHS support to a specific industry, regional area or a particular group of employers. Is there a case to consider how different forms of organisation of OHS support might be fostered, in the interests of making multidisciplinary OHS support more widely available?

Fifth, in Australia the establishment or use of OHS support is almost entirely employer funded, with the exception of some limited government sponsored consultancy (see for example Worksafe Victoria 2005, DOCEP 2005a and DEWRSB 2005). While employer payment for services is also common in the European countries reviewed, there are some mechanisms to facilitate employer payment including reimbursement of a proportion of costs through an insurance fund, direct government subsidy of a proportion of costs, and legislation or government guidelines to clarify that costs are tax deductible. Are any of these options that might be pursued in the Australian context, to make the use of OHS support more affordable?

Sixth, as has already been said, the expanding sector of smaller firms and self-employed workers are much harder to reach in providing OHS support and there is a real challenge to consider how their needs might be comprehensively met. Overseas' initiatives have included local alliances of OHS and health authorities, large organisations providing support to all workers who perform work related to their undertaking (not only employees but also contractors, and others), industry sponsored group arrangements for a particular industry sector, and government sponsored

initiatives in regional areas. They have also included initiatives to develop the skills of OHS professionals for working with smaller firms and generating interest of SMEs and the self-employed in using OHS support. Is regulatory intervention needed then in this area and, if so, what form should this intervention take, in order to ensure that the under-served sectors of the workforce have access to, and do make use of, OHS support?

Seventh, as well as not being required to have any particular OHS professional qualifications, Australian providers of OHS support are not currently required to meet any particular performance standards although, as already discussed, relevant professional bodies may play a role in setting professional competencies and standards of professional conduct. While professional self-regulation is also a feature in the European countries reviewed, some countries have taken this further, already requiring or in the process of establishing a system of evaluation against criteria developed by the regulator, and some form of approval, certification or official recognition of providers of OHS support. Is there merit then, in considering a process for the formal evaluation and accreditation of providers of OHS support? This approach might be particularly relevant in the context of funding. Thus, for example, direct funding, subsidy or tax deductibility might be contingent on using an accredited provider.

Thus, there are a number of areas in which current arrangements for using and providing OHS support in Australia might be reconsidered with a view to enhancing access to and use of OHS support which is high quality and effective in performing its functions. In reconsidering options for Australia, it is important to emphasise that this paper is in no way suggesting that OHS is the terrain of 'experts'. Rather, the purpose is to make quality OHS support more widely available, to facilitate the development of local, workplace understanding of OHS risks, and comprehensive action to address these. In this sense, the role of OHS support is to build relationships based on trust, to resource and facilitate change and the development of OHS interventions that suit the culture, work environment and risks of an organisation, rather than imposing a pre-determined set of activities or procedures (Shaw and Blewett 2000, pp 464-473; Westerholm, Hasle and Fortuin 2000).

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