New Approaches to Improve the Health of a Changing Workforce

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The European Foundation for the Improvement of Living and Working Conditions is an autonomous body of the European Union, created to assist the formulation of future policy on social and work-related matters. Further information can be found at the Foundation Web site at http://www.eurofound.ie/
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Contents

		Page		
Chapter 1	The Scope of the Project	1		
	The problem area	1		
	Approach to the project	2		
	A note on data	3		
Chapter 2	Trends in Work, Technology, the Labour Market and Workplace			
	Health	7		
	Introduction	7		
	Labour market in Europe	8		
	Technology and work	9		
	Approaches to workplace health	10		
	New health risks and at-risk groups	12		
	Occupational health services	15		
	Workplace health promotion	17		
	European Foundation survey on working conditions	18		
	International level policy initiatives	19		
Chapter 3	National Reports from Seven Countries	21		
	Introduction	21		
	Finland	22		
	France	28		

	Ireland	30
	Germany	36
	United Kingdom	39
	Spain	47
	Netherlands	50
Chapter 4	Conclusions on Trends in Work and Health in Europe	55
	Introduction	55
	Demographic changes in the labour market	56
	Changes in economic activity	56
	Changes in the nature of work	57
	New perspectives on health	58
	Emergent workplace health issues	59
	Conclusions	61
Chapter 5	A Research Agenda	67
	Introduction	67
	A research agenda for new approaches to workplace health -	
	background	68
	The research agenda	69
Bibliograph	nv	79

Chapter 1

The Scope of the Project

The problem area

Major changes in the world of work have been taking place over the past decade. Labour market trends towards increasing participation in the labour market by women, the ageing of the European workforce, a trend towards more people being employed in the service sector, the rise of structural and intermittent unemployment, and changes in the organisation of working life have all been seen on a European scale. These have led to increases in part-time working, short-term contracts and an increase in the number of career changes which people make during their working lives. In addition, the growing use of IT has led to a dislocation between work time and place.

These labour market changes have been accompanied and to some degree stimulated by increasing global competition, by changes in the technologies used in the workplace, changes in management practice and the emergence of new contractual relationships between employers and employees, all of which have led to a revolution in the ways in which people work. For example, the increasing integration of information and telecommunications technologies has led to an explosion in the growth of teleworking, mobile working and other forms of technology mediated work. In addition, corporate trends towards outsourcing and downsizing have led to increasing numbers of workers being employed on an ever more precarious basis.

There have also been changes in the ways in which employee health is dealt with in the workplace. In the area of occupational health, the past decade has seen the implementation of the Framework Directive in the Member States, which has led to an increased focus on preventive activities and a relative reduction in the prevalence of traditional health and safety hazards, while

market forces and regulatory change have led to the reorganisation of occupational health care delivery systems. Other changes have seen the rise of the workplace health promotion movement, with its focus on the general health of the worker, rather than only on workplace threats to health and safety.

These changes in the world of work pose significant challenges to the provision of both occupational health and health promotion. New target groups for these services have emerged, which face a range of new health threats, for which new delivery strategies must be developed. In addition, the provisions of occupational health legislation have been extended to cover most, if not all of the workforce in the Member States. For example, the emergence of teleworking and mobile working poses questions in relation to the definition of employer and of workplace, which have implications both in legal terms and in relation to the delivery of health care to employees.

Other workplace and labour market changes pose different problems. For example, the ageing of the European workforce pressures employers to deal not only with occupational health hazards, but also with the general health of employees, since the poorer general health of older employees (on average) means that health related absenteeism may increase; absenteeism may decrease generally but where it occurs it may be for longer periods of time. A related issue concerns the reintegration of workers with health problems into the workforce.

These drivers for change are having a major influence on a range of different policy areas, not only in relation to health policy. Other related policy areas which have been or are being pushed towards change include social insurance, where the combined weight of increasing unemployment benefits, high levels of disability insurance and a rapidly increasing old age pensions bill are driving radical policy change in some countries. The drivers for change also have an influence in areas such as education and vocational training, labour market policy and economic and regional development.

The structure of economic activity is also changing in Europe, with more and more activity taking place in smaller companies. This phenomenon carries major implications for the delivery of health services to the SME sector, and many countries are beginning to address the challenges which this change implies.

The approach to the project

The policy areas which Member States must address are very large - they span the fields of economics, public health, health and safety, workplace health promotion and social insurance, to name but a few. Comprehensively addressing these areas at European and national levels would be an enormous task, and the resources available to the project did not allow for an in-depth analysis. However, it was not the purpose of the project to be comprehensive. Instead, its main aim was to identify and assess the principal emerging trends and issues as they relate to workplace health policy and practice into the future through examining new thinking and action by key

parties in the Member States. In essence, the project may best be thought of as being a pathfinder project which is trying to point to new approaches to workplace health issues which are responding to the challenges posed by economic and social change which all countries will face in the short to medium term. These policy responses, strategies and measures in some cases have not yet been developed. Accordingly, the project had the brief of suggesting new areas for research in workplace health. Suggestions for a research programme are outlined in Chapter 5.

Essentially, this meant that the project was seeking to identify a limited number of trends for which at least some of the Member States are beginning to develop policy initiatives. These trends and policies are likely to be different in each Member State, as the specific conformation of demographic, labour market, public health and economic development indicators is unique to each country.

The main aim of the project was to identify current and future trends in the ways in which workplace health issues are managed. This was to be achieved through two investigative mechanisms - conducting a literature review and undertaking a set of interviews with key players in relevant policy areas in each of the countries selected for inclusion in the study.

A note on data

The conceptual nature and forward looking perspective of this study dictates that the kind of data gathered must largely be qualitative in nature as the main focus of interest was on policy development. However, some quantitative data has been used, especially in relation to official statistics on demography and working conditions. The bulk of the information collected for the study came from two sources. The first of these was the scientific and official level literature, while the second consisted of a group of correspondents in the participating countries who were interviewed by the researchers. Most emphasis was placed on the information obtained from these interviews, as it was felt that the interviewees could provide an efficient way of obtaining an integrated and more up to date picture of policy and related developments in each participating country.

There are, of course, significant national differences in relation to current issues in workplace priorities, values and health service provision. These differences are reflected in the policy priorities and approaches taken in each country. In practice, this means that policy development proceeds at different rates and in relation to different issues. These differences posed a difficulty with regard to data collection, as there is no common policy framework (except that of the Framework Directive) in operation across countries. For example, in Finland, with one of the oldest population structures in Europe, policy development is focused on older workers, the rehabilitation of disabled workers and with developing new integrated approaches to health in the workplace. Ireland, on the other hand, with one of the youngest age structures, has no specific concerns with these issues, and the policy development focus is elsewhere.

The different policy priorities and the differing stages of development of policy meant that it was not possible to focus only on policy documents. The information obtained from the interviews, which in many cases provided insights into emergent policy processes, and the data obtained from the literature, which provided pointers to what may become policy issues were also used.

The countries involved

Seven countries were the main focus for the data collection. These were:

- Finland
- France
- Germany
- Ireland
- The Netherlands
- Spain
- The United Kingdom

These countries were selected according to a number of criteria which included:

- Prior knowledge of relevant policy activity;
- The desire to obtain as even a spread as possible between countries from the northern, central and southern parts of Europe;
- The desire to include a mix of smaller and larger countries.

Interviews with between two and seven respondents were conducted in each of these countries. Additional information was provided by respondents in other countries in order to try to provide a more complete European picture, though formal interviews were not conducted. In all, 28 interviews were made. The key issue in identifying interviewees was to obtain access to someone with sufficient knowledge to provide adequate information for the purposes of the project. The interviewees came from a range of backgrounds - efforts were made to identify and interview respondents from the following kinds of agencies:

- Health and safety agencies;
- Health promotion agencies;
- Trade Unions;
- Employers;
- Researchers.

It did not prove possible to gain access to all of these agencies in each country, but in all countries it was possible to obtain several perspectives on relevant policy developments.

The literature review was conducted with reference mainly to the seven participating countries. However, European level literature was also utilised.

Methods of data collection

The main source of information in the study came from the interviews conducted with people from each participating country. This approach was chosen as being the most appropriate given the fact that the project was mainly interested in emerging trends and policies. This feature of the information meant that it was likely that there would be relatively little literature available, especially in relation to emerging policy issues. In addition, it was also likely that there would be few literature sources available from conventional databases. Finally, the emergent nature of literature in these areas meant that it would be largely available only in national languages, thereby posing a problem for a Europe-wide study with limited resources.

Potential interviewees were identified in a number of ways. Firstly, previous contacts available to the project team in the participating countries were approached with a view to their either acting as interviewees themselves or identifying other potential interviewees. These contacts came from a variety of previous projects of the European Foundation for the Improvement of Living and Working Conditions and of DGV. Secondly, new contacts identified in this way were approached with the same two purposes in mind. In this way a potential network of interviewees was identified in each country. These varied in size from six or seven people to more than 30 potential interviewees. These were reduced in number to between two and seven interviews for reasons of time and access contraints.

The second main source of information for the project came from an extensive literature search. This involved using traditional means of literature searching (database searching, official publications searching) and in addition, the identification of literature from the participating countries through the interviewees from each country. As indicated earlier, there was relatively little literature in relation to new policies for workplace health. Most of the available literature concerns traditional approaches to and issues in workplace health, especially in such areas as shiftwork and health, and unemployment and health. Most literature describes the relationship between specific workplace factors and health and almost no scientific literature concerns itself with the wider policy implications of research findings.

A further area of material interest in the literature concerned more descriptive studies of new initiatives. Here the emphasis was on identifying areas of practice, often at company level, which signalled new approaches to health at work, and which carried implications for policy development. Some interesting examples of this type of study were identified. These occurred in such areas as the delivery of health services to SMEs, the management of workplace absenteeism and the integration of general and occupational health approaches to workplace health.

Chapter 2

Trends in Work, Technology, the Labour Market and Workplace Health

Introduction

This chapter presents an overview of some relevant literature which describes the main drives for change in relation to health in the workplace. It is not an exhaustive review, but it serves to identify some of the major forces which are impacting on European workplaces and which have implications for how health services are delivered and undertaken in the workplace.

The most important issues of this kind which are addressed here include:

- Changes in the demography of the labour market this includes such elements as the ageing of the workforce, increasing female participation rates, labour market deregulation and changes in job tenure which relate to the various forms of atypical work. In addition, conditions of employment are changing rapidly, with less security of tenure and increases in labour market flexibility. Another feature of importance here is the currently high levels of unemployment and low levels of labour market activity in Europe;
- Changes in the nature of economic activity this refers to such trends as the increasing
 numbers of small and medium sized enterprises, the reduction of the public sector,
 manufacturing and agriculture, changes in management practice (leading, for example to
 more outsourcing, downsizing etc.), the growth of the service sector and the globalisation of
 trade;
- Changes in the nature of work important features of these changes include the increasing usage of and dependence upon computer and telecommunications technology, the growth of remote working, the automation of work processes and the increased knowledge content of

- many jobs. A significant feature of these changes has been the intensification of work processes, with increases in the pace of work and the experience of work stress;
- Changes in thinking on health these include a growing realisation of the importance of
 preventive strategies, the rethinking of occupational health, focus on general health and
 wellbeing, the increasing costs of health care and the high costs of disability;
- Workplace health issues here emerging issues include new hazards at work, a shift in
 emphasis towards health rather than safety, the growing importance of stress, increased
 emphasis on absenteeism management and an increasing recognition of occupation-related
 illness, including attention to reintegration/rehabilitation.

These issues are treated in the context of the implications they have for the provision of health services to workplaces, rather than in their own right. In particular, these changes in the world of work demand consequent changes in workplace health policies which go beyond health services.

The labour market in Europe

There are a number of significant trends affecting the labour market in Europe in relation to its growth, unemployment, female participation rates and the age of the labour force. However, while some general trends can be discerned at EU level, they do not affect each Member State equally - indeed there is a strong case to be made that the European labour market is not truly European at all, but is a collection of national labour markets with different demographic trends, economies and problems.

At EU level, the following trends in labour market demographics can be observed:

- The European workforce is ageing, as the balance between younger and older age groups in the population change in the Member States. However, there are large differences in how fast this is occurring;
- Female participation rates in the labour force are rising, though again there are large national disparities in this regard, and much of the more recent employment is part-time;
- The EU labour market does not function as freely as is the case in the US, with the mobility
 of labour being relatively low. For example, only two countries, Ireland and Portugal, have
 more than 10% of their working age population working in other countries;
- Unemployment rates in the EU vary considerably from a low of c. 6% in the UK to a high of c. 20% in Spain. There are many reasons for this variation, which include differences in economic structures, competitiveness, education and training, and the stage of the economic cycle of each country. However, there is reason to believe that much of this unemployment is structural and will remain relatively high even at the height of the economic cycle.

These indices of labour market functioning pose significant challenges to current policy making at both EU and national levels. In relation to the health of the workforce, these changes are especially important, as, for example, unemployment has demonstrable links to health and

wellbeing, increasing participation rates may influence the health and wellbeing of working mothers (and perhaps their children), while there are relatively well demonstrated effects of ageing on health. However, future trends suggest some significant shifts which will emphasise some of the current policy issues and reduce some others. For example, projections into the next millennium indicate:

- Increased female labour force participation rates;
- Falling unemployment rates as initially localised labour shortages occur. (This projection depends on assumptions being made about net immigration to the EU);
- Increases in older age dependency ratios. This will represent an absolute increase in some countries (i.e. those with currently low birth rates) and a shift in the nature of dependency (for countries with currently high birth rates), with larger groups of both older and younger dependents;
- Increases in life expectancy;
- Increases in the average age of the workforce;
- Increases in part-time, temporary working and self-employment;
- Increased career changing and spells of short term unemployment;
- Increases in actual and statutory retirement age, due to labour shortages and difficulties in funding state pension schemes;
- Reductions in levels of registered work related disability due to changes in social security policy (though increases in stress may have the opposite effect).

In summary, the European labour market will be tighter, older, have more female workers and be less secure in the coming decades.

Technology and work

There are a number of trends in relation to technology which are increasingly affecting the way work is done. These include:

- The growth in power and application of computer technology;
- Advances in telecommunications technologies leading to increases in new applications and large reductions in costs of usage;
- Changes in manufacturing technology, with increasing use made of robotics and computer controlled manufacturing;
- The growth of Internet based applications for research, retailing, information provision, service provision and publishing.

Not all of these carry obvious implications for workplace health issues. In some cases there are potentially negative impacts associated with new risks in using these technologies, while in others, advances in technology may reduce traditional hazards. However, the advances in computer and telecommunications based technologies carry with them the potential not only to change the nature of occupational health risks, but when taken in conjunction with emerging

business management methods and techniques, they are changing in a profound manner the ways in which work is defined and structured. The emergence of new and atypical work forms such as teleworking, distance working, self-employment, while not strictly new in the sense that they have not been seen before (though they may now be technology mediated), set new challenges to the delivery of health services to workplaces. (It should be noted that ICT technologies also have potential to create new ways of providing health services and information). Among these challenges are:

- The definition of workplace in the case of homeworking this causes practical problems in both legal and operational terms;
- The definition of employer and employee in situations where, for example, a 'self-employed' worker works for only one client, does this comprise a standard employer-employee relationship? Equally, where contract labour is supplied to work on the premises of another company (as frequently happens in computer manufacturing, for example) which of the companies is responsible for health and safety?
- More and more work is now carried on in temporary workplaces by workers with low levels
 of job tenure, often by subcontractors, often in hazardous industries. This poses significant
 challenges, not only for the supply of more advanced workplace health services, but also for
 basic health and safety services;
- How are health services to be delivered to the increasing range of types of workplaces, where employer-employee relationships are less secure than heretofore, and access is more difficult?

Approaches to workplace health

Broadly speaking, there are only three ways in which health services can influence the health of the population. These are:

- Prevention of health breakdowns through the control of risks to health;
- Protection of the health of the population through, for example, boosting resistance, or providing barriers to hazardous environments;
- Treatment of health breakdowns through illness, treatment and rehabilitation services.

These avenues of delivery are well known in public health circles, as they have informed the development of health services world-wide. However, while these principles of approach have been applied with respect to occupational health and safety for a long time, responses to the new challenges to the delivery of health services into workplaces, posed by demographic, policy and workplace changes, have not yet fully taken into account all of these approaches.

Traditionally, occupational health and safety services, which are the most established of workplace health services, have focused mainly on safety issues and have utilised each of the three approaches outlined above. They have had less focus on health issues, and then have

generally confined themselves to dealing with occupational diseases, a generally well circumscribed and small set of the diseases which can be traced directly to specific workplace hazards. In recent times, the issue of how occupational health services should deal with occupation-related disease has been raised as a challenge for the future, but as yet no widespread approach to this issue has been developed.

However, while the theory of occupational health service delivery dictates that most attention is directed towards safety and occupational disease, the practice of occupational health has often seen a greater concern with general health, even if this has occurred in an *ad hoc* manner. Specifically, many occupational physicians have come from a background of general practice, and in some cases at least, provided what were in effect, general practice services in the workplace. Moreover, in many countries, legislation has obliged occupational physicians to conduct medical screening of workers, mainly to identify their suitability for specific jobs, also for reasons of hiring and firing (from the employer's point of view), but rarely from a primary goal or concern to deal with the general health of the employee.

More recently, there have been some newer approaches to providing health services to workplaces. Most notable among these has been the transposition of developing health promotion approaches and methods to the setting of the workplace. The WHP approach is distinguished by its focus on the general health of the employee, rather than focusing solely upon occupational risk factors to health. Broadly speaking there are two approaches to WHP (Wynne, 1997) - one which emanates from the US and another which is developing in Europe. The US approach tends to focus exclusively on behavioural risk factors, often focuses on single diseases and uses the methods of behavioural modification and health education. The European approach, while not as widespread, and perhaps less coherent, tends to address both the individual and the work environment, employs a greater range of methods, is problem oriented and seeks integration with existing company structures such as health and safety or quality management.

There are some variations in the European approach, where there have been national approaches to general health issues. Most notable among these is the Maintenance of Work Ability approach developed in Finland (see Chapter 3 for details). This approach essentially combines health and safety, a European approach to workplace health promotion and an extensive rehabilitation approach for workers with health problems. It seeks to prevent health breakdown, especially amongst older workers, by means of health programmes, operational training for work and rethinking work organisation, and to reintegrate workers who have suffered some form of health breakdown.

One other approach which is currently under development by the European region of WHO (Baranski, 1998) involves making links between occupational health, workplace health promotion and environmental health approaches. It takes as its starting point the fact that, in large companies at least, there would tend to be sufficient skills available to cover all three approaches, and that there is a common thread running through these approaches. Entitled 'good practice in health, environment and safety management (GPHESM)' it aims to integrate the practices of these three

disciplines for purposes of promoting healthy and safe working conditions for healthy workers in a healthy environment within and without the walls of the organisation.

These approaches represent the current state of the art and ambitions with regard to workplace health. The challenges facing workplace health policy and services over the coming years are varied, and it remains to be seen if they can be met effectively. In particular, developments in the labour market, technology and working organisation (such as teleworking) pose challenges to both the integration and delivery of health services to workplaces.

New health risks and at-risk groups

There are a number of trends in the workplace and society at large which are leading to changes in the nature and prevalence of the health risks to be found within the workplace. These may broadly be summarised as:

- Changes in work related technologies;
- Labour market changes;
- Changes in the nature of work.

As indicated earlier, there are significant changes in the technologies being used in the workplace, especially in relation to what might be termed as machinery used in the workplace. Broadly, these can be viewed as adding intelligence to tools, reducing the manual skills levels required to do the job, reducing the safety hazards of work and adding to the knowledge content of work.

It is beyond the scope of this report to analyse in detail the health and safety implications of all new workplace technologies. However, the trends in this context can be alluded to:

- Manufacturing technologies will generally become safer, as more and more processes become automated;
- Office technologies will carry few risks which are not already known;
- The risks attached to technologies in the sunrise bio-industries will need close attention, as they are not fully understood.

Labour market changes will give rise to a set of potentially at-risk groups, and the number of people who fall into these categories is expected to increase. Among the more important of these groups are:

- Shiftworkers the numbers of shiftworkers are projected to rise as the service sector increases in size. The health hazards of shiftwork are already well known, but the exposure of the workforce will increase.
- Atypical workers part-time work, temporary work, mobile work, self-employment and home-based work will all increase. It is not yet clear whether there will be a significant

association of new hazards with these work forms, but the delivery of workplace health services to these groups will be difficult. Potentially there will be increased risks due to spells of unemployment, job uncertainty and longer working hours.

 Older workers - as the age of the European workforce increases, the capacity of older workers to cope with the demands of working life will become an issue. (As this is one of the most important labour market projections, it is treated in some detail below).

Changes in the nature of work itself will gather pace in the coming decades. Though not all of the changes will carry increased health risks, it seems clear that the following work-related hazards will increase in importance.

- Increased intensification of work it seems likely that work pace will increase, driven in
 part by technological advances, but also by management methods. This is likely to lead to
 increased levels of occupational stress.
- Increased knowledge content of work the demands of technology and the increasing specialisation of manufacturing and services will lead to an increased knowledge content of many types of job. This makes obvious demands on training needs, but also contributes to the demands of work itself. On the whole, this will lead to increased levels of stress for workers. On the other hand, there is also likely to be a significant increase in numbers of low skill jobs in e.g. health and social care related services.

One final issue which deserves mention concerns violence (as distinct from bullying) at work. The last decade has seen an increase in this phenomenon, though its cause has probably little direct relationship to workplace factors. It seems probable that violence against workers is more directly related to levels of violence in society, and to the extent that this might increase generally, workers involved in dealing with the public, will be increasingly at risk from this hazard.

Ageing, health and working ability

As indicated elsewhere, the workforce in Europe is ageing rapidly, although at very different rates in the Member States. Moreover, projections of labour force growth and economic activity in the next two decades suggest that there is a strong possibility of labour shortages developing throughout much of Europe, with consequent sharp falls in currently high unemployment rates and increasing activity rates. These demographic and economic changes are already beginning to affect many countries, especially in relation to the 'greying' of the workforce.

There are many consequences of these trends and these include:

- Financial pressures on the funding of State pensions;
- Higher rates of female labour force participation for reasons of maintaining a labour supply;
- Encouragement for older workers to remain in the labour force;
- Changes in the basis on which State pensions are funded;
- Policies which seek to reintegrate older and disabled workers into the labour force.

These socio-economic trends and the emerging policy responses which will become increasingly necessary from a financial and economic point of view, if no other, represent a major change from the employment, welfare and health policies which were followed by EU Member States throughout the 1980s. Indeed, in countries where the socio-demographic changes outlined above are occurring later rather than sooner, policy rethinking has yet to catch up.

During the past decade or so, the major socio-economic problems facing most of Europe were concerned with high rates of unemployment, often among the young, and sluggish rates of economic growth. The thrust of many countries' economic policies was to try to reduce unemployment levels by whatever means available, and these policies included the expansion of training schemes, reductions in retirement age, enabling older unemployed people to take early retirement, and more controversially, easing the definition of work disability, thereby reducing the numbers of unemployed.

However, reversing these policies has implications for the health of workers, especially ageing workers. The economic success of any policy to raise the retirement age or to reintegrate older workers depends on their being healthy and productive enough to contribute meaningfully. Currently, there are a number of restrictions (though not legally based) on the kinds of work for which older workers should be considered. For example, workers over 50 are recommended not to do night work, while it is also thought that work tasks involving high memory load, high levels of cardiovascular fitness, muscular strength and joint flexibility or fast reaction times are less suitable for older workers (Czaja and Sharit, 1993 a, b; Harma, 1996). However, it should be noted that most jobs do not carry stringent requirements in these areas. The challenge therefore, is to design jobs and working environments which not only do not expose older workers to hazards which are age specific, but to design work and working systems which take account of the additional skills which experience brings.

Griffiths (1997) provides a good overview of age related effects on health, work and productivity. Contrary to common perception, most reviews of the area show no consistent age related effects on work performance (e.g. Warr, 1994, Salthouse and Maurer, 1996). This is not to say that there are no effects of age on, for example, cognitive abilities or psychomotor performance in population based studies, but rather that most jobs do not stretch older workers to the point where age related differences in capacities are material to on-the-job performance. In other words, age makes no material difference to most (non-physical) jobs on the average. However, there are some decrements in physical performance (e.g. Kemper, 1994) which may be relevant to physical jobs and there are of course individual differences to be considered.

However, work performance does not solely consist of the sum of psychological and physical capacities of an individual, it is also mediated by such factors as knowledge, skills, abilities, disposition, motivation and a range of organisational factors. In addition, there are negative stereotypes with regard to older workers and the attitudes and expectations of the ageing workforce held by managers and significant others must change (e.g. the Foundation, 1997).

While there is not a large amount of empirical evidence to support these 'compensation' models of human work related performance as yet, they seem to provide a fruitful line of inquiry for the future.

Policy level interventions to address ageing

There have been a number of EU level policy initiatives in recent years which bear on the issue of older workers and health. These include:

- The Framework Directive (1989), which states that employers should adapt work to the individual in terms of workplace and job design;
- The 'Resolution on the Employment of Older Workers' (1995) which, in a non-binding manner, proposes that governments and the social partners should initiate programmes which are sensitive to the needs of the older worker. Many Governments have already done so (Delsen and Reday-Mulvey, 1996);
- In addition, some countries have set up national research programmes to investigate the issues surrounding the older worker. Perhaps the most notable of these are to be found in Sweden, which has set up the 'Work after 45' programme in 1990 (Kilbom and Hultgren, 1997), and Finland which has more recently established the 'FinnAge Respect for Ageing programme' (Ilmarinen, 1997).

There have also been attempts to influence management attitudes towards older workers, as many of the barriers to continued employment for older workers find expression in negative attitudes and perceptions among potential employers or their line managers. Consequently, changing these negative attitudes by means of comprehensive age awareness programmes is seen as a useful tool to encourage older workers to remain at work. In addition, measures to combat barriers in the areas of recruitment and selection, access to training, the design of the working environment and work organisation are also needed. Finally, the use of health promotion programmes for existing older workers, and appropriate rehabilitation programmes for those older workers who may have left the labour force for health reasons are also seen as appropriate policy responses to maintaining older workers at work (the Foundation, 1997).

Occupational health services

Baranski and Dam (1998) provide the most recent overview of occupational health developments in Europe. In their paper, which forms part of a larger document addressing itself to environmental and occupational health, they chart recent developments in occupational health, assess the current situation and draw out a number of scenarios for the future development of occupational health.

It is pointed out that despite occupational health having a broad definition, which would include *inter alia*, the maintenance and promotion of health, most occupational health practice focuses exclusively on safety issues. In addition, Baranski and Dam point to the fact that only about half of the 400 million workers in the WHO European region are covered by occupational health services.

Despite these limitations, there have been a number of developments in occupational health services during the 1990s. Major positive legislative, conceptual and organisational change has taken place within the EU, but with negative changes taking place in the former communist countries of Central and Eastern Europe.

At the conceptual level, there has been a move away from a narrow definition of the function of OHS which focused on safety, towards one which has a more health oriented focus (e.g. Behrens and Westerholm, 1996; WHO, 1995). At legislative level, the implementation of the Framework and related Directives has led to an increase in the coverage of employees in the EU Member States and to a broader definition of OHS. At an organisational level, there have also been developments within the EU, with the 1990s seeing a process of large companies externalising and outsourcing OHS functions and the generation of a private sector market for OHS. This has led to the need to ensure the provision of good quality services in a number of countries (e.g. Prins et al, 1997).

Baranski and Dam summarise the challenges facing OHS as consisting of:

- Changes in the nature of working life work fragmentation, informal work and migrant workers;
- Changes in occupational exposure patterns increases in violence at work, stress at work, and physical load and repetitive movement, new chemical and biological hazards;
- Dealing with occupational accidents and diseases, which are still unacceptably high;
- Dealing with occupation related and non-occupational diseases.

With regard to future developments, Baranski and Dam identify a number of trends for the future development of OHS. These include:

- The integration of occupational health and environmental management systems this will take place because of the increasing demand on companies to improve environmental management strategies and will involve a significant relationship with quality management procedures within the enterprise;
- Increasing collaboration between company health and environmental services and municipal health and environmental services;
- The elaboration of economic incentives for improved health and safety;
- The development of multidisciplinary preventive services;
- Greater policy and functional integration between all workplace health services and human resource management and operational strategic management within enterprises;
- Increased emphasis on the evaluation of occupational health services, in both cost and effectiveness terms;
- Improvements in the information base for policy development;
- Improvements in training and education for professionals and for employees and managers.

It is clear that major developments in the philosophy and organisation of occupational health services are taking place. While it could be argued that the capacity always existed for occupational health to take a broader view of health, it is not until recent years that discussion has taken place about the needs and opportunities for developing a more integrated view of health. It should also be recognised that the development of OHS services faces a number of major constraints, and even if there is a widespread desire among professionals to broaden the scope of their activities, practical difficulties act as barriers. These include:

- Statutory responsibilities these ensure that there is often little time available for optional, more general health oriented activities;
- Education and training OHS professionals often are not adequately trained in the skills needed for a broader approach;
- The privatisation of OHS in many cases this has led to much sharper business focus
 amongst OHS professionals. In practice, this often means offering services which cover the
 bare legal minimum, especially where employers perceive OHS to be a cost burden. This can
 lead to a disincentive to innovate by OHS;
- Lack of demand for 'advanced' services there is currently no evidence that large numbers
 of employers are demanding services which are based on an integrated view of health.
 Though it is argued elsewhere in this document that this demand is likely to rise, it is likely
 to occur slowly and may be employee driven.

Occupational health services are clearly approaching a development watershed. There is a movement by WHO to broaden the concept and practice of occupational health, but there are still significant technical, organisational and other barriers to be faced before these broader concepts and practice become widespread.

Workplace health promotion

There have been a number of developments in Europe relating to WHP which are worthy of attention. These include:

- The development of a European Network for Workplace Health Promotion (ENWHP);
- The development of national level policies on workplace health promotion;
- The development of an interest in bringing WHP to SMEs;
- The development of a closer relationship between WHP and OHS.

The ENWHP is a network of national health promotion agencies which has been set up by the European Commission for the purpose of collecting and disseminating information on WHP at national and EU levels. Established in 1996, the ENWHP has also become involved in a number of flagship projects which seek to move forward the practice of WHP in the EU. Chief among these is a project (1997-1999) which has sought to identify models of good practice in WHP, using

a set of criteria adapted from the area of quality management. The ENWHP is also about to embark on a major project which will seek to stimulate the practice of WHP amongst SMEs.

Among the documents produced by the ENWHP are the Luxembourg Declaration (1997) which sets out an agreed 'mission statement' and approach for WHP, which has been subscribed to by network members, and the Cardiff Memorandum (1998), which recognises the importance of disseminating WHP to SMEs.

Recent years have also seen the development of national policies on WHP in Ireland, Northern Ireland and elsewhere. In part inspired by European developments, these policies also represent a response to local needs for WHP. An interesting feature of both of these documents is that in their conception or implementation, an active collaboration with the field of workplace health and safety is seen as being essential.

The disciplines of health and safety and WHP have long recognised the need to deliver these services to SMEs and microenterprises, as organisations of this size generally employ the majority of national work forces. Of course, the difficulties of arranging for services to be delivered are also well known - they include resource problems, apathy of SMEs, instability of SMEs and many others. However, there are now some serious attempts being made to rectify this situation, with pilot programmes and studies underway in countries such as Finland, the UK, Ireland and elsewhere. In some cases these attempts cover both areas of OHS and WHP (e.g. Finland) while in others they are confined to WHP.

There has been debate in recent years about the need for WHP to develop a closer relationship with OHS, especially in the context of the widespread dissemination of WHP. This debate has centred around issues of competence, and it must be said, territory, but there has been an increasing acceptance that the best way forward for WHP is to integrate its practice with other ongoing organisational systems such as health and safety, occupational health, quality management and human resource management. This acceptance has been reflected in a number of ways in recent times, most notably perhaps in the Northern Ireland context, where the WHP policy currently under development is a joint initiative between the health and safety and health promotion agencies. Further examples of this rapprochement can be found in the national reports in Chapter 3.

The European Foundation survey on working conditions

Most of the material reported on in this document reflects the view of scientists and policy makers, but the Second European Survey on working conditions (the Foundation, 1997) is one of the few studies where workers themselves are asked for their opinions on workplace health issues. This survey was conducted on almost 16,000 respondents in each of the Member States in 1996. Some of the more pertinent results are outlined below.

There are obvious national differences between the samples in the responses made. For example, 80% of West Germans believe that work affects their health, while only 29% of Irish do so. Almost nobody in any of the samples believed that work affected their health positively (though this was only recorded if mentioned spontaneously by respondents).

Other interesting findings to emerge from the survey were:

- Relatively few people reported being subjected to any form of violence in the past 12 months, with less than 10% being affected in all countries;
- Occupational stress was seen to be a problem by between 20% and 33% of respondents;
- The incidence of backache varied between 13% and 39% of respondents;
- Muscular pains generally affected between 10% and 20% of the samples;
- Psychological problems, other than stress, generally affected small percentages of the samples;
- Job security levels were surprisingly high, with the exception of the UK (the most deregulated labour market in the EU), and ranged between 42% and 83% reporting that they were in full-time, permanent employment across the EU.

While these results rely on self-reports, and while there are obvious cultural differences in relation to the reporting of symptomatology, they do provide an indication of the kinds of health and working conditions of importance to the EU workforce.

International level policy initiatives

There have been a number of recent EU policy initiatives which are of relevance in the current context. These include:

- Adoption of the ILO (1996) convention calling for equality of treatment for homeworkers. The Commission has called for ratification of the convention, signed by all Member States with the exception of Germany and the UK, by the end of 1999. The most recent (1992) figures indicate that that 4.9% of the working population usually work from home, and it is likely that these numbers have increased since then. In addition to monitoring Member States' actions in relation to homeworking, the Commission has signalled in its recent Social Action Programme 1998-2000 that it will consult the social partners regarding the need for action to protect teleworkers.
- Adoption of the Social Action Programme (1998) This programme sets out a framework for the future development of European social policy between the years 1998 and 2000. It covers three areas jobs, skills and mobility; the changing world of work; and developing an inclusive society. As its overall aim, is states that social policy should promote a decent quality of life and standard of living for all in an active and healthy society, and it sees these goals as being realised through access to employment, good working conditions and equality of opportunity;

The Action Programme takes as its starting point the premise that social goals can only be realised through economic growth and vice versa. However, it also states that the whole point of economic growth is to ensure a good standard of living and quality of life for citizens. It therefore sees the new Employment strategy of the EU as being central to realising social goals. However, the Action Programme also acknowledges the need to ensure the creation of safe and healthy workplaces and the importance of a healthy workforce for the economy and its competitiveness.

In pursuing the three-pronged agenda, the Commission will use a balanced mix of policy instruments - partnership and policy development, financial support and incentives and legislation, though it does not envisage a heavy legislative programme.

The aim to create healthy and safe workplaces is subsumed under the changing world of work theme. In this area, the Action programme points to past EU and national legislative efforts which will form the basis of the current programme. Specifically, it calls for the effective implementation of existing legislation and also for the adaptation of these regulations to take account of new risks and changing work practices. However, the focus of the Commission's concerns under this heading is firmly on traditional health and safety risks.

Notwithstanding this focus, there is scope within the Action Programme for a broader view to be taken of the role of workplaces in creating a healthy population. In particular, the policy lines are concerned with equality, public health (where there is an emphasis on developing measures to cope with an ageing population), modernising work organisation and adaptability, and finally on modernising and improving social protection.

There have also been a number of policy initiatives taken by the World Health Organisation, especially in the area of occupational health. These have focused, *inter alia*, on strengthening preventive services at work, introducing quality assurance in the management of OHS services, integrating WHP and OH and developing the concept of good practice in health, environment and safety management (Baranski and Dam, 1998).

The strategy of the European region of WHO has been to develop collaborative links with other international agencies when seeking to implement these policies and initiatives. Accordingly, they collaborated in these initiatives with the ILO, the EU Commission, the Foundation and the European Health and Safety Agency.

Chapter 3

National Reports from Seven Countries

Introduction

This chapter summarises the main findings from the interviews which were conducted as part of the study. The material obtained was in many ways diverse, as the priority issues which drive workplace health policy in each of the participating countries differ. However, the descriptions of the policy and practice initiatives in each country to be found below has sought to present a common structure, as far as this was possible. The issues which are covered in each national description are:

- The economic and social context of the country;
- The structure of occupational health services;
- Key drivers for policy development;
- Developments in policy and practice.

The description of policy initiatives have been drawn largely from the interviews. However, they have been supplemented with material drawn from a number of documentary sources. These include:

- the European Health and Safety Agency survey of future trends in occupational health and safety (EHSA, 1998);
- the Foundation study of occupational health and safety strategies in Europe (Walters, 1996).

The national descriptions outlined below are not an attempt to comprehensively describe all relevant policies in the area of workplace health. Rather they seek to highlight current and future initiatives which have at their core new or innovative approaches to health in the workplace. Thus, incremental policy developments which address long standing workplace health issues are not of interest, but innovative approaches to existing problems or the first steps in policy development for new issues are of most interest.

Throughout this chapter, each national text focuses not only on description, but also seeks to provide an explanation of why specific policy initiatives were undertaken. In addition, a limited attempt is made to assess policy - this represents a synthesis of the views of the interviewees and of the author.

Finland

The national context

In Finland the labour force in 1996 was made up of 1.27 million men and 1.17 million women making a total of 2.44 million. These figures indicate that Finland has one of the higher female participation rates in the EU. Unemployment in 1996 stood at 15.6%, which was among the highest in the EU at that time, but this rate has since fallen considerably in the light of relatively high levels of economic growth. Of men, 9.9% worked in the agricultural sector, with 39.1% in industry and 51% in the services sector. For women, the corresponding figures were 5.7%, 13.9% and 80.4%. Approximately 161,000 people were employed in agriculture. Compared to many EU countries the number working in agriculture is low.

Finland has traditionally been a relatively wealthy country, with a long tradition of high levels of social provision. Until shortly after the fall of communism in the Soviet Union, Finland enjoyed a good economic situation for many years, with adequate levels of economic growth, low levels of unemployment by European standards and among the highest standards of social protection provisions to be found anywhere in Europe.

However, the collapse of the Soviet Union brought economic catastrophe to Finland within a very short space of time, with the Soviet export market being almost completely closed, economic activity declining rapidly, unemployment rising from c. 5% to 16% within a matter of months, currency difficulties and the near collapse of elements of the financial system. In addition, the early 1990s saw Finland hit by the global recession of this time and the return of many migrant workers from Sweden and elsewhere. One further significant feature of the Finnish scene was that an early retirement scheme was instituted in the late 1980s, prior to the recession in the economy.

Finland also had other socio-economic issues to face at this time, two of which are of specific concern here. Firstly, Finland has one of the oldest populations in Europe, and projections are that the population of both working and retirement age will continue to age. Secondly, Finland has had one of the highest rates in Europe of work disability in older workers.

The policy challenges which Finland faced in the early 1990s can be described relatively easily. In essence, they faced a high and growing dependency ratio (especially of older people and the work disabled) against a background of a troubled economy and a high level of social provision. These economic drivers constituted much of the drive for change in workplace health policies.

However, the problems which Finland faced were not addressed solely from a financial or economic perspective. The long tradition of social concern in Finnish society also played its part in addressing the problems of older workers, retirees, the work disabled and the unemployed.

Occupational health services in Finland

Finland has one of the most extensive occupational health services in Europe, with approximately 90% of the workforce being covered by OSH services which are increasingly multidisciplinary in nature. A very low proportion of self-employed persons are covered by the services, in spite of a considerable amount of developmental work to make the services attractive to the self-employed. These services are supplied by about 4,000 professionals, including 1,400 physicians, 2,000 nurses and 300-500 psychologists, hygienists and physiotherapists/ergonomists. There are also about 11,000 safety engineers supplying services to enterprises (Walters, 1996).

These services are both widespread (approximately 80%) and integrated, i.e. offer both traditional OSH and health promotion services (some offer a range of curative services), as well as being at the leading edge in each of these fields. The development of services is backed up by a large group of specialist researchers in such organisations as the Finnish Institute of Occupational Health, the Universities and the Pension Funds whose function is to investigate emergent OSH issues.

The Finnish approach to workplace health issues is perhaps unique in Europe, as it emphasises the general health of the worker, rather than focusing solely on occupational safety and health. This approach is reflected in the structure of the services provided, and is accompanied by a widespread acceptance among professionals and the Government and the social partners that this is the appropriate manner in which to deal with workplace health. Unlike in many other European countries, there would appear to be little friction between professional groups with regard to the issues of role, responsibility and resources, at least in principle. This joint and integrated approach to the problems of workplace health serves as a good example of how services might be organised elsewhere in Europe.

Moreover, this integrated approach to workplace health is implemented in practice. Though services may vary somewhat in scope and quality, the example of Neste Oy, an oil refining company, illustrates the comprehensive approach which is taken. At their oil refinery in Porvoo, the occupational health team consists of physicians, nurses, and physiotherapists, in addition to safety engineers operating from a purpose built centre. This health centre is equipped approximately to the level of a small community hospital, including for example, a small surgery, a well equipped laboratory, consulting rooms and exercise/physiotherapy facilities. The services which are provided range from occupational health, safety programmes, risk assessment and management, health promotion through a proprietary programme (ProHealth), physiotherapy,

emergency treatment and general practitioner services. In addition, rehabilitation of ill or injured workers is routinely undertaken as part of the OSH service. Neste is perhaps one of the more well resourced OSH services in Finland, and may not be typical of smaller companies. However, the approach which is taken is typical of the Finnish approach to workplace health.

Current policy initiatives

The policy background

Finland is to the forefront of new approaches to workplace health in Europe. There are a number of reasons which explain the high level of innovative approaches to this issue. These include the fact that there is an extensive (and unmatched in Europe) research and development infrastructure for OHS, and a strong history of progressive development in health and social policy.

However, the most important factor which is driving new health initiatives in Finland is concerned with the demographics of the labour force, which is the oldest in Europe, and a related pensions system, where a combination of early retirements and a predominantly 'pay-as-you-go' funding model has led to a need to limit the costs.

Until recently, the average age of retirement from the workforce was 58 years, though this has now risen to 59, and this second lowest retirement age in Europe, when combined with the unemployment crisis which struck Finland in the 1990s, led to projections that as much as 35% of workers' salaries would need to be devoted to funding current pension liabilities, which would clearly be unsustainable.

A further demographic feature of concern is that Finns of both sexes are living longer than heretofore - life expectancy for women is now approaching 80 years, while male life expectancy is approximately 77 years. It has been predicted that by 2005, the largest age group in the workforce of many companies will be between 55 and 60 years old.

In short, Finland has faced a serious crisis whereby people are living longer and retiring early, thereby increasing pension liabilities. In addition, the funding available to meet pension requirements was and is under pressure from reduced numbers in employment.

There are also a number of other workplace health issues which are currently of concern in Finland. This concern is reflected in the directions which current research is taking. Some current research areas include:

- Unemployment and health extending the concept of Maintenance of Work Ability to the unemployed;
- Developing new approaches to new workplace health threats, e.g. stress at work, IT usage;
- Developing new delivery mechanisms for atypical workers;
- Developing responses to the problems posed by new forms of work organisation.

Research plays an important role in Finland, as it is closely tied to the process of new policy formation. The Finnish Government devotes a large amount of resources to undertaking research. It would appear that the link between policy and research is a good deal stronger and closer than in many other European countries, where research is either not undertaken at all, or its results and findings are effectively ignored or sidelined.

The policy response

There are many aspects to the policy response to this situation. Fiscal measures have been implemented which seek to reduce access to early retirement and the costs to the State. However, of principal concern here are the workplace health policies which have been introduced to try to reduce the level of early retirements due to ill health.

The main policy instruments which have been used to address these problems include:

- 1. The World Health Organisation's Health For All programme which has been in place since 1982 and has been revised in 1993.
- 2. Maintenance of work ability this programme (further described below) was instituted after a wage negotiation pact recommendation in 1989, and was included in the occupational health care as a function of occupational health services in 1991. The reimbursement system for the costs of occupational health services changed to support the reorientation of the services in 1995 and an evaluation and assessment of reorientation needs will be undertaken in 1998.
- 3. Cost-containment of employment pensions primarily based on the experiences of early (invalidity) pensions, a Pension Committee of the early 1990s proposed several changes in counting the level of pension, early and active rehabilitation efforts and termination of a national basic pension. All these proposals have been put into effect as of 1998.
- 4. The national programme for ageing workers 1998-2002 this programme is based on the recommendation of a Committee on employability of ageing workers. A national programme of the Ministries of Social Affairs and Health, Labour and Education jointly lead a programme which aims to address all factors which directly or indirectly influence the position of ageing workers in working life. The tools used are information, education, marketing, training and experimenting and legislative change.
- The Finnish Workplace Development Programme 1996-1999 this is a State supported action programme undertaken in many types of workplace and deals with such issues as innovation, work organization, leadership and management, productivity and sustainability.
- 6. The employability of older long-term unemployed workers this is a programme based on service needs of the older long-term unemployed and its evaluation 1996-1999, concerning 10 towns in Finland. The model of operation expanded to cover all Finland in 1998.

Many of these policies have been coordinated by the Ministry of Social Affairs and Health and have concentrated on actions in the areas of health, working life and retirement. The principal instrument used to drive these policies is the 'Maintenance of Work Ability' (MWA) concept. This concept and methodology originated from a collaboration between employers and trade unions as a response to the problems of early retirement, and has subsequently been developed by the Finnish Institute of Occupational Health and the Pension Funds.

The MWA concept and methodology is currently being implemented in a number of programmes. These most notably include the FinnAge programme (which this year has become a nationwide programme called 'Experience - a National Treasury' which will run from 1998-2002), which has a large focus on the workplace and a set of workplace pilots in the public sector, some large private sector enterprises and a number of small company pilots.

Current practice initiatives

The 'Maintenance of Work Ability' concept

The 'Maintenance of Work Ability' (MWA) concept appears to be unique to Finland, and has been designed as a policy and practical response to problems of ill health in the workplace, with special emphasis on providing services to older workers. The health and disability problems of older workers are not seen to be a function solely of the individual, but are due to the interaction of the work environment and work tasks in which the individual operates, and the health status and professional competence of the worker. Framing the problem in this way leads to a balanced and multi-stranded strategy for intervention.

There are four key concepts within the MWA paradigm: these are:

- Functional Health Capacities this refers to the health status of individuals in terms of the functions they can perform.
- Professional Competence this relatively new element of the MWA concept refers to the level of education and training the individuals have, to enable them to undertake their work.
- Adjustment of the Physical Work Environment this refers to the process of modifying the
 physical aspects of the work environment in order to make the work more suited to the
 worker. In particular, it focuses on efforts to reduce both whole body and local physical load.
 This may be achieved by, *inter alia*, reducing work pace, altering work-rest schedules or
 redesign of physical tasks.
- Adjustment of the Psychosocial Work Environment this refers to the process of modifying
 the psychosocial work environment for purposes of better fitting the work to the worker. In
 practice, this can involve the concept of age management (see below) which involves
 altering the attitudes of supervisors and the organisational climate.

The programme is based on the premise that both objective health status and perceived health status decline with age. For example, research which has led to the development of the concept

reported that 31% of female workers of all occupations in the 44-48 years age range reported at least one musculoskeletal problem, while 11 years later, the same cohort reported incidence rates of 56%. Similar increases were seen among males (Ilmarinen et al., 1991; Tuomi et al., 1997).

An analysis was performed of the factors which contribute to improvements in work ability over time. The principal factors associated with improvements were improvements in supervisors' attitudes towards the older workers, reduction of repetitive movements and increased physical exercise during leisure time. More specifically, efforts made in altering the physical and psychosocial work environments were seen to be effective.

However, health status is not seen as the sole determinant of working ability. Within the MWA concept a process model of these factors is currently under development (Ilmarinen, 1998; personal communication). This model will be a three layer model which groups factors influencing work ability at the societal, workplace and individual levels. In addition, the model will specify the kinds of interventions which can be made at these levels and the results which could be expected. In essence, this model will specify a dynamic and multidimensional approach to the issue of maintaining older workers in the workforce, while maintaining and improving their health.

The concept of 'age management' is important here. This consists of focusing on four elements of supervisory behaviour:

- Attitudes towards supervisors' own ageing (as this predicts their attitude towards ageing workers);
- Support for teamwork;
- Work organisation;
- Communications with older workers.

Twenty-five pilot studies have been carried out using the MWA concept as part of the FinnAge programme between 1990 and 1996. Results to date are very encouraging and demonstrate that poor or moderate work ability can be improved, while good work ability can be maintained. In addition, cost-benefit analysis of some of these pilots has indicated that the financial investments made in developing work ability programmes may be returned as much as ten-fold. Moreover, there is also evidence that the life satisfaction of individuals who had participated in an MWA programme has increased significantly.

'Maintenance of Work Ability' in small enterprises

A significant part of the application of the MWA concept has taken place in small enterprises. Finland has one of the highest coverage rates of OSH services in Europe and in recent times large scale pilot activity of the MWA concept has taken place (FIOH, 1998). This activity has largely been funded through EU Social Funds, and this was made a precondition of Finnish entry into the EU. The assessment of these pilot initiatives is now becoming available, and it would appear that

they have largely been successful in bringing the concept and practice of MWA to small enterprises. However, it is also felt that the availability of public sector funding for the pilot schemes was a crucial part in their success, and that if such funding was withdrawn, then it would be much more difficult for the concept and practice to become widespread.

France

The national context

In France, the labour force in 1996 was 22.2 million, which was made up of 12.3 million men and 9.9 million women. In all, 14% of the workforce were unemployed, though this figure has fallen slightly since then. Of men, 23.8% worked in agriculture, 25.4% in industry and 50.7% in the services sector. For women, the figures were 21.9%, 6% and 72.1% respectively.

Occupational health services in France

In France, the Labour Inspectorate has powers relating to the control and application of labour regulations, conciliation, arbitration and mediation procedures as well as participating in the implementation of employment policy. With regard to the organisation of occupational health services, the numbers of occupational physicians has increased in recent years and they now cover approximately 85% of the workforce. These are largely organised on a group practice basis. Occupational medical practices are responsible, *inter alia*, for organising annual medicals for employees. In addition, they are obliged to spend at least one third of their time in risk assessment and the evaluation of company health and safety systems and in consultation on the introduction of new production techniques.

Training and retraining has been a significant feature of the French occupational health scene in recent years. This has occurred at all levels, with health and safety workers in enterprises entitled to a three or a five day training course depending on company size. Furthermore, there has been a new inter-university initiative in relation to professional training, which has increased the emphasis on general health issues for employees as compared to a health and safety focus (see below for more detail).

Issues which the occupational health services will face in the near future include:

- Devising measures to cope with the intensification of work;
- Meeting the challenge of delivering occupational health services to SMEs;
- Delivering occupational health services to the service sector.

Workplace health issues and initiatives in France

The organisation of French occupational health services follow relatively traditional lines, with clear lines of responsibility attaching to the professions involved in workplace health. Occupational physicians carry most responsibility for occupational health and there is a stipulation that they must spend a given percentage of their time engaged in risk assessment in the

workplace. However, while this regulation may seem to be forward thinking, and in many ways it is, there is a widespread feeling that there is still insufficient time spent on activities other than medical screening.

The current priorities of the health and safety agencies in France are largely concerned with improving current approaches to existing problems. For example, the recent Bilbao Agency publication indicated that for France, their main current concern involves improving the regulations concerning asbestos. In addition, they view their main strategic efforts in the near future being directed at improving the coherence of regulatory efforts and initiatives between the OHS agencies involved in their implementation and the evaluation of these regulatory initiatives. This issue seems to excite a good deal of current debate, with articles being written in the public press. For example, Le Monde (25 June 1998) carried a two-page feature which criticised the implementation of health and safety regulations, with the labour inspectorate coming in for particularly heavy criticism.

However, the French national agency for occupational health and safety also indicates a concern with future labour market and work related changes in the areas of teleworking, increased use of new technologies and changes in labour market demographics, i.e. the ageing of the workforce.

It did not prove possible to identify a single national agency with responsibility for workplace health promotion in France. However, informal communications lead to the impression that there is a certain amount of workplace health promotion taking place, despite the absence of a national policy in the area. Three sources of information would support this contention:

- Discussions leading to the recent French 'Declaration' on workplace health promotion (see below) indicated that the concept of WHP is not entirely new to French workplaces. Good practice in occupational health in France has in the past involved a certain focus on the general health of the worker. The methods involved would largely come from the health education area and there is some evidence of a US style approach to the issue. In addition, there would appear to be some OHS practice which uses the routine health screenings which take place in French workplaces as a basis for workplace health promotion.
- There would appear to be a certain level of growth in the private or voluntary sector provision of health promotion to French workplaces.
- Recent developments in training (over the past decade) for occupational health professionals (physicians and nurses) have seen a radical alteration of the perspective on occupational health. This has involved a shift from a traditional, safety and workplace hazard based approach towards one which incorporates a focus on general health and wellbeing. Perhaps the best example of this is to be found in the DIUST training course (Diplome Interuniversitaire de Sante du Travail) for occupational health nurses which focuses not only on traditional skills and issues, but which emphasises the skills of needs assessment, programme planning and a broad view of health and wellbeing.

In 1998 the 25th national conference on occupational medicine saw a WHO-inspired adoption of a French 'Declaration' on workplace health promotion in Europe. The purpose of establishing this Declaration was to try to initiate a formal movement for workplace health promotion amongst French occupational physicians, nurses and allied professions. The Declaration is consistent with the WHO definition of workplace health promotion and it also draws attention to the need for good environmental health practice. It is hoped that the Declaration will form the first step in establishing a more formal movement of workplace health promotion in France, but it is too early to judge whether it will be successful or otherwise.

Ireland

The national context

In Ireland, the size of the labour force in 1996 was 1.3 million which was made up of 0.8 million men and 0.5 million women. The unemployment rate stood at almost 13% which represents a fall from the heights of the early 1990s, and at time of writing it has fallen further to below 9%. 46.1% of men worked in agriculture, 17.1% in industry and 36.8% in the service sector. For women, the figures were 21.2%, 4.6% and 74.5% respectively. These figures indicate that Ireland has one of the largest agricultural sectors in Europe, with correspondingly small proportions of the labour force employed in industry or services.

Ireland currently enjoys the fastest rate of economic growth in the EU. Growth in the past five years has consistently been above 5% and is estimated in 1998 to be within the range of 8-10%. This rate of growth has led to GNP per capita rising from approximately 78% of the EU average in 1993 to almost 100% of the EU average in 1998.

As a consequence, unemployment rates have fallen dramatically from a high of more than 16% in the early 1990s to a current rate of approximately 8%, which is the lowest percentage rate since records began in 1983. This fall in unemployment has occurred despite rapid growth in the labour force, which has risen dramatically for three reasons - the youngest population age structure in the EU, a rise in female participation rates and a rise in immigration into the country both by Irish exemigrants and more recently, by other nationalities.

There has been relatively little policy change in Ireland in the area of health and safety - the success of the economy has served to highlight already existing problems such as safety in high risk sectors. The recent developments in workplace health promotion policy have been driven by two main factors - it is part of the fulfilment of a broader public health strategy and to some degree may also have been influenced by developments in this direction elsewhere in Europe. However, it should be noted that Ireland does not face the same demographic pressures when compared to the rest of Europe - the age structure is relatively low and levels of work related disability are low.

Workplace health policies

Workplace health policy issues in Ireland are the responsibility of two Government agencies: the Ministry of Health and Children, which is responsible for public health, and the autonomous state agency responsible for Health and Safety - the Health and Safety Authority (HSA).

Within the Ministry of Health and Children, the Health Promotion Unit (HPU) is responsible for devising and implementing policies with regard to health promotion. Its fields of activity take in what might be termed general health promotion in relation to a range of public health issues such as smoking, AIDS, heart disease and cancer. In recent times, however, it has begun to become active in the area of workplace health promotion. In the latter case, the HSA is not directly responsible for generating legislation, but it does have an advisory role in this regard with the relevant Government ministry, and is directly responsible for establishing policy with regard to the implementation and monitoring of health and safety regulations. Recently, both agencies have been active in relation to workplace health issues.

Current issues and policies in the Health Promotion Unit

The most significant recent policy development to emanate from the HPU is a 1998 initiative on workplace health promotion. A policy document entitled 'Workplace Health promotion: healthy bodies - healthy work' has been produced following extensive consultation with the social partners, voluntary health agencies and experts in the field. The purpose of this policy document is manifold. Some of its aims include:

- Establishing a baseline of workplace health promotion activity in Ireland;
- Identifying models of good practice;
- Identifying obstacles to the progress of workplace health promotion;
- Defining the roles of key players with regard to workplace health promotion;
- Making recommendations for action by key players;
- Identifying research needs.

This policy initiative has arisen from within the area of public health policy, where a recent strategic initiative 'Shaping a Healthier Future' has called for a reorientation of health services towards a health promotion approach, i.e. seeking to encourage people to take a more responsible approach to their own health within the context of a supportive environment. This strategic initiative led in 1995 to the development of a (general) health promotion strategy which was focused largely on lifestyle issues and health. However, this strategy also recognised the need to focus on a settings approach, and the recent workplace health promotion initiative represents the application of a general health promotion approach within the workplace setting.

The policy is situated within the need to develop a cohesive framework which would see the participation and cooperation of both the social partners and professionals within the field. For this reason it places heavy emphasis on the potential roles of these key players and in making

recommendations for action which they might take to further the development of workplace health promotion in Ireland.

Among the more relevant findings with regard to the current situation in Ireland are:

- Levels of awareness of and activity in relation to workplace health promotion are generally low. This is in part a result of the preponderance of very small enterprises in Ireland.
- Most workplace health promotion which does take place focuses on single health issues and consists mainly of health education interventions and health screening.
- The key players on both sides of industry are generally supportive but not very active in relation to encouraging workplace health promotion. Awareness of levels of activity amongst their members is low, as a result of workplace health promotion having a low priority for them.

Despite this relatively discouraging background, the policy document does identify a number of models of good practice. These include:

- The Health at Work project this was a project set up as part of the EU's Europe Against Cancer programme which focused particularly on women and lower paid members of the workforce. It was undertaken by the Centre for Health Promotion Studies of University College Galway. The project proceeded by conducting a needs analysis of 2,500 companies in the West of Ireland (the majority being very small companies), developing a set of targeted lifestyle interventions and finally undertaking both process and outcome evaluations of these interventions. This project focused also on organisational structures and interventions which supported the lifestyle programmes. The findings from this project indicated that the health risk behaviours targeted by the interventions generally improved, but that the programmes within companies were seen as being peripheral to company operations. The need to integrate health promotion activities with those of health and safety was recognised. One of the most significant features of this project is that it represents the first comprehensive and wide-scale workplace health promotion initiative which was research based.
- The 'Happy Heart at Work' programme this programme is run by the Irish Heart Foundation (a voluntary sector organisation) and covers more than 400 companies employing more than 200,000 employees or about 15% of the labour force. This programme, which is obviously an example of the single issue type, focuses on altering health risk behaviours, but also on developing health education implementation skills within the companies. A recent process evaluation has determined that the programme is well received by companies and that heart health policies have been put in place by a majority of companies. This programme is regarded as a model of its type.

- The Construction Employees' Health Trust (CEHT) this recent (1994) project has been set up by construction industry trade unions with the aim of promoting positive health care policies amongst employers and workers in the industry. It provides a rare example of an initiative undertaken by trade unions, and it has been funded in a novel way, by levying a small fee directly from workers' wage packets. The activities of the CEHT are generally confined to unionised construction sites, but they provide a wide range of interventions which range from single issue programmes to health and safety actions and health screening.
- The Good Neighbour Scheme This scheme is run by the HSA and focuses largely on health and safety issues. More than 50 large companies take part in this initiative which aims to encourage larger companies to support local smaller companies in providing their health and safety practice. While the focus is on health and safety activity, the scheme provides a useful delivery model which might be adapted for use with general health issues in the workplace.

The principal obstacles to the development of workplace health promotion are identified as relating to lack of management commitment, the difficulties of delivery workplace health promotion to SMEs, the prevalence of an *ad hoc*, uncoordinated approach and a lack of information and expertise among many of the key players.

The policy document concludes with an examination of the current roles of the main players and a set of recommendations targeted at these players. These analyses of the way forward emphasise the need for a collaborative approach between the main players, and outline a set of actions which would undoubtedly help develop the area. However, the sum of these actions is relatively limited, which perhaps reflects the relative lack of resources available and the difficulties of persuading agencies to take action on what must be a voluntary basis. In particular, it appears that the provision of workplace health promotion services is seen as being the responsibility of the public health and voluntary sectors, with a relatively small role envisaged for the health and safety sector, beyond one involving advocacy for the concept.

Despite these criticisms, there are a number of potentially important developments indicated in the document. Specifically, it is foreseen that each local health authority should undertake a pilot workplace health promotion project within the next year. In addition, the recommendations urge that training courses for employers and trade unions should be developed and finally that research needs to be undertaken into the very small enterprise sector (i.e. less than 50 employees). Some of this research has already been undertaken (Wynne and O'Brien, 1997).

Current issues in the Health and Safety Authority

The HSA has four main responsibilities in relation to occupational health and safety. These are:

- The labour inspectorate role;
- Information gathering on health and safety;
- The provision of advice and information on health and safety;
- Making contributions to policy development.

Within each of these roles, its traditional emphasis has been on safety rather than health, and this has taken place within the context of occupational health rather than general health. Moreover, the demands of the labour inspectorate role have tended to take precedence over the other roles, with the result that its main priorities have focused on such issues as the prevention of deaths and injuries at work. Effectively, it operates a kind of hierarchy of needs, with the prevention of serious and fatal workplace injuries being at the apex.

Its main policy and practical initiatives are thus governed by the highest risk sectors of the Irish economy - agriculture and construction, and these areas tend to attract the highest share of all of the HSA's resources and activities. Moreover, because fatal occupational injuries are a relatively infrequent occurrence within the context of a small labour force (approximately 1.35 million), they tend to attract a lot of political and media attention, which has implications for how the HSA conducts all of its activities. For example, the construction industry is booming in Ireland at present, and a recent spate of fatal accidents attracted a lot of comment from politicians, the media and the social partners. As a result, a new safety initiative which has heavy involvement by the trade unions in particular was announced. (In fact, this initiative had been under consideration prior to these accidents - their occurrence served to speed up its agreement and implementation).

There has also been a major focus on the agricultural sector, both because of its relative economic importance and because it still accounts for a relatively high level of fatal and non-fatal accidents. Many initiatives have been taken in this sector, of which some have been innovative and high quality. For example, international prizes have been won for the production of farm safety videos.

This prioritisation of resources on the high safety risk sectors does not mean that other health and safety issues are ignored. In recent years some resources have been devoted to emerging health and safety issues such as stress at work, the costs and benefits of health and safety, the hazards of IT, and bullying in the workplace. These initiatives have generally been small scale, and have usually consisted of the publishing and dissemination of information and guidance on these issues.

It is also worth noting that the HSA, in common with most other health and safety regulatory authorities in Europe, has had only a limited emphasis on health when compared to safety issues. The reasons for this lack of focus on occupational health are also common to other similar agencies - occupational diseases are relatively narrowly defined, they often take a long time to manifest themselves and there are inadequacies in the notification procedures for these diseases. For example, it has been estimated that the notification of such diseases is underestimated by a factor of two or three.

The difficulties of dealing with occupational diseases are magnified when it comes to dealing with occupational related illness or general health issues which are not related to the workplace. The HSA recognises that there is the potential for its involvement in initiatives focusing on these issues, but it has limited scope to do so. The difficulties of adequately addressing these issues when taken together with its primary focus on high safety risk sectors means that while it would

be broadly supportive of initiatives in these areas, it is unlikely to initiate them or to devote significant resources to their implementation.

Despite the limitations of resources the HSA has initiated two programmes which have been innovative and at the leading edge in recent years. These are the 'Good Neighbour' Scheme and the development of an Internet site for health and safety.

The Good Neighbour Scheme (already briefly described above), is among the more promising methods which may be used to encourage SMEs and very small enterprises to take up and improve the practice of occupational health and safety. This approach, though not the first of its kind, was independently 'rediscovered' and launched by the HSA in 1994-1995, and has since been imitated in the UK (von Richtofen, 1998).

The essence of the scheme is that large companies with a good health and safety infrastructure should act as mentors to smaller companies within their immediate locality. In practice, this scheme consists of the larger company offering advice, shared training and in some cases infrastructure to the smaller company. The scheme has been running for more than 3 years and currently has more than 50 large companies acting as mentors. The scheme is voluntary in nature, and there is no obligatory programme of activities laid down by the HSA. This voluntary and open-ended element of the scheme may one of the biggest contributors to its success, as participating companies may then deliver health and safety services on an as-needs basis and in response to the requests of the smaller participant companies.

The second innovative activity of the HSA concerns its development of an extensive Internet site for the dissemination of health and safety information. This site was developed as a means of helping to fulfil its information dissemination role. In particular, existing forms of dissemination were seen to be labour and resource intensive, and the Internet site is viewed both as a means of improving the management of dissemination resources and of reaching target companies in a novel way, thereby extending the base of companies taking up health and safety advice.

This Internet site is among the more developed in Europe and has been used as a basis for the Web site which is being constructed by the European Health and Safety Agency in Bilbao. Currently, the site is conceived solely as being a means of disseminating information, but in future it is possible that it will also be used to gather information from companies, especially in relation to notifiable information on accidents and diseases. (This would be used as a means to augment current collection methods).

Currently, the HSA is undergoing a review of its activities which is due to be completed by the end of 1998. Though it is not certain what outcomes will result, it may be the case that greater emphasis will be placed on health occupational issues, in addition to its traditional concerns with safety.

Other initiatives with implications for policy and practice

There is one further initiative taking place in Ireland which is innovative in a number of respects. This concerns a workplace health promotion project which is being run by the Centre for Health Promotion Studies of University College Galway. This project is aiming to establish workplace health promotion in small farms in the West of Ireland. The project is innovative in at least two respects - firstly in its selection of a target group (very few initiatives for family farmers exist), and secondly, as an example of a delivery mechanism to this sector.

The project is still underway, and it has just completed its needs analysis phase. Targeted programmes are currently being designed and it is anticipated that these will be implemented and evaluated within the coming 12 months.

Germany

The national context

In Germany the 1996 labour force consisted of 35.6 million people (20.4 million males and 15.2 million females). Less than 10% overall were employed in agriculture, with 27% and 10% of males and females employed in manufacturing and 62% and 85% of men and women worked in the service sector. The unemployment rate was 9.5% (3.4 million) in 1996, but has since risen to more than 4 million people.

Since the unification of Germany in 1989, the German economy has struggled to cope with costs associated with process. The most visible sign of this phenomenon has been the dramatic rise in unemployment rates, not only in the former GDR, but also in the former Federal Republic. The current rates of unemployment are approximately 11% nationally and 18% in the former GDR. In addition, Germany has experienced low levels of economic growth, which has meant, *inter alia*, that Germany has struggled to meet the Maastricht criteria on government indebtedness, which is a sign of how difficult the economy has found it to cope with costs of unification.

The structure of occupational health services in Germany

The legislative basis and the structures used to implement occupational safety and health services in Germany are among the most complex in Europe, reflecting both the federal structure of the country and the strong historical traditions of local workplace level autonomy. There are three strands to legislation - national level protective legislation which is generated by federal Government, accident prevention legislation which is generated by mutual indemnity associations (insurance companies), and regulations generated by works councils at the workplace level.

Occupational health services have been covered by the Health and Safety at Work Act of 1974 which indicates that occupational physicians must undertake pre-employment medicals, must investigate occupational hazards and provide advice to employers on all matters of prevention. In addition, companies must appoint safety officers whose primary responsibility is the maintenance of safety at work.

Two other agencies are also involved in the provision of services. These are the statutory accident insurance agencies and the statutory health insurance agencies. Both of these bodies insure employers against safety and workplace health risks, and they generally take a preventive approach to managing insurance risk. In practice this means that they provide advice on safety programmes on the one hand and health promotion programmes on the other. Each of these insurance schemes is entirely funded by employers.

In recent years there have been some changes in the way in which OHS services are delivered to enterprises. Chief among these has been the establishment of group OHS practices which deliver a range of integrated services to workplaces. In addition, there has been some reorganisation of the responsibilities of the accident and health insurers, with stronger demarcation of activities between these two agencies. One unfortunate result of this has been to reduce the independence of the health insurers vis a vis offering integrated health and safety prevention programmes.

Policy developments in Germany

Developments in Germany are mainly influenced by the large number of unemployed (more than 4 million people, representing about 11% of the labour force). Unemployment is a major social problem (18% unemployed) in the East of Germany particularly. It has been commented that Germany has too many undereducated workers and it can be very difficult for employers to find well-educated employees. Sickness benefit has been legally reduced from 100% to 80%, but most workers still get full payments as result of collective bargaining.

Informers observe increased attention being paid to health and safety issues and for preventive activities at the workplace from German employers in general and from SME employers specifically. This increased attention from SME employers is related to changes in regulations leading to a target for full coverage of all enterprises by occupational health care in the year 2001/2002 at the latest.

There has been a recent change in Government from a coalition between the Christian Democrats and Liberals to a coalition between Labour and the Green Party. The implications of this change in government (after 16 years) will become visible in the near future.

In spite of the difficult economic circumstances, occupational safety and health is developing in Germany with the expectation to provide OHS services for all workers by the year 2000. The political decision for a gradual inclusion of small and medium-sized enterprises was taken in 1992 and based on a broad consensus between the social partners, enforcement institutions and the Ministry of Labour and Social Affairs. This consensus has been under considerable strain as a consequence of the economic changes in Germany after the reunification. In the past two years particularly, there has been considerable resistance against OHS services provision for small-sized companies. Actions by the industrial accident insurance funds and the Federal Ministry of Labour have prevented this criticism leading to a postponement of the scheme. Employers are familiarised with occupational safety and health through seminars. This employer-centred model (see pilot

projects) builds on the employer's legal responsibility for the safety and health of the workers, which is based on the German Act of Safety and Health at Work.

The policy of extension of occupational health and safety resulted in an almost ruinous price competition between service providers, at the expense of service quality. Unacceptably low cost providers with poor quality services reinforced the risk of discredited company doctor services. This situation forced the Federal Labour Ministry to take the initiative and establish quality assurance systems for safety engineer and company doctor services. This initiative was supported by the social partners, the labour inspectorates and medical institutions. The quality assurance system - developed under the leadership of the Federation of German Company and Factory Doctors - will use audits and certifications (based on ISO 9000). If the quality of the services of a provider are evaluated successfully, the employer and the inspectorates know that this provider meets certain minimum requirements in line with statutory requirements. Participation in this quality assurance system is optional. Proof of compliance with minimum standards should provide a competitive edge over other providers and should lead to the desired quality of occupational safety and health services. Otherwise state regulation could be the alternative. The first quality examination will take place later this year and will be performed by trained auditors.

Older workers are currently an important issue in Germany. The issue in relation to older workers is that they have high incomes, but do not contribute as much to the primary process. Recently new legislation has been passed (the 1996 Partial Retirement Law), which enables older workers (55 years and older) to reduce their working time by 50%. If the resulting working time is used by an unemployed person the older worker gets a benefit payment up to 85% of the former salary. This scheme is directed both at the reduction of workload of elderly workers and the reduction of unemployment. Implementation requires either a collective agreement, a works agreement or an individual contract between employer and employee. At the end of 1997 agreements on partial retirement have been concluded in 15 sectors (particularly in the public sector), covering five million workers. There is some discussion in Germany about the qualifying criteria for this scheme. A person can only qualify for early retirement if he/she had a full-time contract for at least three years (in the last five years before the retirement). This means that part-time working people cannot qualify for this scheme. At the same time other schemes have been dropped, for example the very favourable early retirement scheme in the steel and coal mines, which allowed the miners to stop work at an age of 50/52. Reduction of workload may enable the older miners to continue their work until the age of 55.

Initiatives directed at the health of women and migrant workers are mostly taken at the regional state level. Regulations differ from region to region. No information was available about innovative initiatives.

Another issue in Germany is related to the 620 DM jobs. Workers who are employed on a monthly salary of 620 DM or less (for a job of 19 hours a week maximum) do not have to pay for social security. This also means that these workers do not get benefits in the event of sickness, have no

sickness insurance, and do not get paid while on holiday, or other bonuses. This regulation was originally introduced to facilitate newspaper delivery jobs, students who do holiday work etc. Employers have misused this regulation and replaced normal jobs with 620 DM jobs. Particularly workers in supermarkets have 620 DM jobs currently. Some chains *only* offer 620 DM jobs. Employers favour the low costs of wages. Moreover it facilitates the redundancy of workers, because it is easier to let go of workers with a 620 DM job. Many employees also do not want to change this situation, because if employers have to pay for social security, employees would lose 20% of their income. Most workers already have sickness insurance through their parents or their partner. The unions want social security for all workers; employer organisations are against this. This situation could change under the new government.

Stress is another important issue for the German government. The Bundesanstalt für Arbeitsschutz published new guidelines for employers and for foremen in the construction industry recently. More information on these initiatives is not available at this moment.

Pilot project on OHS in SMEs

Some industrial accident insurance funds have developed special regulations for small enterprises. In two pilot projects the effectiveness of this so-called 'employer model for provision of occupational health services' has to be proven in practice. In this model the employer takes part in information and motivation sessions to obtain knowledge in the field of health and safety at work. This knowledge allows the employer to assess the risk potential in the company him/her self and to use expert and company doctor advice only if necessary. Although this model explicitly leaves medical acts (such as preventive medical check-ups for workers) in the hands of the physicians, there is still considerable doubt about the acceptability of this model. The advantage of the employer model is the stronger orientation to company needs and the involvement of the employer in occupational safety and health protection.

United Kingdom

The national context

In the United Kingdom, the labour force in 1996 stood at 16.0 million men and 12.5 million women. Unemployment totalled 2.34 million which constitutes a rate of 8.2%. This rate has since fallen to around 6% as a result of relatively high economic growth rates. With regard to sectoral breakdowns, 8.3% of men and 5.9% of women worked in agriculture, which is one of the lowest rates for this sector in the EU. Industry employed 39.4% of men and 10.1% of women (one of the higher rates in the EU) while 60.2% of men and 84% of women worked in the services sector.

Great Britain has enjoyed a relatively positive economic situation in recent years, following a recession in the early 1990s, with unemployment falling to among the lowest rates in Europe, economic growth being the highest of the developed economies and forecasts for the future being generally quite positive, notwithstanding the current turbulence in the global economy. However,

from a policy point of view, the most significant change in recent years has been the replacement of the Conservative Government which was in power from 1979-1996 with a Labour Government.

While this political change may have many consequences throughout the social and economic policy arena, it has had specific consequences for new policy initiatives in the area of health and safety and of public health.

The Conservative years saw a radical restructuring of the British economy, with policy emphasis being laid upon the deregulation of the economy in almost all spheres, including the labour market, financial services, public transport, the electricity and water industries, the nationalised industries and many areas of the public sector. In addition, these years saw a rapid decline in levels of trade union membership and influence. The ethos of privatisation also affected the conduct of occupational health and safety and other workplace health policies.

At governmental and public sector level, budgets tended to be reduced for the agencies responsible for workplace health, with, for example, reductions being seen in the numbers of labour and environmental health inspectors. In addition, there was a notable Government initiative which saw a large reduction in the amount of health and safety regulations governing much of the economy, which was done in the spirit of reducing the bureaucratic burden on all and especially small enterprises. (Much of the regulation which was taken from the statute books was considered to be outdated). There were also indirect effects on the practice of health and safety. For example, the 1980s and early 1990s saw an increase in outsourcing of labour and services in much of British industry, a trend which affected the numbers of in-house occupational health and safety services.

The main drivers for policy change in Britain since the accession of the Labour Government have largely been political. The effects of 17 years of what was one of the most radical ever Conservative Governments had been to impose more right-wing changes to the economy and society than had been implemented anywhere else in post-war Europe. The new Government has not pledged to undo all of these changes, but it is undertaking a wide-ranging policy review which includes a major focus on health and social issues. Among the other issues which are influencing policy change are situations which result from the social and economic changes made by the previous Government. For example, the deregulation of the labour market has led to a large increase in atypical work forms. There are currently investigations which are examining the health and safety implications of these forms of work.

Occupational health services in the United Kingdom

In the UK, there are approximately 30 pieces of primary legislation and more than 360 pieces of secondary legislation governing health and safety in the workplace. The Health and Safety Executive (HSE) is responsible for ensuring compliance with these provisions. Compliance is achieved by the labour inspectorate of the HSE and by the environmental health departments of local government. One significant aspect of the Conservative years concerns the injunction on HSE inspectors to consider the cost-benefit implications of their enforcement activities.

The HSE also fulfils an information and assistance provision role. In practice this means dealing with approximately 750,000 enquiries per year. Other aspects of its role relate to commissioning research and recording national statistics on occupational accidents and notifiable occupational diseases.

Preventive OSH services are operated on a voluntary basis, i.e. there is no statutory provision for a minimum service, and employers have discretion over how they organise these services. A recent survey (quoted by Walters, 1996) indicated that 68% of firms with more than 25 employees and only 5% of firms with less than 25 employees use professionally qualified occupational health services.

Research issues

Given the political and economic climate of the Conservative years, it is perhaps not surprising that research attention has been paid to the issue of the most effective way of organising inspection activities, with a view to reducing the rate of breaches of the health and safety code. Essentially, this has reduced to a debate between the strategy of encouraging compliance without the widespread use of prosecution, and that of increasing prosecution rates with or without the increasing of penalties. Though there is no definitive answer to this issue (see Mossink and Licher, 1997), it seems that there is no clear cut case for changing from the current strategy.

There has been a flurry of new policy making taking place in the United Kingdom since the recent change in Government. This policy formation is taking place under the broad area of public health, but there are also developments underway in relation to occupational health and workplace health promotion. In addition to these policy developments, there is a range of pilot and research initiatives which are of interest in the current context.

The policy formation process which is taking place has been to some extent decentralised to the constituent countries of the UK, i.e. at the level of England, Scotland, Wales and Northern Ireland. Public health policy papers have been published for the first three of these countries, and these form the basis for discussions about the future directions of occupational health and workplace health promotion within the UK. Even in the absence of a Green Paper on public health policy for Northern Ireland, there are recent joint developments in both occupational health and workplace health promotion.

Specific policy initiatives in the UK are outlined below.

• Green Paper on public health - Our Healthier Nation

Consultation document on occupational health

Wales
 Green Paper on public health

• Review of health promotion policy

• Green Paper on public health

Northern Ireland • Development of workplace health promotion policy

The Ministry of Health has directed the Health Promotion Agency for Northern Ireland and the Health and Safety Executive to jointly develop a new policy for developing workplace health promotion in Northern Ireland. This initiative, which is currently underway, will develop the policy on the basis of an extensive consultation process with all interested stakeholders. Though it is too early to say what the final outcome of this process will be, it is clear that joint development of the policy by the Agencies responsible for OSH and WHP will mean a high level of integration of the philosophies and approaches of these two traditions. It is expected that the new policy will be available in the Spring of 1999.

In England, there is a major development of OSH policy underway which is being led by the Health and Safety Executive. It has published a discussion document in early 1998 (Developing an Occupational Health Strategy for Great Britain) which is currently available for comment by interested parties.

This new policy initiative has been inspired by a number of concerns. These include:

- The changing nature of work and work organisation;
- A desire to focus more on health, rather than safety issues in the workplace;
- Research which shows continuing effects of work on health;
- A realisation that dealing with health at work requires a complex, interdisciplinary response;
- Changing demography in the workplace;
- The emergence of new health hazards in the workplace.

As a response, the document envisages that a high level of inter-agency collaboration will be needed to meet seven specific aims. These are:

- To have suitable procedures, systems and campaigns in place to address occupational health issues;
- To decide which occupational health issues should be targeted for action;
- To offer ways of providing relevant sound advice on occupational health;
- To collect and make available essential occupational health information;
- To raise awareness of occupational health and to make training and education on this available to everyone;
- To provide systems to assess the effectiveness of actions taken;
- To gain commitment from all interested parties.

There are a number of notable features about this policy development process. Perhaps the most important of these is an explicit recognition that there is a need for a multistranded approach to the problems of occupational health. This currently takes the form that explicit reference is made to the potential utility of the methods of health promotion to achieving the aims of occupational health, though it does not currently go so far as to include general health improvement as part of the activities of occupational health, except where there are multiple work and non-work causes

for a specific health condition. However, at a strategic level, the policy is seen as being a significant part of the public health strategy currently under development in England.

This policy is currently drafted in a strategic fashion - there has been no consideration yet given to methods of implementation of the policy. When this stage arrives, it will be fascinating to see what the implications of the policy will be for the organisation of occupational health services. The emphasis on multidisciplinarity and inter-agency collaboration must imply changes in how services are currently organised, with new areas of professional expertise becoming necessary if the aims of the policy are to be realised.

Other workplace health initiatives

There are a range of other workplace health initiatives taking place in the UK. Many of these are not at a policy level, but they represent significant investigations or pilots of new approaches to dealing with workplace health issues. These activities also include some relatively small scale research projects. Among the more interesting of these are:

- Research into delivery mechanisms for WHP to small enterprises (which is being undertaken by the HEA);
- Pilot projects examining the possibility of developing health promotion synergies between the workplace and the community (which is being undertaken by the HEA);
- Pilot projects using innovative approaches to dealing with health related absenteeism in the NHS (Institute of Occupational Health);
- Stress prevention projects in the NHS. (undertaken by the HEA);
- Assessment of the 'Health at Work in the NHS' initiative (HEA).

There is an emerging debate in the UK about the relationship between the concepts and practice of workplace health promotion and occupational health. At one level this debate represents a coming together of the concerns of both traditions, with the workplace health promotion movement taking greater cognisance of workplace factors such as organisational structures and management processes, while occupational health recognises that placing more emphasis on health (rather than safety) will lead to greater use of the concepts and methods of WHP. This debate has yet to come to a conclusion, with the occupational health and public health policies currently under development providing a context in which it will be resolved. Whatever the final outcome, there is already evidence of a shift in perspectives among the agencies responsible, and this will no doubt be reflected in practice in the future.

A major programme of workplace health promotion has been underway in the NHS in England for the past few years. This project, which has constituted one of the largest single WHP initiatives anywhere in Europe, has recently been evaluated (HEA, 1998). There were many issues of concern in the evaluation work, but one of special interest was an investigation into the factors which lead to the sustainability of the WHP process.

HSE and new workplace issues

Among the other areas of interest which the HSE are involved in are:

- Homeworking;
- The health and safety implications of changing patterns of employment;
- Trends in technology and their implications for health and safety;
- Encouragement of a health and safety culture.

The HSE has produced a brochure for distribution to employers and employees on the subject of homeworkers. This short brochure is practical in focus, and deals with legislation, risk assessment for the homeworker, common hazards to be found in the home as a work environment, working with VDUs, pregnancy, first aid, and reporting of work related injuries and diseases. Though this brochure is targeted at employers and employees, much of its content is relevant to the self-employed homeworker.

The HSE has also taken a major interest in the potential health and safety impact of technological developments in the economy during the 1990's. This has resulted in a number of publications, the latest of which is entitled 'Trends in technology and their implications for health and safety' (HSE, 1998a). This publication details the approach the HSE has taken to this issue, which includes the commissioning of research and the development of a methodology for monitoring of developments. This work has taken place within the context of the HSE contribution to the UK Government's Technology Foresight Initiative.

The HSE has taken a broad view of technological development, not only in relation to the kinds of technology of concern, but also in relation to their focus of application - it does not confine its attention to the workplace but is cognisant of developments in society as a whole. It views as being central, a set of key drivers which impact on technological development:

- Novel technology, IT and communications;
- Changing patterns of work and lifestyle;
- Environmental issues;
- Political and economic climate;
- Public opinion;
- International legislation and programmes of work.

The database of technological developments which has been generated as a result of this work is now available (HSE, 1998a). The main areas of technological development outlined in this database are organised into six main themes. The database also indicates likely trends in technological developments and their possible impact on health and safety at work. The main themes are:

- Health and Life Sciences:
- Materials;

- Control and IT;
- Biotechnology;
- Manufacturing Production Business Systems and Processes;
- Health and Safety (General).

One area of specific interest in the current context is the theme of the use of technology to enhance the practice of health and safety. For example, there are database entries on telemedicine for health surveillance purposes, computer based systems to carry out health and safety functions and an increasing range of software tools to help in the management of health and safety. Each of these developments is rated as being 'probable' in relation to its occurrence and impact. It also points to the advent of data warehousing as allowing for the identification of new trends in health and safety.

More generally, there are numerous entries concerned with the increasing use of IT and IT applications in all forms of work. It views the diffusion of IT based technology as being certain, and generally assesses the implications of these developments in terms of the known electrical and radiological hazards which are associated with hardware.

The concerns of HSE with the impact of new technologies in settings other than the workplace are reflected in such database entries as 'increasing use of lasers in entertainment', 'continuing use of sunbeds' and 'high tech leisure'.

The database identifies 230 trends in technological development in all. Most of the assessments of the impact of these trends are confined to their safety implications with relatively little assessment of potential health implications. Where health impacts are possible, they tend to be confined to relatively traditional kinds of health outcome.

Despite these limitations of the database, it fulfils a very useful function, that of a 'technology watch' and allows the reader to obtain a rapid overview of emerging trends in the economy which may have OSH implications in the future. It should be noted that the contributions to the database are drawn from a wide area, and the HSE has noted that the contents of the database do not necessarily outline HSE policy in these areas.

In addition to the HSE's concerns about the emergence of new risk factors in the workplace, it has also addressed the issue of potential new at risk environments in a discussion document entitled 'The health and safety implications of changing patterns of employment' (HSE, 1996b). In particular, this publication deals with the issue of how health and safety legislation applies to workers who have been subject to the changes in labour markets and labour market regulation in the UK. This concern stems from a HSE review which identified a consensus that health and safety regulation should be related to the risks of work, rather than company size or the employment status of workers.

In the UK, there have been major changes in the labour market since the 1980s with large increases in self-employment, part-time working and temporary working, so that in 1995 only 62% of the labour force was made up of full-time employees, a decrease of 5% since 1984. In addition, the size of companies has been getting smaller, with an attendant increase in the use of contractors to undertake work in many sectors of the economy. This trend towards outsourcing began in the 1980s and is still accelerating.

The provisions of health and safety law still apply to these new forms of working. Employers have the same obligations to implement health and safety practices, regardless of the job tenure of employees. The situation for the self-employed is more complex, as they are sometimes regarded as being employers and at other times employees. The situation regarding contract labour is also complex, but the principle that health and safety duties fall to those who are in a position to discharge them applies.

This document confines itself to a discussion of labour market changes and health and safety legislation. While it implicitly recognises that these changes have implications for the practice and delivery of health and safety, it does not discuss or make proposals on these issues.

The document 'Factors motivating proactive health and safety management' (HSE, 1998b) signifies a change in the approach of the HSE to promoting health and safety. In the past, promotional efforts emphasised the legal requirements of employers to undertake health and safety action. Currently, however, more emphasis is placed on developing the 'business case' for engaging in health and safety, i.e. focusing on the economic costs and benefits of good health and safety practice. This approach has been reflected in the HSE's 'Good Health is Good Business' campaign. This document reviews international empirical studies which investigate the reasons why managements engage in good practice with a view to developing insight into how better health and safety practice can be achieved.

Two consistent main factors have been identified from UK research as being important in the decision to initiate health and safety action - fear of loss of corporate credibility if action is not undertaken, and the belief that it is necessary and moral to comply with legal regulations and responsibilities. The fear of loss of credibility has been mainly associated with companies operating in high risk sectors, regardless of company size. The motivating factor of complying with legislation operates in a complex way however, as companies tend not to view compliance as an economic or instrumental decision, as the likelihood of detection of failure to comply is low. The evidence suggests, for example, that companies improve practice following inspections through the focusing of management effort rather than through fear of consequences.

Despite the fact that good health and safety practice is usually not seen in instrumental terms, there is evidence that management does tend to hold the perception that health and safety is seen as a cost factor rather than as an investment to prevent future costs. Benefits on the other hand, tend to be seen in non-financial terms such as improved image and compliance with moral

obligations. Moreover, the incidence of these perceptions is not uniform; they tend to be differentiated according to whether the company is in a high or a low risk sector and also by company size.

The document develops a model to indicate what kinds of strategy should be followed in order to promote better health and safety practice. It advocates a targeted strategy whereby an appropriate mix of persuasion and compulsion based approaches are used, according to the size of the company and the sector in which it operates. The significance of this work lies in its recognition that the tool of enforcement is insufficient on its own to improve health and safety practice - it also needs to be supplemented with a strategy of persuasion. In essence, a well-rounded business case must be made if promotional efforts are to be successful.

Spain

The national context

In Spain, the overall size of the labour force in 1996 was 15.8 million (9.7 million men and 6.1 million women). Unemployment was 3.5 million, a rate of 22% making it the highest rate in the EU. Unemployment levels have since fallen considerably, though they remain the highest in the EU. Of men, 22.2% worked in agriculture, 26.6% in industry and 51.2% in the services sector, while the figures for women were 19%, 8.5% and 72.5% respectively.

In common with all other European countries, Spain has experienced a significant shift in employment patterns away from agriculture in particular, and industry to a lesser extent, towards the service sector. Two other striking features of the Spanish labour market are noteworthy. Firstly, Spain has the highest rate of unemployment in Europe by a long way, and has consistently been in this position throughout much of the 1990s. Unemployment rates are currently of the order of 17%, but have been as high as 22% in recent years. Secondly, Spain has the highest proportion of temporary workers and short term workers in Europe.

The Spanish labour market has seen high levels of immigration in the past two decades, with significant influxes coming from the Magreb and parts of West Africa. Spain has also seen a significant rise in the proportion of women in the labour force, with for example, a 37% rise in female participation rates between 1985 and 1993.

Occupational health services in Spain

Occupational health services in Spain are governed by both Constitutional provisions (1978) and by a recently passed legislative provision (the 'General Ordinance on Health and Safety at Work', 1995), which brought Spanish legislation into line with the provisions of the Framework Directive. This Act provides for workplaces to have responsibility for solving health and safety problems by means of collective bargaining at the workplace. It provides for the establishment of safety delegates and H&S committees at the workplace and for the development of health and safety plans for each workplace. Information provision and providing access to appropriate training are also enshrined in the Act.

Policy formation in the area is the responsibility of the Ministry for Labour and Social Security, though the Ministries of Health and Industry also have inputs to the process. The management of OHS services is the responsibility of the regional authorities, but the Ministries of Labour and Social Security, Health and Industry are responsible for regulation and planning.

Occupational health insurance is a mandatory provision and all wage earners are covered as part of their general social security contributions. Insurance is generally organised through a series of Mutual Insurers which are strictly regulated by the social security system. These account for almost 90% of workers, with the remainder of the workforce being covered by bodies associated with these Mutual Societies and by the general social security system.

Company medical services cover about 15% of the Spanish workforce, and are obligatory in the case of companies employing more than 1,000 workers. Enterprises with between 100 and 1,000 workers can join together to form their own occupational health services. For companies employing less than 100 workers, the Ministry of Labour and Social Security can facilitate organisations operating in especially risky sectors in the setting up or usage of occupational medical services.

Sole-Gomez (1998) provides a useful overview of the activities of occupational health services in Spain. She states that their focus is almost exclusively on occupational health and services, with only a small proportion of company medical services providing even the most basic of general health, or health promotion services. However, in recent years terms such as health protection, health promotion, quality of life and quality of working life have begun to become current, and a small number of examples of OSH programmes incorporate these terms as being goals of their activities.

These impressions are based on a series of nationally representative surveys which were carried out in 1987, 1993 and 1997, which included some questions on the organisation of OHS services. Specifically, the most recent survey indicates that most health activities in Spanish workplaces were related to traditional occupational health and safety activities. For example, the most common activities were medical examinations (carried out by 68% of Spanish companies), risk evaluation (47%), and safety signposting (44%). Only two of the less common activities, changes in work organisation (30%) and improvement of ergonomic conditions (21%) related to what might be regarded as more modern types of health activity.

Another 1997 survey, carried out by the regional governments, identified a range of general or public health oriented activities for which local health authorities were responsible. These activities are backed by two legislative instruments (the OSH law of 1997 and the Health of the Nation law of 1986) which explicitly detail activities such as health promotion which could or should be incorporated into OHS practice. However, the extent to which this happens is not clear and it is likely that such integration is the exception rather than the rule.

Recent Spanish workplace health initiatives

Despite the fact that workplace health promotion seems to have gained only a small foothold in Spanish enterprises, there are a number of intervention projects and research initiatives which take a new approach to the issue of workplace health. These include:

- Trade union initiatives, such as the 'Instituto Sindical de Trabajo, Ambiente y Salud' which
 is a trade union institute specialising in the development of training and intervention
 materials and programmes for workplace health. Among their current activities is the
 development of stress prevention materials.
- The Catalan 'Acord Basic en Salut i Seguretat en el Treball (ABS)' which is an agreement between the main trade unions and the Catalan SME organisation. This agreement has established a jointly sponsored Foundation to help SMEs improve their standards in relation to workplace health. It is a unique initiative in Spain, since it has been a bottom-up approach, and has not been initiated by central administration.
- The recent updating of Spanish occupational health and safety legislation has required the establishment of a new agency to manage the excess funds in the social insurance system for occupational safety and diseases. The brief for this agency will be to invest excess funds in the prevention of occupational diseases and accidents. However, the agency is not yet fully functioning and it is too early to say how innovative its interventions might be. However, the concept of insurance funds investing in these activities in the health and safety arena is new to Spanish workplaces.

There are also a number of research initiatives in Spain which are adopting an innovative approach to workplace health issues. Perhaps the most important is the Casa Gran project of the Centro de Salud Laboral in Barcelona. This project is essentially a replication and expansion of the Whitehall study of UK civil servants which took place in the 1980s which looked in detail at the work related factors influencing health, wellbeing and mortality. The Casa Gran project is a longitudinal epidemiological study which involves a cohort of more than 20,000 workers who are employed by the Barcelona municipality. When the results are available in late 1998 and early 1999, they can be used for the design of preventive health programmes throughout the Barcelona municipality.

The priorities of the Spanish Health and Safety Agency

The priorities of the Spanish Health and Safety Agency as identified in the Bilbao agency study concern the improvement of technical knowledge and the establishment and improvement of testing laboratories. In addition, they will be more concerned in the future with the risks associated with new technologies, ergonomics and stress at work.

Netherlands

The national context

In the Netherlands, the labour force in 1996 was made up of 4.3 million men and 3.1 million women, a total of 7.4 million people. The unemployment total was 475,000 people, giving a rate of 6.4%, which was amongst the lowest in the EU. Of men, 21.4% worked in agriculture, with 15.7% in industry and 62.9% in the service sector. For women, the figures were 11.9%, 6.8% and 81.3% respectively.

The socio-economic situation in the Netherlands has improved strongly in recent years. Employment is rising rapidly; there was a 10% growth between 1994 and 1998 (5.8 million to 6.4 million). Women, young people and the long-term unemployed also benefit from this development. The number of unemployed has dropped from 486,000 in 1994 to 297,000 in 1998. Although 68% of the people between 15 and 64 years were working in 1998, labour participation is still low among women between 25 and 54 years and among men and women from 55 years and upwards. Only 31% of this last group was working in 1998.

The current government is a 'purple' coalition, composed of Labour, Liberals and Social Democrats. They started this coalition in 1994 and continued it after the elections in 1998.

The Minister of Public Health, Welfare and Sports (Mrs. Borst, Social Democrat) is still the same as in the former government. The Minister (Mr. Melkert, Socialist) and the Deputy Minister for Social Affairs and Employment (Mr. de Grave, Liberal) have changed. The new Minister of Social Affairs is Mr. de Vries (former Chairman of the Social Economical Board, and Socialist) and the two Deputy Ministers are Mr. Hoogervorst (responsible for social security and working conditions; Liberal) and Mrs. Verstand-Bogaert (responsible for work and care, and emancipation; Social Democrat).

Current and future trends in workplace health

After a decrease in absenteeism since 1994 (as a result of new legislation in which government shifted the financial responsibility for absenteeism and disability to employers), the numbers for sickness absenteeism (5%) and disability (14%) remained stable. Recent figures however indicate a small increase in levels of absenteeism and disability. It is still too early to say if this is a new trend.

Women have higher levels of absenteeism and disability than men. Absenteeism is especially high among (female) workers in the health care sector (7%). Women in this sector have a four time higher disability risk than men.

Many workers have work-related diseases. About one third of workers have work-related health complaints. About 1.7 million workers (25% of the work force) are regularly working under severe work pressure. More than 50% of the workers need measures directed to relieve this high

work pressure. About 2.2 million workers (33% of the work force) do repetitive work (VDU workers; cashiers; flow production workers, etc.). One in every two workers in the service sector has RSI complaints during working hours. The work related costs of absenteeism, disability and health care have been estimated at 12 billion DFL, which is almost 2% of the total gross domestic product.

Research shows increased attention from companies for an active working conditions and absenteeism policy. This is supported by the obligation of all companies to be affiliated with a certified Arbodienst (occupational health and safety service). This obligation is part of the implementation of the European Framework Directive on Health and Work in the Netherlands. At this moment 92% of companies have a contract with an Arbodienst. There is a slight difference between companies with less than 100 employees (91%) and companies with 100 employees and more (96%). The number of certified Arbodiensten has strongly increased (mid-1998, 113 services). The improvement of the work quality of these services is financially supported by the Dutch government.

About one third of the companies (36%) have completed the compulsory risk assessment. This situation is much better in the larger companies (86%) than in the smaller companies (35%). As a result of this, 65% of workers are in a company which has undertaken a risk assessment. Many companies have also taken measures to improve working conditions and decrease the physical and mental work load. The number of measures which companies take to improve working conditions has also increased in recent years. Government employers are very active in the reduction of work stress (e.g. job rotation, redesign of shift schedules and social management training). Factors that prompted these workplace measures are to improve staff morale and encourage involvement of the workers.

Current and future policy initiatives in workplace health

One of the main targets of this new government is to reduce the inflow in social security, to improve the outflow and to increase employment among low educated, long-term unemployed and disabled workers. The reintegration of inactive persons has to improve to secure social-economic growth in the near future.

The Government is discouraging older workers from leaving the workforce. It is much more difficult for companies to 'drop' their older workers in disability or unemployment schemes. Collective early retirement schemes are replaced by individual prepension regulations which start at higher ages (63 years instead of 58 or 59) and have lower levels of benefit (70% of gross earnings instead of 80%). The savings system enables workers to make a flexible and individual choice, which could also be to continue working until receipt of the old age pension, because savings can also be used for other purposes.

To increase labour participation among women, the government wants to create better facilities to combine work and care. This includes enlarging the capacity of child care centres, improving the

legal position of part-time workers, expanding absence arrangements, and better regulation of working time.

The Reintegration of Disabled Workers Act is intended to improve the position of disabled workers on the labour market. Employers who employ disabled workers get a bonus (8.000-24.000 DFL); do not have to pay for the sickness, absenteeism and disability of these workers; and pay lower premiums for the disability scheme. At the same time the higher the number of people employed by a company that become disabled (and receive disablement benefit), the higher the contribution the employer will have to pay.

There is no special health policy on atypical workers in the Netherlands, although they have been given a stronger position in terms of job security and social security (particularly temporary agency workers).

It is more and more realised that long-term labour participation of workers can only be achieved when the working conditions are good and the company policy includes prevention of health problems and attention for individuals. That is why the members of government consider further improvement of working conditions essential. Too many workers still have work-related health complaints. Government wants to introduce targets to reduce workplace risks. This will also enable the assessment of the effectiveness of government policy in this area. They started with general targets for noise reduction and RSI in VDU work. Unprotected exposure to damaging levels of noise has to be reduced by 50% in 5 years. RSI related complaints in VDU work has to be reduced by 10% in three years. Targets for heavy lifting and work pressure are under development. In the Dutch tradition of social policy, the government tries to achieve these targets by making agreements at the sectoral level with employer organisations and unions (e.g. for RSI in banking, noise reduction in the building industry and heavy lifting in the health care sector). Government supports the activities with money for research and information, example projects of monitoring and evaluation. A structural expenditure of 100 million DFL has been made available. Companies are also stimulated to invest in safety and health by special tax arrangements. The sectoral arrangements include economic analyses. The costs of working conditions measures are calculated against the reduced costs for absenteeism and disability. In this way the government tries to combine health and safety policy and social security policy. If agreements cannot be reached or targets are not met, enforcement by the labour inspectorate will be intensified.

To reduce the number of disabled workers, particularly the number of mentally disabled workers (almost 40% of the new disability benefits are related to psychological diagnoses), the Ministries of Labour and Health increased their cooperation. Both Ministries want more information on the prevention of these problems and on the improvement of the health care process. This also includes more cooperation between occupational and general health institutes, and also between the different levels of the general health institutes. Knowledge about work and health has to be improved within general health care institutes, but also in relation to the health effects of other areas (for example housing conditions, work and income).

Another important aspect for the Ministry of Health is to avoid special treatment in health care for workers. As a result of the shift in (financial) responsibility for absenteeism and disability, employers try to have their workers made a priority. Waiting lists in general health institutes increases the absenteeism costs of employers. However workers are not a special group for the national policy of the Ministry of Health. This Ministry is more interested in the workplace as a place to influence individual lifestyle behaviour and to reach large numbers of people at the same time.

Chapter 4

Conclusions on Trends in Work and Health in Europe

Introduction

This Chapter sets out the conclusions from this study. They are described in terms of two sets of issues - the socio-economic and demographic drivers for change in workplace health policies, and the trend changes in health policies themselves which are already in evidence in the countries included in this study.

The field of enquiry of this study is very broad, taking in policy developments in the areas of occupational health and safety, workplace health promotion and environmental health as outcome measures and a wide range of social, economic, demographic and politico-cultural factors which are pushing for changes in current policies in these areas.

Among the more important factors influencing change or potential change in these policy areas are:

- Demographic changes in the labour market;
- Changes in the nature of economic activity;
- Changes in the nature of work;
- Changes in thinking on workplace health;
- Changes in the nature of workplace health issues.

The effects of these drivers for change are summarised in the following sections of the report.

Demographic changes in the labour market

Within the labour market, changes which are already taking place and which will be accentuated over the coming decades, according to the most reliable forecasts available, include the ageing of the European workforce, where it is anticipated that falls in the birth rate coupled with rising demands for labour will contribute, *inter alia*, to increases in pensionable age and a decrease in the health of the average worker. Moreover, pressures on the financial arrangements for pensions will increasingly occur as a result of life expectancy and dependency ratios increasing.

It is also anticipated that current trends towards higher levels of women participating in the labour market will continue, partly as a result of cultural changes making it more acceptable or desirable for this to happen. In addition, the economic pressures of modern life make it more and more necessary for women inside and outside of relationships to work. Finally, it is conceivable that the rising demand for labour which is anticipated will lead to higher participation rates for women.

The past two decades have seen a high level of deregulation of labour markets occurring, especially in countries which have been governed by parties of the right. Economic theories and the practicalities of competing in an increasingly globalised economy have led governments to reduce the level of social protection and working conditions for the labour force. While deregulation has taken many forms, usually starting with financial deregulation, so-called rigidities in the labour market have been reduced. The effect of these changes is complex, and varies from country to country, but in all countries there has been an increase in part-time, temporary and self-employment. In the UK for example, recent figures indicate that no more than 60% of the labour force now hold full-time permanent work, and projections are that workers will change jobs at an ever increasing rate in the future.

More generally, the amount of atypical work (defined here as involving work forms which are not typical in terms of time, tenure or location) is currently increasing and will continue to do so.

Changes in economic activity

There have also been considerable changes in the nature of economic activity undertaken in the EU. In particular, increasing amounts of activity take place in the service sector, with large reductions being seen in the primary industries, agriculture and manufacturing activity (at least in terms of employment, if not monetary value). These changes lead, among other things, to radical changes in the kinds of health hazards posed by work.

The deregulation of financial markets and the reductions in trade barriers which took place throughout most of the developed world in the 1980s and 1990s have led directly to the globalisation of increasing amounts of trade. While perhaps not carrying direct health threats for workers affected by this process, at least in terms of the nature of work undertaken, these changes have led to increases in the intensification of work and to reductions in the security of jobs as

capital and work become ever more mobile. The levels of stress associated with more intense work in more insecure conditions represent a new threat to occupational health, at least in intensity, if not in quality.

A feature of the new economic order has been the increasing attention paid to the importance of SMEs as an engine for economic growth. All Member States and the EU Commission recognise that this sector will provide most of the growth in job creation over the coming years, and the combination of economic forces (e.g. the need for flexible business approaches, the need to develop sunrise industries) and official policy have led to an increase in the numbers of SMEs in all economies. This trend poses particular challenges to both delivery mechanisms for health services to the workplace, and the concepts of health services which may be supplied. On this latter issue, the fact that occupational health hazards and general health needs are likely to be different to those of larger enterprises has not yet been addressed. In particular, health hazards for many SMEs will be different, as many new enterprises operate in new economic sectors which do not carry the occupational hazards associated with more traditional industries. In addition, the general health needs of SMEs are more likely to be episodic rather than continuous, especially in very small enterprises.

Perhaps the most visible result of the widespread economic changes which have been and are continuing to take place has been the high levels of unemployment which have affected most of the Member States. This has obvious and well documented effects on the health of the unemployed, and despite some long-term projections which indicate possible labour shortages in Europe over the next ten to twenty years, there is still reason to believe that spells of unemployment will continue to affect the European workforce. It may be argued that the health needs of the unemployed have little to do with the occupational or general health needs of the workplace, but the fact that the European worker will, on average, experience more career changes, more spells of unemployment and more retraining than is currently the case, means that the current dichotomy between employment and unemployment will tend to break down. This trend will pose particular challenges for the delivery of health services to an ever changing workforce, and it is possible that workplaces will play a greater role here in the future, not only as delivery systems evolve, but also because the provision of health services which extend beyond contracts of employment may become an incentive used by companies to hire and retain workers.

Changes in the nature of work

The economic changes which are currently taking place have to a large degree been enabled and are being fuelled by developments in technologies which, *inter alia*, have had major impacts on both the organisation and the content of work. The most notable technological changes have concerned developments in computer and telecommunications technologies (ICT) which have enabled many of these changes. These include:

 The development of new and expanded areas of economic activity, e.g. the growth of electronic services, the computer and telecommunications industries themselves;

- The increasing knowledge content of many jobs;
- The development of remote working forms, e.g. teleworking, mobile working;
- The increasing trend towards the incorporation of ICT technologies into more traditional technologies, e.g. manufacturing technologies.

Moreover, the pace of technological change in the ICT area is very rapid, with very fast rates of growth in computing power and speed and software applications being seen in the past twenty years. (Whether this pace of change continues indefinitely is open to question). There have also been developments in more traditional technologies, such as those in manufacturing, but these have occurred at a slower rate and are unlikely to pick up in speed.

These technological changes pose challenges to workplace health delivery systems in a number of ways. Firstly, new technologies may be associated directly or indirectly with new categories of occupational hazards and may lead to the development or growth in new health outcomes (e.g. RSI, stress). Secondly, delivery systems themselves are challenged by the new forms of work associated with these technologies, for example, traditional delivery systems have yet to adapt to the phenomena of teleworking, mobile working or self-employment to any significant degree. Finally, developments in ICT provide opportunities for delivery systems, where new communications methods offer the possibility to extend the range of information services of delivery agents. Good examples of Internet-based occupational health information systems currently exist (e.g. the Finnish Institute of Occupational Health, the Irish Health and Safety Authority, the Bilbao Agency for Health and Safety at Work).

New perspectives on health

An evolution in thinking on health strategies has been taking place concurrent with the broad changes in demography, the economy and the nature of work. This evolution has taken place to a large degree independently of these wider changes, and one of the challenges facing health strategies is to find ways of coping with the health implications of these changes.

Within health circles there has been a gradual change in perspective, on the theoretical level at least, which has given more recognition to the importance of preventive as opposed to treatment strategies. Public health thinking has seen a rise of emphasis on health promotion and disease prevention strategies over the past 20 years. Moreover, there has been increasing recognition of the range of social, workplace, environmental and personal factors which contribute to generating health, and there has been a corresponding increase in knowledge of the factors which cause risks to health.

Against this background of rethinking public health strategies, there is also evidence of new perspectives on workplace health emerging. Within the field of occupational health, there has been a growing realisation of the need for change. This has been prompted by a number of factors, such as the need to take account of changes in the nature of work which have led to reductions in

the numbers of people exposed to traditional hazards, the emergence of new health related outcomes such as stress related outcomes, which are not amenable to traditional OHS approaches, and the growth in numbers of other workplace based health professionals which have brought a complement of new skills and techniques to bear on workplace health issues.

The most notable new approach to workplace health issues is that of workplace health promotion (WHP). This approach has gained significant acceptance in recent years as being a legitimate means of addressing general health issues in the workplace. Though there are different models of WHP in practice, with a US based and inspired model focusing on individual level risk factors, and a more broadly based European one which integrates work, environmental and individual level interventions, this approach to workplace health has gained ground as a means of, for example, controlling absenteeism (for example, Grundemann, 1998), reducing health care insurance costs, and more recently as an integral part of quality management strategies.

Recent developments on the international front have seen the formation of an EU funded network for workplace health promotion and developments in the training sphere (e.g. Wynne, 1998), all of which signify the growth of this approach. The WHO have also been active in policy development, with one current initiative (Baranski, in press) aiming to integrate the approaches of occupational health, workplace health promotion and environmental health.

There have also been national level developments in the broad area of workplace health promotion, with perhaps the most notable being the Finnish 'Maintenance of Work Ability' programme. This approach seeks to integrate the approaches of occupational health, workplace health promotion and the rehabilitation of disabled workers. Other countries have been involved in developing national level workplace health promotion strategies, or in reviewing the effectiveness of current policies in the area. Among these is Northern Ireland, where workplace health promotion policy is a joint initiative between the health promotion and health and safety agencies, the Republic of Ireland and Wales.

Emergent workplace health issues

There are a number of health related issues and policies which are becoming more important in the workplace context. These include:

- Changes in regulations concerning occupational health A number of countries are still
 in the process of modernising their legislative base to bring them in line with the Framework
 and related Directives. This updating process carries implications for how workplaces are
 regulated and for the practice of OHS.
- Changes in social insurance regulations As the costs of work related disability have risen excessively in some countries, they have begun to limit the amount of state funded social insurance which is available to employers and employees. Most notable of these countries is the Netherlands, where employers are now responsible for the costs of the first year of absence from work. Similar, though less dramatic changes have been made in the UK, and

- it is thought that many other countries will be driven in the same direction. These changes may encourage more broadly based approaches to health by employers, but they may also promote more rigid and exclusive employment policies.
- The emergence of new hazards at work New forms of work practice and the emergence of new work technologies have given rise to concerns that new hazards to health will be found in the workplace. Many of these concerns relate to the use of new chemical and biological processes in industry, and they are the focus of much research within the traditions of occupational health and safety. Within the psychosocial sphere, there is also growing concern about the growth of occupational stress in most Member States, and health and safety agencies throughout Europe are investigating the issue and seeking to develop sophisticated approaches to its prevention and management in the workplace. This process is being accelerated by the growing number of civil litigation cases being taken by employees against employers.
- The emergence of new at-risk groups The changes in labour market demographics and conditions of work have led to the emergence and growth of new groups of workers who may be at risk (new or otherwise) in relation to occupational health. These groups include older workers, marginalised workers of all kinds, homeworkers, teleworkers, and by some definitions, different categories of the unemployed. Occupational health services are beginning to investigate the kinds of health hazards these groups may face and to address the problems of delivering OHS to these groups.
- Increasing the emphasis on health issues Recent policy initiatives in some countries have reflected a more general concern about how to deal with health (as opposed to safety) issues at work. From the point of view of health and safety agencies, this concern is largely, though not exclusively, confined to narrowly defined occupational diseases. Some agencies are also beginning to think about occupation related illness, such as stress related illnesses and psychological conditions. In either case, there is an increasing recognition that methods developed to deal with safety hazards are not easy to apply to illnesses of both kinds, and the search is on for more appropriate and effective paradigms to deal with these issues in the workplace. In this regard, workplace health promotion is thought to have a role to play, not just in relation to general health but also occupational health.
- The costs and benefits of workplace health activity There is a strong trend towards justifying OHS practice and WHP practice on financial grounds. This concern has been applied both at national and international levels, with respect to policy development, and at company level with regard to, for example, cost-justifying specific health and safety interventions. Despite a continuing concern for these issues by the social partners, there is still no universally accepted or easily applied method to calculate the costs and benefits of workplace health activity (e.g. Mossink and Licher, 1997, Kruger et al, 1998). Nonetheless, it is likely that these concerns will not diminish, and efforts are currently underway to develop more acceptable and usable methods in this regard (e.g. Mossink et al, 1998).

Conclusions

The area of investigation for this study has been broad, but the aim was not to be comprehensive in coverage, rather it was to identify trends in workplace health approaches which are innovative, and which take account of the changing workplaces and society in which we live. This section of the report provides some tentative conclusions regarding current trends in policies and approaches to workplace health. In doing so it seeks to identify forward looking policies which are in place, under development or under consideration in the Member States which were the focus of the study.

Conclusion 1 - The national contexts vary

It is self evident that Europe is not an homogenous place. However, it is essential to understand that there are specific national socio-economic differences which lead to different approaches to policy making in the workplace health areas. These different national contexts are reflected in current policy and research concerns, but it is also clear that there are larger forces at work, which mean that Member States will face common problems, albeit at different times.

Currently, there are important national differences with regard to:

- Demography there are significant differences between the Member States with regard to
 the age structure of the population, female labour force participation rates, retirement ages,
 birth rates and unemployment levels. Despite these differences, in general, the European
 workforce is likely to become older, have higher participation rates and have lower
 unemployment levels in the future.
- Workplace health priorities each Member State tends to have differing workplace health
 priorities, partly as a result of demographic factors but also as a result of economic structures
 and political approaches. For example, Ireland with a relatively high proportion of
 agricultural employment focuses a lot of attention on agricultural health and safety, while the
 UK, with the most deregulated labour market in Europe, sees priorities in dealing with
 atypical working modalities.
- Social provisions social provisions with regard to workplace health and safety legislation, social security support for illness, and labour market regulation vary considerably between Member States, despite the body of EU legislation on health and safety and the Social Chapter. In part, these differences reflect structures and practices which pre-dated recent legislative initiatives, but they also reflect differences in political philosophies. For example, countries with traditionally strong social security provisions such as Sweden or Finland, have sought to maintain a high safety net despite recent legislative changes, while for countries such as Britain, labour market deregulation is an example of consistent political approaches. The maintenance of mandatory health screening in Spain is an example of how practices which predate the Framework Directive have been maintained following legislative updating, even though there are no explicit provisions for this contained within the EU legislation.

- Infrastructure for health services the numbers of occupational health professionals per head of the working population varies considerably between countries, as does the mode of provision of these services. Many countries have adopted an occupational health service model, which is at least theoretically multidisciplinary in nature, which may legally be bound to provide a certain minimum of services and which enterprises are obliged to contract. However, other countries have a more *ad hoc* arrangement.
- Social policy within the area of social policy as it affects workplace approaches, there are two major issues being addressed, though by no means all countries are yet addressing these issues. The first concerns the ageing of the workforce, where Finland, notably, has instituted the Maintenance of Work Ability programme as a means of promoting the health of older workers. The second issue is that of work related disability, where a range of approaches (changing the allocation of costs between public and private sector, implementation of health promotion programmes) have been implemented in a number of countries, most notably the Netherlands, Finland and the UK.
- Resources available Countries apply differing levels of resources to dealing with health in the workplace, where political approaches and economic differences dictate that budgets and manpower vary widely between countries. These obvious differences mean that countries differ in the kinds and levels of information they have available for policy making processes, thereby placing constraints on the types of policy produced, and for the levels of resources which are applied to the implementation of policy.
- **Problems faced** Despite the efforts made in Europe to achieve economic convergence, and to a lesser extent, convergence of social policies, there are still major differences between countries with regard to economic conditions, social policies and demography. These differences lead to variation in the type of problems faced by each Member State, and though there are commonalities, the nature and prioritisation of problems by each country differs. These problems include excessive costs for work related disability, safety problems in traditional industries, devising effective responses for workers working in atypical work forms, dealing with health issues relating to unemployment, and the implementation of EU inspired legislative changes.

Conclusion 2 - The problems faced are multifaceted

It is clear from even a cursory examination of the workplace health related problems faced by the countries under examination, that there are many facets to each of them, and particularly to the solutions which have been proposed. To take one example, the problems of an ageing workforce can be defined in terms of health issues, job performance issues, social security and private provisions for work related disability and pensions, dependency ratios, job and training discrimination, rehabilitation practice and unemployment policy. Similarly, initiatives aimed at introducing a general health component into workplace health practice carry implications for public health policy, OHS policy, workplace health promotion, service provision, health service personnel training and labour inspection.

Despite these complexities, there would appear to be little evidence of coordinated policy initiatives to address the multiple facets of these problems, though they do exist. Rather, countries

appear to develop policy on a piecemeal basis, with initial policies needing to be followed up by subsidiary policies as the implications and effects of these efforts become clear. Even in countries such as Finland, where multiple policies to deal with the ageing of the workforce have been put in place, the coordination of these initiatives has caused problems.

Conclusion 3 - Social insurance provisions for workplace health issues are changing

In countries where there are high levels of work related disability, for example, the UK, Netherlands and Finland, there are moves to change social insurance provisions with the aim of encouraging people with disabilities to return to work. There may be two broad approaches taken here. The first consists of moves to internalise health related insurance costs to workplaces, with employers becoming liable for a greater proportion of the costs of ill health. Secondly, there are initiatives which aim at reintegration of disabled workers, which may consist of medical rehabilitation, job retraining and sensitive job placement to ensure that the work provided takes account of the abilities of the worker concerned.

Though not all countries are faced with the issue of high levels of work related disability, it is likely that moves to internalise the costs of work related ill health will be made as social insurance costs will continue to constitute a large proportion of overall social security budgets. In addition, cost internalisation may be seen as a useful tool to provide incentives for improved practice of OHS and general health activities in the workplace.

Conclusion 4 - There is a growing emphasis on stress

Though the health implications of occupational stress have been recognised in scientific circles for some time, there is increasing evidence that national health and safety agencies are devoting more and more resources to this issue. This is taking many forms, with more research being undertaken, training for labour inspectors in the area and more policy and guideline development taking place.

In addition, there is increasing recognition that traditional approaches to dealing with safety issues may not be easy to apply to the phenomenon of occupational stress. In particular, the difficulties of measurement of stress and of ascribing causation of stress related symptoms to the workplace mean that approaches involving benchmarking, for example, are under consideration as possible new methods for dealing with the issue.

Conclusion 5 - Merging occupational health and general health at the workplace

There is an increasing trend at national level to integrate occupational health and general health approaches in the workplace. This is occurring for a number of reasons, such as the need to address the problems of ageing workers, occupational stress and the need to effectively address occupational health issues, where the methods developed for dealing with occupational safety will need to be augmented with those from such areas as health promotion. These trends have been identified in countries such as Finland, the UK, Ireland and the Netherlands.

In addition, there is also some evidence that pressures for more integrated approaches to health are emanating from within companies. In particular, the growth of the quality management movement is, at its best, leading to a greater value being placed upon human capital, and ensuring the general wellbeing of employees is increasingly been seen as a useful way of realising that value.

Moreover, there is some, perhaps surprising, evidence that microenterprises place a higher value on general health issues than occupational health issues (Huntley et al, 1998).

Conclusion 6 - Recognition of new work forms and their challenges

Many countries are recognising the fact that greater proportions of the workforce are now working under atypical conditions, i.e. there are increasing numbers of part-time, temporary, self-employed, mobile and home-based workers. This has led to research into these areas, but as yet has not yet led to significant levels of policy making. The main issues of concern here are the description of new hazards and risks, delivery methods for these difficult-to-reach groups and the assignment of responsibilities for health and safety provisions between employers and the atypical worker.

Conclusion 7 - Growth in the area of workplace health promotion

There is now much evidence that workplace health promotion in Europe is becoming a more common approach to dealing with workplace health issues. At national level there is evidence of intensified policy development, while at workplace level health promotion appears to be increasing, or at least it is now more visible due to the efforts of such bodies as the European Network for Workplace Health Promotion. In addition, there is evidence that the availability of training in the area has increased, with major initiatives being undertaken in France and Finland, for example. However, there is also evidence that this growth is somewhat uneven, with countries such as Spain showing little evidence of a growth in activity in this area.

One of the issues of importance to the future development of the area which is now receiving consideration is that of the marketing of WHP.

At international level, the European Network for Workplace Health Promotion has been involved in a number of initiatives which have served to raise awareness of the approach. These include the Luxembourg Declaration (1996) which offers a definition of workplace health promotion, the Cardiff Memorandum (1997), which sets an objective of bringing WHP to SMEs, and a soon to begin project on realising that objective.

The World Health Organisation have also been active, with the launch of a new policy document in the area in 1998 (WHO, 1998).

Conclusion 8 - The costs and benefits of OHS and WHP is an emerging issue

There has been an increasing interest in the issue of the costs and benefits of undertaking OHS and WHP in recent years, which may be expected to increase in the coming years. This interest has occurred at international, national and company levels. This interest is reflected in EU initiatives at policy making and research level, and by national initiatives in countries such as Finland, the Netherlands, Germany and the UK.

However, while the initial interest was confined to crude measurements of costs and benefits, it is now increasingly being realised that because of the difficulties of adequately measuring benefits, a more sophisticated approach is needed. Such an approach needs to take into account the fact that benefits are more difficult to quantify and that cost-benefit analysis should be used as a tool to aid decision making rather than being the final or only criterion.

Conclusion 9 - The OHS needs of SMEs are becoming more important

All Member States recognise the increasing importance of SMEs within national economies, and a range of measures are in place to encourage their growth. Within the OHS community, increasing attempts are being made to improve the level of OHS activity within SMEs in many countries. Recent years have seen the extension of OHS legislation to many hitherto unregulated SME sectors and OHS agencies have been investigating and piloting a range of approaches to delivering OHS to them. Among the more promising approaches are mentoring models and value chain models. It is likely that such efforts will intensify in the coming years, not only in relation to OHS, but also in relation to WHP.

Chapter 5

A Research Agenda

Introduction

This chapter sets out an agenda for future research which may be undertaken in relation to the new approaches for workplace health which will be needed to cope with the major socio-economic and demographic changes which will take place in the coming decades. In doing so, a broad perspective is taken, as there are many specific research needs which could be enunciated, but which are beyond the scope of this report.

One of the perspectives which informs this agenda concerns the need to look at emerging policy initiatives in a multidimensional way. The challenges to workplace health are complex, involving the areas of public policy development, changing demographic trends, new developments in technologies, changes in business models and new thinking on public and occupational health. To date, most of the policy responses to these changes have been uncoordinated and sporadic in nature. Future research therefore needs to take an integrated and coordinated view, not only if problems are to be fully understood, but also to help ensure that future policy development proceeds from an adequate view of the problem.

A second perspective which informs this research agenda is the need to be forward looking. Projections in relation to working life in ten years time indicate that the workplace and the labour market will differ significantly from that of today. The workforce will be older, work will become more knowledge and technology based, job tenure will be less secure and it is at least possible that work will be more plentiful than is the case today. This situation will throw up new challenges for workplace health and these need to be reflected in research programmes in the EU.

The final perspective informing the research agenda concerns the level at which research is needed. There is doubtless a need to specify research needs at a fine level of detail - there are many specific research needs in relation to the emergence of new workplace hazards, for example. However, this document deliberately takes a high level view of the research agenda, as there is a need to specify what should be the broad areas of research, especially in the context of the multi-disciplinary and multi-policy future which is emerging.

A research agenda for new approaches to workplace health - background

This vision of the future might be expanded by trying to imagine what the changes will be in the workplace related factors which create health and wellbeing. It is known at present that work and employment are generally good for the employee's health and wellbeing. At its best, it may provide a sense of wellbeing and fulfilment, a basic income, social support from peers, a sense of security, adequate finance for leisure time, and a health conducive environment. In addition, the workplace may provide a set of services related to health and welfare which can support the employee.

However, if we examine the workplace of the future, many of these salutogenic factors may be altered in a negative way. It seems clear, for example, that job tenure will decrease, that atypical work forms will increase, and that the distinctions between employer and employee, work and leisure, and work, workplace and home will become more blurred.

However, it may also be the case that workplaces will become more involved in providing services to improve the general health of the employee, through the influence of a combination of factors, such as legislative change, labour shortages and positive changes in management philosophy and methods.

These projected changes in the workplace, taken together with some emergent trends in workplace health policy form the background for the research agenda outlined below. This agenda has been framed in terms of a set of issues which will need investigation at a number of levels. Policy level research needs to be undertaken in relation to the policy formulation process and the focus of policy. Descriptive research is also needed, as there is a relative paucity of the right kinds of information which might inform policy development, especially in relation to the cross-policy issues which will become more relevant in the future. Investigative research will also be on the agenda, as the health and wellbeing implications of work in the next millennium are not yet understood. Finally, evaluative research will be needed, both in relation to pilot programmes and to broader initiatives.

The substantive issues which should form the basis for investigations include:

- The effects of an ageing workforce;
- The health and wellbeing implications of working in SMEs and micro-enterprises;

- The implications of work and home related technological changes for health and wellbeing;
- The relationship between work and home life;
- The emergence of new hazards and at-risk groups;
- Occupational and non-occupational sources of stress and their health implications;
- The development of sustainable employment in the context of occupational and environmental health, economic and social considerations;
- The distribution and level of costs between public and private sectors in relation to workplace related health issues.

Running throughout this vision of the future is the theme that a broader view of work-related health will need to be taken in future research. Not only will a greater emphasis on mental health issues be appropriate, but the social wellbeing of employees needs greater consideration. In a world where the support mechanisms available to home and family life become more important (as a result of increases in female labour force participation and dependency ratios), the ability of employees to remain in productive work will be crucially dependent on the arrangements which are put in place to maintain their social wellbeing.

A final structural element on this research agenda is the issue of its organisation. Three kinds of focus are needed in future research. Firstly, there is a need to define the precise nature of the problem to be addressed. Secondly, there is a need to investigate the policy responses appropriate to the problem and finally there is a need to investigate what kinds of service delivery will be needed to effectively influence the problem.

The research agenda which is elaborated below is both broad and deep. It has been generated with a focus on the research needs themselves, rather than confining its content to the brief of a single agency such as the Foundation. While many of the issues outlined below might usefully be taken up by the Foundation, other research funding and policy making agencies could and should also become involved in working to this agenda.

The research agenda

The research agenda outlined below is organised in tabular form. The main headings in the Table are:

- Research issues this refers to the content areas of the research which needs to be undertaken;
- **Research questions** this refers to some sample questions which would warrant investigation. They do not represent an exhaustive listing, but they should be viewed as an heuristic tool for generating detailed research programmes and studies.

The ageing workforce

The ageing workforce in Europe is increasingly been recognised to pose a significant challenge in a range of areas affecting the economic, health and social wellbeing of Europe. However, there has also been a relative lack of research into the area in some countries especially in relation to the kinds of integrated policies which may be necessary to cope with this challenge and also in relation to evaluation of the effectiveness of specific programmes. Some areas which might fruitfully be further investigated include:

- Ageing and health;
- Ageing and work performance;
- The effects of extending retirement age;
- Training and promotion discrimination issues;
- Cross-policy areas and ageing;
- Public and private pension provision for an ageing population;
- Involvement of occupational and public health services;
- Part-work/part-retirement solutions.

One area which has been investigated to a certain extent concerns the effects of ageing on health and wellbeing and on cognitive and physical performance. However, there has been relatively little worksite based research into this issue, and the translation of laboratory results to real life situations is not easy. Specific areas of concern which deserve further attention include ageing in the context of new working patterns and the interaction between ageing and longer working hours. Given the fact that later retirement ages are now being actively considered, it is imperative that these potential effects are better understood.

A key theme in this area relates to the broad issue of maintaining the wellbeing of the ageing worker, i.e. his or her physical, psychological, social and financial wellbeing, for longer than is currently the case. There is a real danger that the coming economic need for workers to work more years will be at the cost of the individual and collective wellbeing of the employee. Consequently, there is a need for research, especially at policy level, to take a broad and integrated view of the possible effects of this phenomenon. Examples of such research issues could be to examine the relationship between pensions systems and the need to earn wages, the issue of access to training and age-suitable work and the availability and effects of part-work and retirement solutions.

Finally, there is a need to examine the role and services provided by occupational health services to the older worker. If later retirement becomes a reality, there will be a potential need to provide additional workplace services which relate to employee welfare. Which agents are to define and provide these services and how will they relate?

5.2.2 Health and wellbeing and working in micro-enterprises

Despite the high political priority given to encouraging the growth of microenterprises and SMEs, relatively little is known about the positive and negative factors influencing the health and wellbeing of the employees of these organisations. In addition, the issue of how best to deliver health services to these organisations has not been satisfactorily resolved in any country.

A further issue which rarely receives the attention it deserves is the size of the target enterprise. While there are different definitions of what constitutes an SME or a microenterprise (based, for example, on number of employees, financial turnover, etc.), the most commonly accepted definitions are based on number of employees. However, the definitions which have been developed for purposes of economic forecasting, for example, do not pay much cognisance to the internal organisation of most enterprises. For example, SMEs which meet the definition of having no more than 250 employees are very different entities to those employing less than ten. For purposes of dealing with the health of employees, this heterogeneity of small enterprises in terms of size, internal structures and organisation, economic viability and infrastructure is of the utmost importance, and deserves to be the subject of further research.

Among the more important research areas in relation to microenterprises are:

- Assessment of health status of employees;
- Service provision methods, especially to microenterprises;
- Economic functioning and health status, health service provision;
- The nature of SME health needs.

The potential research topics outlined above focus on two broad areas - assessment of the health needs and status of SMEs and microenterprises, and the development and evaluation of effective delivery methods for health services. The issue of health needs is particularly important, since there is some limited evidence that the perspective of microenterprises on this issue is much broader than that of larger enterprises.

One additional area which has not received much attention reflects the need for integrated research, i.e. the relationship between the economic functioning of the enterprise, its health status and needs and how health services are implemented within and delivered to these enterprises. At the heart of this concern is the hypothesis that economic functioning dictates the level of health concerns and practice and the openness of the enterprise to external delivery of health services.

Work and home related technological change and health and wellbeing

The rapid changes in technology (not only, but especially in ICT based technologies) are recognised as having a transformational effect on both working life and increasingly on home and/or family life. These effects have been and are currently fairly intensively studied in relation to the effects of new workplace technologies on health, i.e. within the traditional occupational health and safety research paradigms. However, there are a number of issues which have not yet

attracted sufficient research attention. These include:

- The impacts of technology on health and wellbeing new paradigms and methods;
- The impacts of work technology on home life.

While the potential effects of technologies on health and wellbeing are currently the subject of much research, there is still great difficulty in conducting sufficient research to cope with the apparently ever increasing pace of technological change. The finite resources available for such research means that there is likely to be a growing deficit in knowledge, policy and practice with regard to the health implications of new workplace technologies. New methods and paradigms of research need to be developed which shorten the loop between the emergence of new technologies and the reaction of the scientific, policy making and practitioner communities so as to enable better prevention practices to emerge earlier. One possible method which may deserve investigation is to place more of the onus on the producers of these technologies to demonstrate the health and safety characteristics of the technologies they market prior to their being made available.

The potential impact of new workplace technologies on home and family life might also be usefully addressed. In particular, there are potential negative effects which may be mediated through more flexible working practices which deserve attention.

The relationship between work and home life

The trends towards increasing female labour force participation, increased levels of homeworking and increased levels of working hours in many countries deserve attention in terms of their impacts on home life. In addition, the ageing of the European population will lead to an increase in the caring role for many employees. Finally, the flexibilisation of work practices will lead to increases in job insecurity, with attendant problems in relation to health and wellbeing and the ability to plan ahead.

These trends will impact increasingly on the home life of employees and of family members. Specific areas of research concern include:

- Homeworking and impacts on family life;
- Homeworking and leisure time availability and usage;
- Job security and home life;
- Working time and caring.

The emergence of new hazards and at-risk groups

There are a wide range of potential new hazards associated with advances in technology and new ways of working. Advances in many areas such as ICT, biotechnology and chemicals have the potential to generate new health hazards at work and the increasing pace of technological change means that there are a range of legitimate areas of investigation within the occupational health

tradition. These include:

- Hazards associated with new technologies;
- Low job security/frequent career change and health and wellbeing;
- Health and wellbeing impacts of atypical work forms.

However, there is also a set of hazards which are increasingly being recognised as being potentially important which emanate from the psychosocial area. These include the growth of atypical and new work forms (e.g. changes in working hours, location of work, job tenure) and the consequences of flexibilisation of labour, i.e. low job security and its effects on health and wellbeing. These areas constitute a relatively new area of research, especially in relation to their potential health and wellbeing effects, and may also constitute a new area of occupational health hazard which occupational health practitioners should deal with.

Occupational and non-occupational sources of stress

The area of occupational stress has received increasing research and policy level attention in recent years, but there are still significant research and development needs in the area. Among the most important areas for research are:

- Interactions between work and non-work stressors;
- The stresses associated with atypical work forms;
- Effectiveness of stress related interventions;
- Methods of work related stress prevention.

There have been efforts in scientific studies to assess the contributions of occupational and non-occupational sources of stress to health and wellbeing. However, these studies are not conclusive, and they have not yet led to reliable methods of making these assessments in the workplace. This issue is important because of the fact that occupational health legislation dictates that employers are only responsible for occupational hazards to health, and the fact that it is currently very difficult to assess the effects of work stress means that many cases of occupational stress may go unresolved. More generally, there is also a case for studying the effects of non-work stress on health and safety within the workplace.

The emergence of new and atypical work forms also warrant research in relation to the stress they may produce. It seems clear from research into the areas of shiftwork and unemployment for example, areas which share some characteristics with some atypical work forms, that new and perhaps greater levels of stress would be associated with atypical work when compared to more traditional forms.

Research into the effectiveness of organisational level interventions to prevent stress is badly needed. To date, most evaluation of stress interventions has been confined to individually oriented programmes. Leaving aside the incongruence of expecting such programmes to effectively deal with structural sources of stress, the intervention methods which have been proposed and

implemented have questionable effectiveness, if only because they have not been adequately researched and evaluated. Part of this research work should focus on the development of simple and easy to use methods for diagnosing occupational stress and designing appropriate interventions.

The development of sustainable employment

The forecast trends in Europe towards the development of labour shortages when taken together with the economic incentives and pressures for business potentially present a challenge to the health and wellbeing of workers. On the one hand, an ageing workforce and an elevated retirement age present significant challenges to the maintenance of employee health and wellbeing. On the other, the pressures of global competitiveness and the economic incentives which companies increasingly face may lead to further pressures on employee health. Moreover, trends in social security provisions appear to have the effect of reducing the benefits available to the employee.

These major trends, over which governments have only limited control, may combine in such a way as to significantly increase the health burden placed upon employees in the economy of the future. Accordingly, the following broad areas deserve research attention:

- Workplace social, health and welfare provisions which enable participation in the labour force:
- The impact of business development incentives and strategies on workplace health and welfare provisions;
- The allocation of health and welfare costs, business development and sustainable employment.

A corollary of these trends is that there may need to be a readjustment of the allocation of health financial costs between employer, employee and the state, in order to ensure that employment becomes more sustainable for all concerned. Perhaps the principal issue here is to ensure that the employee, especially the older employee, does not bear an increased burden of health hazards and their costs due to reductions in public provisions on the one hand, and increased pressures of working on the other.

Workplace related health issues and costs

There are a number of relatively well established issues in workplace health which currently receive attention, but which will continue to need research in the immediate future. These include:

- Methods for assessment of the benefits of health and wellbeing;
- Economic incentives for health, safety and wellbeing measures;
- New paradigms for dealing with workplace health related issues;
- Effectiveness of new delivery systems;
- Integrated health and wellbeing delivery models.

Within the area of the costs and benefits of health and safety, two issues are in need of further research. The first concerns the need to develop accurate and convincing methods to assess the benefits of engaging in workplace health practices, while the second is concerned with the need to examine in more detail, possibly through pilot schemes, the use of economic incentives to encourage the practice of occupational health and safety in its broadest sense.

There are a number of pressures bearing upon occupational health which demand the development of both new paradigms and new delivery models of occupational health services. Some of these pressures have been alluded to earlier, but they include the ageing of the workforce, the emergence of new work hazards and new at-risk groups, and the growth of the small enterprise sector. To take one example, the application of the standard approaches to dealing with physical or chemical hazards in the workplace are much more difficult to apply to issues such as occupational stress, where it is extremely difficult to quantify both the sources of stress and their outcomes. In this case approaches based on benchmarking methods may be more applicable.

Another example concerns the phenomenon of occupation related illness or disease, where the causes of the illness are multifactorial and may emanate from either occupational or non-occupational sources. In this case, it may be possible to control the causes of the disease coming from the workplace, but it is not possible using traditional occupational health methods to prevent the disease. While such traditional approaches may satisfy the demands of legislation (where they are applied at all), it is extremely difficult to prove their effectiveness and they may ultimately fail in their goal of disease prevention. In order for these kinds of illnesses to be effectively addressed, there is a need to develop new integrated approaches to deal with health and wellbeing in the workplace. The approaches to workplace health promotion being developed in Europe at present hold promise in this regard, but their effectiveness is not yet proven, and their implementation is not yet widespread. Within the context of integrated health models, there is also a need to consider services other than occupational safety and health or health promotion. Services such as welfare, child care, rehabilitation and supports for elder care will also need to be considered.

Finally, there is a continuous need to develop new delivery systems for workplace health. These need to be developed to extend the coverage of workplace health services to all enterprises and to address effectively the emergence of potential new at-risk groups such as homeworkers, teleworkers and older workers. In addition, there is a need to address the specific health needs of groups such as women workers, migrant workers, whose existence in the labour force is already widespread, but for whom service provision tends to be limited.

Work and disability

The issue of disability which disbars the individual from working is a major issue in some countries. While vigorous efforts to combat this problem are being made, there is still much to be

understood about the most appropriate methods to be used and a range of other issues relating to the rehabilitation of disabled individuals. Among the more important research topics are:

- Methods of rehabilitation of disabled workers;
- Economic benefits of rehabilitation;
- Professional roles in rehabilitation;
- The impacts of work related disability reduction strategies;
- The interaction between wage, pension and disability insurance systems.

These research and development issues will become more important as the European workforce ages and as the average age of retirement increases. Moreover, the changes in social security and pension regulations will impact significantly on how the phenomenon of work-related disability will be treated. It will be necessary for research to track the ways in which these changes impact on the individual employee in order to ensure that negative impacts on health and wellbeing do not ensue.

As the concept and experiences of dealing with work-related disability evolve, the role of the various professionals involved will also need to evolve. This need will occur because of the likely growth in need and the increase in the range of services required to deal with this growth. Research into the needs, development of new models and methods, redefinition of roles and training and education for professionals in the area will all need to be undertaken.

Policy level research

The challenges to be faced due to the changing nature of work and society demand not only a research response but also a concerted policy response. To date, a number of emergent policy initiatives are appearing in some Member States, which begin to address these health challenges in the workplace. However, these initiatives are as yet relatively untried, and are in need of research both at a policy level and in terms of the effects of these policies. Moreover, the precise conformation of the problems faced varies considerably by Member State, and the legislative and resource frameworks available to the Member States also vary significantly. For these reasons, there is an obvious need for research to take place at policy level in the following kinds of areas:

- The interaction of welfare, pensions and occupational health policies;
- The interaction of labour market, economic development and workplace health policies;
- The interaction of public, occupational and environmental health policies;
- The relationship between research and policy development for workplace health.

Research into policy areas should obviously take place at a high or strategic level. However, there is also a need for a reassessment of the policy formulation process itself and the role of research in this process, especially in the light of the increasing pace of workplace change. For example, the use of rapidly emerging and changing technologies defies the capacity of the research community to gather information relevant to the policy formulation process. New ways of

conducting research and of speeding up the information transfer process will need to be developed if policy formulation is not to fall further behind the practices taking place in the workplace.

With regard to the content of policy research, there is a need to ensure that an integrated approach to policy analysis takes place, i.e. interacting areas of policy are fully investigated. In addition, there is a need for the evaluation of policy initiatives, especially in the context of the multifaceted nature of the problems to be faced.

Professional level research

The changes in the workplace which are now taking place pose considerable challenges to the established professional groups operating in the area of workplace health. These challenges relate to a potential mismatch between the knowledge and skills bases of the professions and the multifactorial nature of the problems which are emerging. Among the main areas of research and development which are implied are:

- Adequacy of the skill and knowledge base of workplace health professionals;
- Adequacy of current policy and practices;
- Development of multidisciplinary services;
- Development of new concepts of workplace health for professional groups.

An important theme in this research is that of integration, both in terms of the concepts of workplace health to be used and in the nature of the services to be delivered. This integration implies the further development of multidisciplinary services, and research is needed to help specify the conformation of these services.

A second theme which will be of importance is that of expansion of services beyond the traditional confines of workplace health practices. In particular, there will be a need to link more effectively with external services and to broaden the scope of activity to include non-occupational issues such as general health, the maintenance of wellbeing and mental or psychosocial health issues.

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