

a considerable economic problem for the national economy in the form of lost resources, lost real output, and high expenses incurred for medical treatment and rehabilitation measures. The direct costs, which essentially include the costs of compensating for these occupational accidents, are estimated by Eurostat, the Statistical Office of the European Union, to be 20 bn Euro annually.

These figures represent, however, only the tip of the iceberg, as work-induced disorders, including occupational diseases, are even likely to lead to a considerably higher rate of incapacity to work and to considerably greater losses for the national economy as a whole. Model estimations carried out for the Nordic Council of Scandinavian Countries, indicate that work-induced disorders account for up to 40% of the overall figure for illnesses.

Estimates carried out as part of the project “Economic aspects of occupational safety and health at the workplace in the Member States of the EU” conducted by the European Agency for Safety and Health at Work in Bilbao, Spain, suggested economic losses of between 0.4 and 4% of the gross national product, which is a huge sum compared to an estimated European Gross Domestic Product (GDP) of more than 8,000 bn Euro per year.

Modern, humane working conditions are increasingly becoming an important factor of competition as well as an element of a modern employment strategy. This was a central result of the European Conference on Occupational Safety and Health and Employability in September 1999 in Bilbao, Spain. At this conference the Director-General for Employment and Social Affairs of the European Commission, Allan Larsson, emphasised the importance of joint political measures within the European Union in order to avoid employees losing their jobs on account of accidents and work-induced disorders and companies losing essential know-how. The contribution of occupational safety and health (OSH) to the competitiveness of a company or a national economy depends decisively on how well the rapid changes in employment, observable throughout the world, can be upheld and accompanied by wise and efficient OSH policies.

1.1 Changes in Working Life

The future trends in employment are basically known to us. We know that employment in the primary and secondary sector will decrease in absolute

figures and increase in the tertiary sector. Within the tertiary sector a knowledge sector will emerge, which will produce the most dynamic developments in employment. The growing need for consultancy will raise considerably the demand for qualified services. This applies in particular to sectors such as law, economics, property, safety, health, education and training, information, the media, and also to the fields of organisation and planning as well as research and development.

An area with considerable growth rates is that of social welfare industries such as social services, health, and nursing.

Work profiles will also change. Simple types of work and unskilled work will decrease, less qualified work will stagnate, demanding jobs relating to data, information, and knowledge will gain in significance. New technologies demand new qualification features. The importance of primary training will diminish whereas that of further training correspondingly increases in significance.

An optimal combination of professional and social competence, good communication and co-ordination skills, flexibility, and the ability to cope with the new situations, an orientation towards services, the ability to learn and readiness to participate in further training are the decisive requirements for the employees of tomorrow.

Knowledge, creativity and information will be the future driving forces generating productivity.

The change of the profiles and requirements of work is accompanied by a change in the organisation of work itself. Gainful employment will increasingly take place in self-organised groups working autonomously and with flexible working hours. Work will be organised on a project-oriented basis and in networks of small teams. Telework will be firmly established in this working world, which will be characterised by flexibility. The stable and safe “normal employment relationship” will increasingly belong to the past. Discontinuity and fragmentation will determine working life.

1.2. New Challenges for OSH

This brief description of the important trends in the further development of employment illustrates clearly the high demands that will be made on employees. And although it is completely correct that those responsible for OSH raise the banner for humanising employment and adapting working conditions to suit people, it is equally right that we must help those affected

to deal with these requirements to cope with the challenges of the new information society. For that which can be positively described as enriching the contents of work with a high degree of responsibility in the form of job enlargement or job enrichment, can easily lead to excessive demands by too great a psychological strain. We will have to cope with the challenges mentioned in the field of employment with an ageing labour force. This is a reflection of demographic changes and not necessarily a drawback as such, for it has long since been recognised that the capacity for work does not decrease with age in general. It would also be absurd to dispense with the knowledge and experience of older employees. However, working conditions must of course be such that it is possible to sustain employment over a long period and equally the attitude towards employing older people must change. Investing in the qualification of the employees and realising concepts for life-long learning will become increasingly significant to the survival of companies because in future more and more older employees will provide the crucial innovation factor.

The new working world must not only benefit young, Olympian-like elites. We must guide everyone along the path to the new information society. Nobody should be excluded on the grounds of illness, an employment-induced inability to work, age, or gender. When we ask ourselves what contribution OSH can make to employment and the capacity for work in my opinion the answer must be sought in two fields. We must, on the one hand, also help to establish the social standards of employment, of which we can be justly proud, in the new fields of employment. The solution to the employment problem must not be sought in social dumping. More flexibility and greater responsibility must not degenerate into permanent strain for the employees. New technologies and new concepts for production and services should also be developed and implemented with a view to the requirements of employees. This is not only the dictate of our social responsibility but also that of economic reason. Experiences in Germany, for example, from the research and development programme "Work and Technology" have shown that those technologies and concepts for production and services, which have been developed and implemented with respect to the employees' needs are superior to those, which are only technology-oriented and do not take into account employees' requirements in relation to the design of their working conditions. Thus new concepts of work organisation have in the past been developed and tested in Germany, which have included team-work, the reduction of hierarchical structures, and the shifting of responsibilities to lower levels with the objective of human-

ising work. Similar results have been obtained to those derived using other approaches, for example, the concept of lean production, and following different objectives such as a productivity increase.

This means that in highly developed industrial and service-oriented societies the requirements for increases in productivity are not diametrically opposed to the demand for improvements in working conditions, but may even be interdependent.

Secondly, OSH can prepare employees for meeting new higher requirements, for example, via measures aimed at promoting health within the company and can help them to cope with these demands. This also applies in particular to the integration of the long-term unemployed and to the employment of disabled persons. To this end there exist numerous initiatives, such as the Luxembourg Declaration on the Promotion of Health Within Companies. Existing experiences must be publicised and acted upon.

2. THE EUROPEAN POLICY FOR OSH

Originally social policy and thus OSH were not included in the independent fields of EU policy. There was hardly any mention in the European Economic Community (EEC) Treaty of explicit authorisation for action in the field of social policy. The powers of the European Commission were mainly restricted to furthering closer co-operation between the Member States.

At first the integration process was only rooted in economic policy in the form of the European Community of Coal and Steel (1953), the EEC (1957), and the European Atomic Energy Community (1957). The most important aim was to create a joint market for goods, services, labour, and capital.

One objective of the European Coal and Steel Community (ECSC) was, however, also to take measures in order to reduce the considerable number of mining accidents and explosions, in particular in the coal mines, which cost the lives of more than 1,000 miners.

In 1957, the year in which the EEC was founded, the Standing Committee for Operational Safety and Health Protection in Coal Mining and in other mineral extracting industries was established in order to support the Commission in the area of legislation initiatives.

In 1974 the Advisory Committee on Safety, Hygiene and Occupational Health Protection at Work was established. Its task is to support the

European Commission in the process of developing and implementing measures in the fields relating to OSH and health and to facilitate the co-operation between the national authorities and the employees' and employers' organisations. This committee also has tripartite parity with members of the governments, the employees' organisations, and the employers' representatives of all Member States as well as the Commission.

The first Directive on OSH dealt with employees' protection against hazardous substances with respect to safety and health at the workplace and was adopted in 1978.

Directives, such as those that have been numerous adopted by the Community, have no direct legal force in the Member States. The Member States are, however, obliged to adopt the necessary legal and administrative regulations, in order to comply with the respective directive.

2.1. The Single European Act

The passing of the Single European Act in 1986 was a milestone for European social policy and thus also for Community policy in the field of OSH. By including the new article 118a in the EEC Treaty of 1957 the improvement of work environments became an explicit objective of the Community. This article was later absorbed in Articles 137 and 138 of the Treaty of Amsterdam. It provided the basis for European directives, which prescribed minimum regulations for OSH particularly at the company level and which, in collaboration with the European Parliament, the Council of Ministers has already been able to pass with a qualified majority.

The concept here was one of harmonisation and simultaneous progress.

No Member State was allowed to fall short of these minimum standards when transposing these directives into national regulations, but equally was not obliged to abandon in the event of higher standards of safety and health protection.

By means of the Single European Act, Article 100a was also introduced to the EEC Treaty. The directives adopted on the basis of this article define in the interest of the free movement of goods within the Community quality requirements and thus also technical safety requirements for machines, equipment, tools as well personal protective equipment (PPE), which are binding for all Member States.

The concept here was one of total harmonisation in the interest of the free movement of goods.

2.2. The Framework Directive for OSH

The most important directive to be based on the new Article 118a was without doubt the framework directive of 1989 “on the implementation of measures to improve occupational safety and health.” This framework directive, which has been transposed in Germany via the Occupational Safety and Health Act, constitutes in essence the basic law for OSH.

- Accordingly the employer is bound to ensure the safety and health of employees with respect to all aspects relating to work;
- the employer must evaluate the working conditions in the company from the point of view of OSH and must take the corresponding protective measures;
- the employer must ensure that each employee receives appropriate instruction relating specifically to the workplace in question and that all queries relating to OSH are heard;
- the employer must provide an appropriate organisation for OSH together with the necessary means.

Equally, the employees are also required to play an active role in the OSH protection measures of the company.

- Each employee is obliged to attend to his or her own safety and health as well as that of other persons affected in any way by his or her job;
- the employee is required to use machines, hazardous materials, and PPE properly; and
- the employee is required to act in accordance with his or her instructions.

Based on this framework directive numerous single directives have also been passed, relating amongst other things to

- the use of work equipment,
- the protection of employees against the risks from VDU work,
- the use of PPE,
- the manual handling of loads,
- the design of workplaces,
- the improvement of working conditions at construction sites,
- the protection of employees against risks from hazardous substances.

2.3. The European Social Charter

A further significant step for European social policy was the Community Charter of Basic Social Rights, which was adopted in 1989 by 11 heads of

state and government (not including the United Kingdom). The aim here was to make the advantages of the Single Market more apparent to employees and thus principles were agreed upon, which ought to lead to an improvement in the basic social rights of employees, for example,

- the right to freedom of movement throughout the Community,
- the right to adequate welfare cover,
- the right to equal opportunities for both men and women,
- the right to safety and health protection at the workplace,
- the right to freedom of association and free wage negotiations,
- the right of access to promotion at work for disabled persons.

These principles became part of the Treaty of Amsterdam in 1997.

Social policy action programmes, which are explicitly put into practice, are used to implement social policy aims, for example, through the action programmes for safety and health protection.

The current social policy action programme has set the focus for the period 1998–2000 naturally on reducing unemployment and raising the level of employment.

However, also at issue is the ability to cope with the conditions of a changing world of work and thereby to modernise labour organisations, anticipate trends in industry, to seize the opportunities arising from the information society, and to create safe and healthy workplaces.

Further aims include improving and modernising social security, promoting social integration, combating discrimination and turning equality of opportunity into reality, promoting higher health standards within the population as well as supporting the extension of the EU.

2.4. The Action Programme for OSH

The current action programme for OSH, which is the 4th such action programme, focuses on nonlegislative measures. It is now important that the aims of the directives relating to more safety and health protection be allowed to take effect in workplaces throughout the EU. The enforcement of planned Community legislation is the responsibility of the Member States. The Commission, however, verifies whether the measures taken by individual states are in accordance with Community Law and takes steps with strict adherence to the subsidiarity principle to ensure the correct and effective application of Community Law.

One such measure is the appointment of a committee of senior supervisory officials. This committee assesses national systems, and problems related to the practical transposition of directives are discussed. For this reason the Commission attaches particular importance in its activities to collecting and conveying information about occupational health risks as well as about examples of successful design solutions for safe and healthy workplaces. Special attention is paid to the situation in small and medium-sized businesses, as it is here that complex situations involving exposure to strain and hazards for the employees are frequently encountered and often there exists only a low level of labour protection know-how.

Within the framework of this action programme it is intended that the following themes will be pursued:

- frequency and stemming of violence in the workplace, in particular there where employees are being increasingly exposed to violent attacks, for example, in security services and sales positions;
- the influence of excess stress and personal behaviour on the incidence of occupational accidents, occupational diseases, and work-induced illnesses;
- advantages and disadvantages of using specific techniques for monitoring the health of the labour force (in particular genetic screening and genetic monitoring) with respect to the ethical, social, psychological, and legal consequences;
- the effects on safety and health protection of new technology and production methods, the introduction of modern communication technology, and the increase in homework on contract;
- the potential exposure of employees particularly in the field of nursing to potential dangers to safety and health, such as infectious microorganisms, chemical substances and dusts, physical reactions, mutagenic and teratogenic substances, skin irritants, and so forth;
- incentive systems, which promote preventive measures on the basis of their efficiency and suitability for general application.

One way of conveying information and educating the public is the European Week for Safety and Health at Work, which takes place in all Member States on a given topic. This year's week went under the heading "turn your back on work-related musculoskeletal disorders" and took place in the autumn.

2.5. The European Agency for Safety and Health at Work

The European Agency for Safety and Health at Work was established in 1996 with its headquarters in Bilbao, Spain, in order to assist Member States in the practical implementation of Community regulations and to develop a common understanding on OSH. The Agency has the task of making available to all Community institutions, the Member States, and others involved all relevant, technical, scientific, and economic information on the field of OSH.

A lot of information on OSH issues in the Member States already exists. However, it is often widely scattered and not always easily accessible.

Organising an information network is one way of securing access. This network is made up of national contact points, Focal Points, and other relevant associated bodies, which are all able to make a contribution to the subject of safety and health at work. Use is made of the Internet and all national centres can be reached via the Agency at the following address:

European Agency for Safety and Health at Work
 GranVia, 33
 E-48009 Bilbao
 Spain
 Telephone: 0034-94-479 4360
 Fax: 0034-94-479 4383
 E-mail: <information@osha.eu.int>
<http://osha.eu.int>

The Focal Point in Germany is Section IIIb 2—Occupational Safety and Health at the Ministry for Labour and Social Affairs, <http://de.osha.eu.int/>.

The main national contact institutions in Germany are

- the Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (Federal Institute for Occupational Safety and Health), headquarters in Dortmund;
- the Hauptverband der gewerblichen Berufsgenossenschaften (HVBG, Federal Association of Professional and Trade Occupational Accident Insurance Funds) in Sankt Augustin;
- the Landesinstitut für Arbeitssicherheit und Arbeitsmedizin (LIAA, National Board for Occupational Safety and Health) in Potsdam.
- The Focal Point institution functions as the point of contact between the Agency for Safety and Health at Work in Bilbao, Spain, and the main German institutions. It distributes information from the Agency, co-ordinates activities and represents the national network at the European level.

- The Federal Institute for Occupational Safety and Health mainly has the task of introducing its own research results and acting in an advisory capacity to other research institutions, which become involved in the network.

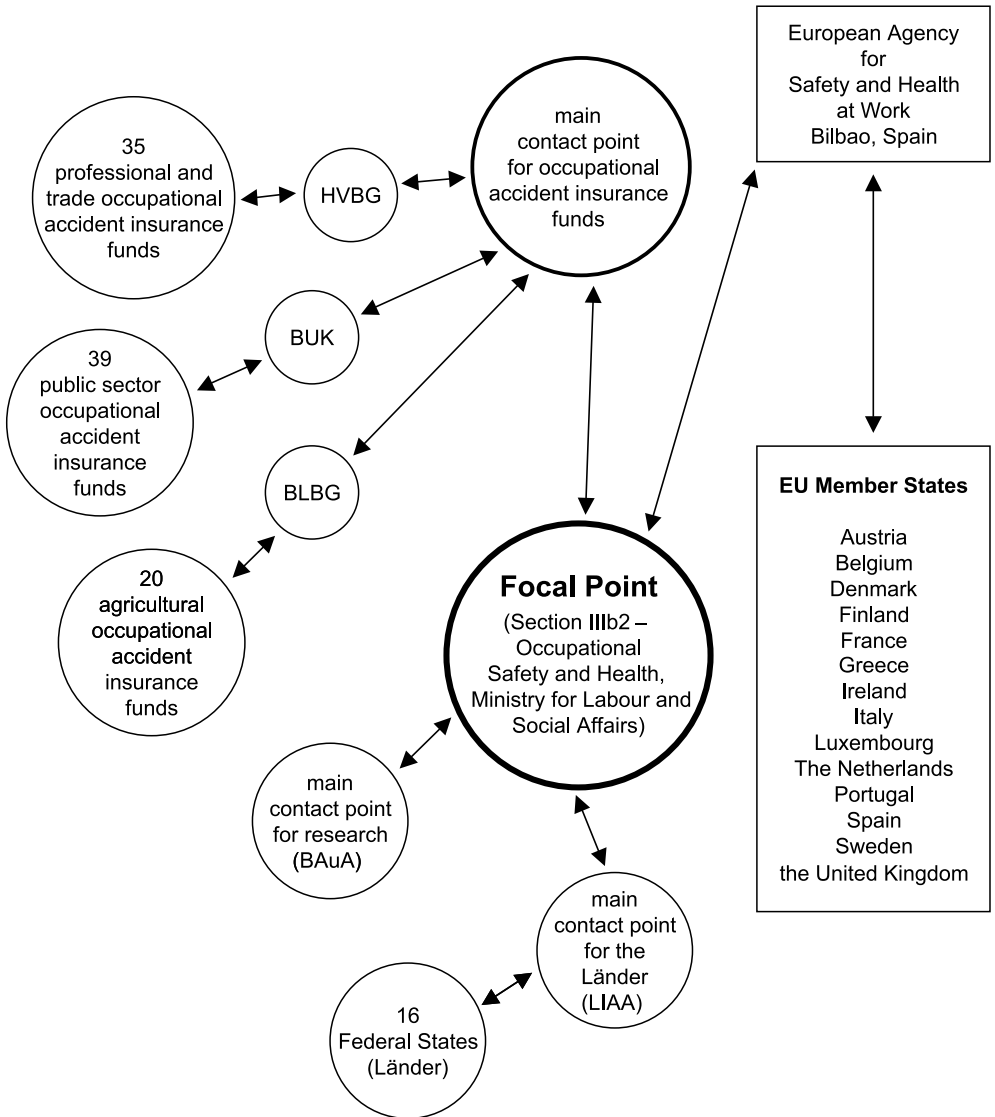


Figure 1. Organisation structure for establishing a German occupational safety and health network. Notes. HVBG—Federal Association of Professional and Trade Occupational Accident Insurance Funds, BUK—National Association of Accident Insurance Funds, BLBG—Federal Association of Agricultural Occupational Accident Insurance Funds, LIAA— National Board for Occupational Safety and Health, BAuA—Federal Institute for Occupational Safety and Health.

- The Federal Association of Professional and Trade Occupational Accident Insurance Funds is responsible for ensuring the involvement of all (occupational) accident insurance funds in the network. These comprise
- 35 Professional and Trade Occupational Accident Insurance Funds,
 - the Bundesverband der Landwirtschaftlichen Berufsgenossenschaften (BLBG, Federal Association of Agricultural Occupational Accident Insurance Funds), and
 - Bundesverband der Unfallkassen e.V. (BUK, the National Association of Accident Insurance Funds).
- The National Board for Occupational Safety and Health represents the Federal States (Länder).

The Agency conducts information projects concentrating on the following fields of activity:

- the monitoring of safety and health protection at work—A report is currently being compiled on the state of OSH in the whole of the EU;
- proven practices in the field of OSH—Solutions to the problems of stress at work, hazardous substances, musculoskeletal disorders are collected and distributed via the Internet;
- Research—Amongst other things, work is currently underway on a joint presentation of research priorities. The aim is also to anchor these research topics in the EU framework programme on research;
- Systems and Programmes—Within the framework of this field of activity the priorities and strategies laid down in the OSH policies of Member States are collated and the economic effects of OSH are analysed. The Conference on Changes in Working Life was held during the Austrian Presidency and the Conference on Safety, Health, and Employability took place during the Finnish Presidency.

2.6. The European Foundation for the Improvement of Living and Working Conditions

Another important source of information for promoting common strategies on OSH is the European Foundation for the Improvement of Living and Working Conditions in Dublin, Ireland. The Foundation was established in 1975 with the objective of making a contribution towards drawing up concepts and creating better conditions for living and working in the EU. The main focus of attention in the year 2000 was on promoting employment

policies, modernising labour organisations, promoting new developments in information technology, for example, telework, promoting social policy programmes, such as strategies for keeping active in older age and for equal opportunities at work as well as for sustained development.

Both the Foundation and the Agency are run by an administrative board, which is made up of government, employer, and employees' representatives from all Member States and the Commission.

3. OUTLOOK

Safety and health at work is a common European cause. It represents the common moral view shared by the Member States of the European Union that Europe as a whole must not only be an economically strong Europe but also a Europe of citizens. Safety and health at work are thus not merely a question of social responsibility towards employees within the Union but also an appeal to economic reason. For it is only with a healthy, motivated, productive, and highly qualified labour force that we will be able to meet the economic demands of a globalised economy.