

Health and safety at work in SMEs: Strategies for employee information and consultation

Introduction: the issues at stake

Regulatory context at national level

Forms of employee involvement

Trends at national level

Trends at EU level

Policies promoting OSH in SMEs through employee involvement

Commentary

Bibliography

Annex: Multinomial regression on the determinants of information level on OSH at work

Small and medium-sized enterprises face a number of difficulties in complying with occupational health and safety (OSH) regulations owing to fewer resources and less awareness of the costs of non-compliance in terms of higher risks. Employee OSH representatives are frequently lacking, especially in smaller companies, making it more difficult to implement the participatory approach envisaged by the 1989 EU Framework Directive on health and safety. Consultation on changes to organisation and working conditions, workplace learning opportunities and job security all contribute positively to improving employee information on OSH risks at work. One approach that appears promising when dealing with this gap is free counselling combined with discounts on insurance premium for those achieving substantive reductions in their accident rates, and territorial employee representatives.

Introduction: the issues at stake

EU health and safety at work strategy

The <u>EU health and safety at work strategy 2007–2012</u> stresses the importance of small- and medium-sized enterprises (SMEs), high-risk sectors and subcontracting in achieving the target of a 25% reduction in work accidents by 2012. SMEs in particular are seen as more vulnerable since they have 'fewer resources to put complex systems of protection in place, while some of them tend to be more affected by the negative impact of health and safety problems'.

The strategy envisages a simplification and adaptation of existing legislation applicable to SMEs together with various forms of support in its implementation, such as:

- dissemination of good practice;
- training of employees;
- development of simple risk-assessment tools and guidelines;
- access to affordable and good-quality prevention services;
- financial incentives.

Labour inspectors are urged to play a twofold role 'as intermediaries to promote better compliance with the legislation in SMEs, primarily through education, persuasion and encouragement' and 'when necessary, through coercive means'.

Member States are invited to:

- 'take steps to facilitate access to good quality prevention services' particularly in favour of SMEs;
- improve the health surveillance of workers while avoiding inflating formal requirements;
- incorporate specific measures into their national strategies (financial assistance, training tailored to individual needs, etc.).

Member States and the social partners are also encouraged to promote 'the practical, rapid implementation of the results of basic research by making simple preventive instruments available to enterprises and in particular to SMEs'.

Such an approach is consistent with the 'think small first principle' of EU legislative action and the EU <u>better regulation strategy</u>, which is based on simplifying, reducing administrative burdens and conducting impact assessments for legislative proposals.

The 2007 action programme (212Kb, PDF) aims to reduce administrative costs by 25% in 2012 by adopting the standard costs model. Following the finding reported in the 2009 Commission document, Reducing Administrative Burdens in the European Union (57Kb, PDF), that the working environment is one area where the proportion of EU regulation is higher, the Opinion (91Kb, PDF) of the High Level Group of Independent Stakeholders on Administrative Burdens issued on 28 May 2009 recommends excluding companies with fewer than 50 employees from the risk assessment procedure and to differentiate information obligation according to company size.

This approach, which is warmly supported by employers' associations, meets demands expressed by SME employers who see health and safety (OHS) legislation as either an administrative requirement, a bureaucratic burden, or very expensive (as indicated by several annual reports from national inspectorates – for example, Slovenia and Spain). However, the proposal is contested by the European Trade Union Institute (ETUI). According to an ETUI special report (183Kb, PDF) (Vogel, 2009), 'work hazards are much more to do with the production process and how it is managed than company size. Size is often associated with poorer quality management, but it does not have to be' and that such a rollback on regulation would undermine accident prevention in SMEs.

The relevance of OSH at work in SMEs is highlighted by prevalence of accidents among them. According to a Eurostat report, <u>Statistical analysis of socio-economic costs of accidents at work in the European Union</u> (Eurostat, 2004), SMEs employ over 66% of Europe's working population but account for 82% of all occupational injuries and for about 90% of fatal accidents

According to a working paper from the European Agency for Safety and Health at Work (<u>EU-OHSA</u>), <u>Occupational safety and health and economic performance in small and medium-sized enterprises: a review</u> (European Agency for Safety and Health at Work, 2009a), the main reason for less favourable OSH conditions in SMEs is their lack of knowledge and resources to manage their working environment properly, including opportunities to call on external expertise. While SME employers consider ensuring safety to be costly, they are not similarly aware that poor safety is also costly. A reduction in accidents, damages and poor health outcomes can lead to a reduction in costs and greater availability of personnel and plant; this in turn can improve efficiency and thereby heighten the effectiveness of businesses.

Furthermore, as outlined in the <u>ready reckoner cost overview</u> produced by the UK Health and Safety Executive (<u>HSE</u>), the impact of work accidents is disruptive for SMEs: 60% of companies that have a disruption lasting more than nine days go out of business. Short-term interruptions of business can lead to loss of clients and important contracts, while a serious incident can lead to closure of a business due to the direct costs of dealing with the incident or the loss of contracts and/or customers.

In addition, SMEs tend to restrict their record-keeping because of the cost and do not routinely keep records of the cost of ill-health or accidents as this would increase administrative costs. According to an HSE research report (Antonelli et al, 2006), 'these costs are not readily apparent and that this information is too difficult to understand'. This report suggested setting up a separate OSH budget, as highlighted in an earlier HSE report by Gervais et al (2007) who showed that businesses with separate OSH budgets were more likely to agree that they experienced the benefits of a reduction in staff turnover, employee stress and sickness absence, and an increase in productivity, improved staff morale and fewer compensation claims. In addition, the link between OSH management and insurance premiums make the benefits of such management more visible to employers.

On the basis of a comparative analysis over four EU countries of OSH representatives in SMEs, Walters (2001, 2002) identified a further lack of resources making up the overall 'structure of vulnerabilities' (Nichols, 1997), which SMEs face in health and safety management. These are:

- the limited use of preventive services both from public agencies and private consultants;
- the lack of experience of both employers and employees due to the shorter life-cycle of SMEs and the greater prevalence of non-permanent employees, compared with larger companies;
- infrequent inspections and control;
- restricted access by workers to their right to representation by means of elected representatives and unionisation.

In his analysis, Walters also highlighted further subjective factors making small companies more reluctant to engage in OSH management.

- The strong identification of employers with their business tends to mean they have a defensive attitude towards external agencies.
- In general, they show lower awareness of health and safety limitations and are confused about differences between preventive, regulatory and compensatory services.
- Small companies are more likely than larger employers to consider health and safety an individual rather than an organisational issue, relying more on employees' maintaining an adequate level of attention while performing their tasks, rather than on company prescriptions arising from risk assessment. This is a consequence of informal modes of organisation dominating in small companies, unlike medium-sized and large companies, which have a more formal organisational design and a wider set of prescriptions.
- Finally, the lack of employee representation in SMEs is usually seen as enabling better relationships with the employer (as they share both work environment and uncertainties over their perspectives), thus promoting direct involvement. On the other hand, as Walters and Lamm (2003) point out, 'relationships in small workplaces occur on a more personal basis, making employee dissention over OSH [OHS] matters more difficult' than in medium-sized and large premises. The overall effect of company size is therefore ambiguous and depends on the employer's attitude towards OSH.

A further HSE research report (Cameron et al, 2005) presents 'engagement' as a wider notion than 'involvement', according to which 'all workers, not just employees, have the opportunity to influence both management and other workers' decisions'. This approach is useful for multiemployer workplaces, which are becoming more prevalent – well beyond solely construction sites. The report explains that, while safety representatives have the strongest relationships with safety compliance thanks to their informal communication channels (though unionisation does not guarantee lower accident rates), the key resources in non-unionised workplaces needed to improve workers' commitment are:

- employer cooperation and support;
- OSH training;
- an open culture of trust.

Regulatory context at national level

National OSH policies focusing on SMEs

The national governments in European countries have adopted two main strategies in promoting implementation of OSH measures in SMEs – relaxing OSH requirements, and promoting OSH.

Relaxing OSH requirements

The first strategy aims to either simplify OSH requirements, or to exempt micro companies from some of them. The most common approaches are listed below.

- Employers are allowed to perform OSH tasks themselves, usually after having attended a training course carried out by an accredited training provider who certifies their knowledge according to national standards (as is seen in Belgium, the Czech Republic, Italy, Latvia, Luxembourg, rhw Netherlands, Poland, Portugal and Slovakia).
- Employees' OSH representatives are established only in companies above a certain size
 threshold (the practice in almost all countries apart from Italy, Portugal and Slovenia).
 Such a threshold is generally higher when national legislation foresees an OSH committee
 in the workplace.
- Risk assessments are performed in a simplified (or standardised) manner, as in the case of Italy in companies with fewer than 50 employees, or not performed at all (as in German and Italian companies with fewer than 10 employees).
- Internal OSH services are introduced (in Greece, Poland and Portugal) or time is set aside in favour of employees' OSH representatives (as in Austria and Luxembourg).

In Malta and Slovenia, the boundaries are not so clear-cut. In Slovenia, labour inspectors deal with OSH regulation according a 'soft law' approach (recommendations that are non-binding to a different extent according to the company's risk profile). In Malta, there is no precise threshold for the election of employees' OSH representatives.

When threshold-related simplifications or exemptions are introduced, the underlying shared view (often informal or tacit) is that OSH regulation is 'too complex' or targeted according to medium and large companies, and is more 'structured'; its fulfilment is seen primarily as an administrative burden. Such view is explicitly stated by employer associations or acknowledged by labour inspectorates as the dominant approach among small businesses.

Promoting OSH

A second strategy can be found in several countries. This is based on a 'promotional' approach, which aims to either lower cost barriers or facilitate access to OSH information and consultancy advice provided by public institutions. In most countries, labour (or OSS) inspectors play an important role in disseminating information.

Although bringing action into the mainstream through guidelines and websites is widespread, the most significant promotional actions public authorities can use to promote OSH in micro and small companies are as follows.

• Extensive free advice is provided via a system that aims to reduce the physical distance between public authorities and entrepreneurs. For example, the Austrian Social Insurance for Occupational Risks (AUVA) set up a network of regional centres offering free-of-

charge prevention services for companies with fewer than 50 employees. Ten years after its establishment, the consultancy services offered by the prevention centres covered almost two-thirds (65.7%) of all employees in SMEs. Similarly, German local employment offices offer a technical consultancy service (*Technischer Beratungsdienst*), granting access to its experts even to small companies. In the UK, the HSE has developed a series of example risk assessments targeted at SMEs.

- Financial incentives targeting SMEs are offered either directly or indirectly. An example of direct targeting is the Fund for the Improvement of Working Conditions (<u>FACT</u>) in France; another is the funding incentive from the Italian National Institute of Insurance against Accidents at Work (<u>INAIL</u>), envisaged by national legislation in 2008. Incentives may be offered indirectly to bilaterally managed funds (for example, the Swedish 'Prevent' initiative), with specific inducements devoted to SMEs, or by multistakeholder projects targeted at SMEs (for example the Belgian Pro-Safe project).
- Participation in multi-stakeholder committees is targeted at SMEs (for example the German 'Alliance for Health').

Approaches adopted by different countries

It is possible to group Member States according to their approach to OSH regulation in SMEs.

Mere simplification This involves introducing employee thresholds for risk assessment exemption or self-certification and/or allowing the employer to be responsible for OHS. Most of the countries adopting this approach are new Member States (NMS), such as the Czech Republic, Poland and Slovenia, or are experiencing significant changes in their economic structure (Greece, Ireland and Luxembourg).

Simplification combined with promotional activities targeted at SMEs In Austria, Belgium, Germany and the Netherlands, such a combination is well-consolidated, but in Italy, Portugal, Romania, Slovakia and Spain, the promotion of OSH that is targeted at SMEs is very recent and elicited by the implementation of the EU strategy 2007–2012 for safety and health at work.

Universal regulation combined with promotional activities targeting SMEs This is the case in France, in particular by means of its SME-targeted fund FACT, and in Sweden, where both public agencies and social partners are engaged in coordinated actions.

Universal approach for all sizes of company This grouping involves most of the Nordic countries (Denmark, Finland and Norway) and of the NMS (Bulgaria, Cyprus, Estonia, Hungary, Lithuania and Malta). While the Nordic countries pay considerable attention to SMEs in terms of both institutional design and of supporting and sanctioning actions, the NMS are either SME-dominated or their OSH regulation is too recently established.

Such a grouping highlights the leading role played by the social partners in promoting OHS, especially in SMEs. Germany has an extensive partnership with, at its cornerstone, the 'New Quality of Work' initiative (INQA) – an alliance, launched in 2001, of the federal government, states, trade unions, employer and business associations, social security organisations, foundations and individual companies. It aims to combine employees' expectations of healthy and satisfying working conditions with the need for enterprises to be competitive; to do this, it carries out surveys and promotes specific projects focusing on key issues (training, health and safety, well-being at work, aged workers, clerical work, etc.). A good practice database is one of the tools used to facilitate the exchange of ideas and to increase cooperation among companies. Under its umbrella, social partners and the Federal Association of Guild Health

Insurance Funds (<u>IKK</u>) launched a partnership for health in 2008, which focused on providing SMEs with information, advice and tools.

Joint institutions of social partners (for example bilateral bodies, joint committees and joint agencies on training or OSH promotion) play a particularly active role in Greece, Italy, Ireland, Romania and Sweden in promoting OSH in SMEs, by cooperating with social insurance, labour inspectors and/or occupational health services.

Other countries display different patterns of coordination among social partners and public institutions, in general less extensive and differentiated by sector or company size. Austria, Belgium and Portugal have the most articulated strategy in terms of public OSH policies targeted at SMEs. In Austria, working groups concentrate on specific OSH issues (failure management, risk assessment, explosions, etc.), but in Belgium and Portugal, the focus is more on dissemination and support actions in favour of SMEs.

The importance of promotional OSH policies is on the increase at an EU level (Table 1). For most countries that implemented the EU framework directive rapidly without any adaptation to their national context, leaving it too general, and with an overly bureaucratic approach, simplified rules for SMEs do not provide sufficient incentive to small and micro companies to improve their OSH culture.

Table 1: Promoting implementation of OSH regulation in SMEs

	Simplified regulation	Non-simplified regulation		
Promotion	AT, BE, DE, ES, IT, NL, PT, RO, SK	FR, SE, UK		
Non-promotion	CZ, GR, IE, LU, PL, SI	BG, CY, DK, EE, FI, HU, LT, LV, MT, NO		

Source: EWCO national questionnaires, 2009

Notwithstanding such different approaches towards small and micro companies between countries, the 'over-regulation' issue is posed in most countries by employer associations (especially those for small and micro companies), while in Sweden the issue is stressed by the main employer organisation.

The Romanian debate on the implementation of the EU health and safety at work strategy 2007–2012 is a typical example of the difficulty in achieving significant improvements in OSH standards. The Ministry of Welfare Commission for Social Dialogue claims that the increase in emphasis on SMEs is a 'threat' to the strategy implementation, as shown by a SWOT analysis, and emphasises that achieving the EU OSH strategy goals requires 'a change in values, attitudes and behaviour for all the parties involved in preventing labour hazards' (see the Romanian national contribution); it stresses therefore the need to intensify social partnership in achieving such goals. While the National Council of Small and Medium Sized Private Enterprises in Romania (CNIPMMR) agrees with the government on the importance of social partnership for OHS, it has vetoed the draft proposal and called for specific support to SMEs in order to implement the current legislation through a combination of simplification, financial aid and programmes promoting OSH awareness and knowledge.

Involvement of social partners at national level

Social partners are often involved at national level – not only in consultation and direct negotiation with public authorities, but also in consultative committees on OSH polices and in national agencies. Five configurations can be identified.

Unilateral commitment Social partners develop their own agencies, which provide training, technical expertise and guidance; they do this either on their own or in cooperation with other representative associations (either on the employers' or employees' side). This is the case in Slovakia, Slovenia and Sweden.

Bipartite involvement In Romania, such cooperation is established in the construction sector (dominated by small and micro companies) with the Builders' Social Fund (<u>CASA</u>), although the draft of the EU safety and health at work strategy 2007–2012 envisages the institution of a tripartite committee.

Tripartite involvement at national level This is demonstrated in an array of policy interventions. These include policy setting, ranging from advisory committees established at national level included in the national tripartite councils (in Latvia and Hungary) or by means of tripartite OSH committees (as in Austria, Estonia, Lithuania and Portugal). Meanwhile in Denmark social partners sit on the board of the Working Environment Committee, which provides technical expertise. Finally, in Germany, social partners are members of the Committee on Workplaces (ASTA, in German), under the aegis of the Federal Institute for Occupational Health and Safety (BAuA), which formulates concrete measures and sector-specific regulations, and of INQA, which is more focused on well-being and the quality of work.

Tripartite involvement both at national and local level In Finland, labour inspectorates coordinate local-level tripartite committees, while in France regional committees provide advice on the basis of information collected by regional observatories. In Belgium, national level consultation is limited to the National Labour Council (CNT), while the High Council for Protection and Prevention at Work (CSPPT) is complemented by Provincial Committees for the Improvement of Work, which include further stakeholders providing expertise (labour inspectors, trainers, schools, etc.) to promote information, dissemination and training. Bi-level tripartite involvement is also seen in Bulgaria.

Combination of both bipartite and tripartite bodies This configuration is characteristic of Greece and Italy. The Greek social partners' agency, the Hellenic Institute for Occupational Health and Safety (EL.IN.Y.A.E.), seems more focused on medium and large companies, but demonstrates some link with public policies since it supervises the national inspectorate. In Italy, social partners take part in advisory committees for INAIL at national, regional and provincial levels; they also set up specialised joint committees for OHS, sometimes carrying out workplace inspections, as in the construction industry, for instance. Finally, the 2008 OSH reform established tripartite advisory bodies for public policies at both national and regional levels. Table 2 shows the type of involvement by social partners in Member States.

Table 2: Social partner involvement in OSH design and implementation

Patterns and levels

Pattern	National level	National and local level	
Bipartite	RO		
Tripartite or more	AT, DE, DK, EE, ES, HU, IE, LT, LV, PT	BE, BG, FI, FR	
Both	EL	IT	

Source: National EWCO questionnaires, 2009

The three main actors who contribute to promoting workers' involvement in implementing OSH policies are:

- labour inspectorates;
- targeted public institutes on occupational health and working conditions;
- social security insurance and bipartite institutes.

Labour inspectorates play a pivotal role in Portugal, the UK and the NMS, while in Italy and Austria, the national insurance institutes combating work accidents play a leading role in promoting and mainstreaming OSH in small and micro companies. National OSH institutes and working committees in Ireland and Spain also play a pivotal role, recently complemented by sectoral bipartite foundations. In Denmark, Finland, France, Germany and Sweden, different specialised public institutions participate in designing OSH policies, each providing a specific contribution and sometimes promoting multi-stakeholder initiatives such as the German INQA. Finally, in Belgium, Greece and the Netherlands, social partners appear to play a more relevant role in implementation policies.

Forms of employee involvement

The EU <u>Framework Directive on health and safety</u> requires OSH employee representatives to play a key role in ensuring that employees are involved and consulted. A number of configurations can be identified:

- OSH representatives meeting their counterparts regularly;
- OSH committees based on representative parts;
- OSH committees based on a competence criterion, although representing all parties involved;
- risk prevention representatives.

Most countries require a threshold in terms of the number of direct employees in order to introduce indirect employee involvement on an OSH issue by means of either elected or nominated representatives at company level. Five configurations can be identified across the EU27 and Norway.

Incorporation in general works council This is the case in the Czech Republic and the Netherlands. In Belgium works councils can intervene on OSH issues in companies with 20–50 employees; when workplaces are larger, an OSH committee is established. Where a works council is set up in Italy, OSH representatives are selected from among its members.

No threshold for OSH representatives This is the case in France, Ireland, Italy and Slovenia. OSH committees are established voluntarily at company level, apart from France, where they are established when workforce is more than 50 employees.

A low threshold (of fewer than 30 employees); this varies between countries:

- five employees in Cyprus, Bulgaria, Spain and Sweden;
- 10 employees in Denmark, Austria, Estonia and Norway;
- 15 employees in Luxembourg;
- 20 employees in Denmark, Finland, Germany and Greece.

Workers' representatives are substituted by OSH committees when the workforce is larger than:

- 10 employees in Cyprus;
- 50 employees in Bulgaria, Estonia, Spain and Sweden;
- 100 employees in Austria (250 when they are clerks or people undertaking low-risk activities).

In Bulgaria, OSH issues are always discussed in bipartite units, while in Finland and Germany, OSH workers' representatives and committees can coexist since they benefit from full independence. In Denmark, OSH representatives can be incorporated in the workplace cooperation committee.

A medium threshold The threshold is 50 employees in countries where either work representatives or committees are introduced. Work representatives may be either general or OSH specific, as in Hungary, the Netherlands and the United Kingdom. Committees are found in Latvia and Romania.

A high threshold This may be 100 employees, as in Slovakia, or may be higher still, as in Poland, where it is 250 employees.

The establishment of OSH committees (or representatives) below the legal threshold can be required by social security legislation (Germany), collective agreement (Latvia, Norway) employees (Sweden) or, more frequently, by labour inspectorates (Estonia, France, Norway and Romania); the higher degree of risk is the main reason for their introduction.

Apart from Finland and Germany, OSH committees can be considered as an evolution from an informal interaction between safety officers and representatives to an institutionalised and (apart from the case of Denmark) specialised social dialogue structure.

In Denmark and Norway, workers' representatives are elected at a department or group level, and are coordinated by a senior safety representative. Similarly, in Sweden more that one OSH representative and committee can coexist in the same workplace, while in Finland clerical employees can elect a separate safety representative with two deputies.

Table 3 summarises the type of indirect involvement in terms of threshold.

Table 3: Type of health and safety indirect involvement, by company size

	Works council	OSH representatives only	OSH representatives and/or committees	Committees only
No threshold		IE, IT, PT, SI	FR	
20 employees or fewer	CZ	DK, EL, NO	AT, BE, CY, DE,* EE, ES, FI,* LU,* SE	BG
50 employees	NL	HU, LV, UK		LT, RO
100 employees or more				PL, SK
Not defined a priori		MT		

Notes: * OSH representatives as distinct from OSH committees.

Source: national questionnaires

Workplace OSH representatives are usually established on a company basis. The exception is France, where the Committee of Hygiene, Safety and Working Conditions (CHSCT) supervises all employees working in the plant. In Finland, site OSH representatives in shared workplaces (for example construction sites, harbours, refineries, petrochemical plants, power stations and steel factories) are seen as standard practice, while in Italy their establishment requires a plant-level collective agreement.

Collective bargaining introduced territorial-level OSH representatives in Belgium (in the retail and food industries), Denmark (in the public sector), Italy (in craft, commerce and construction) and Norway (at sectoral level according to the Ministry of Labour requests). Such representatives are found mainly in sectors dominated by micro companies, where any company-level indirect involvement would include just a minority of the workforce; in Sweden, they can be established on an intersectoral basis in those provinces where workplaces are very dispersed (Walters, 2002). According to the Slovenian Social Agreement 2007–2009 (267Kb, PDF), the government has committed itself to examining the possibility of establishing institutes of regional workers' representatives for health and safety at work for small employers; however, their introduction would require considerable legislative changes.

The above-mentioned cases show that territorial OSH representatives are established in those sectors dominated by small and micro companies, where social partners share the feeling of urgency about OSH issues, and the need to develop specific approaches to OSH because those developed in larger firms are seen as unworkable.

Scope of OSH councils/representatives

The EU Framework Directive introduced general prevention principles applicable to all occupational risks and aimed to ensure that workers were better protected, through the implementation of measures to guard against accidents at work and occupational diseases. The Directive places an obligation on employers to adequately inform employees about:

- 'safety and health risks and protective and preventive measures' including first aid, firefighting and worker evacuation (article 10);
- dealing with serious and imminent danger (article 9).

Employers are further obliged to consult their employees and their representatives by allowing them 'to take part in discussions on all questions relating to safety and health at work' (article 11), thus including their right to make proposals and to a 'balanced participation' on:

- any measure which may substantially affect safety and health;
- appointed workers who deal with preventing occupational risks or, if applicable, external service providers dealing with the same;
- information on risk assessment, protective measures, work accidents causing absences longer than three days, and the reports sent to the responsible authorities;
- the planning and organisation of training.

OSH workers' representatives have the right to:

- adequate time-off;
- adequate training;

- take appropriate measures;
- submit proposals to their employer in order to mitigate hazards or remove sources of danger;
- appeal to external OSH authorities if they consider that the measures taken and the means employed by the employer are inadequate.

National legislation can reinforce or limit the role of OSH representatives (or committees) in relation to a number of aspects.

First, the right to take action on individual claims is usually granted to OSH representatives though it is not allowed to OSH committees in Austria, Belgium (since their role is to 'collectivise' individual claims) and in the Netherlands. In Finland, OSH committees cannot initiate action.

The right to call in external experts for consultancy, investigation and surveys is granted in most countries, with OSH committees and employers having to bear the cost. This is the case in Austria (as a result of a common decision), Belgium (where only the presence of experts is permitted), France, Romania (though it is not specified whether the employer has to bear the costs) and Germany. In Poland and Slovakia, this right is subject to the employer's consent. In general, this clause seems to limit such a right in the NMS. This right is not regulated by law in the Czech Republic and Finland, although it can be observed in these countries — especially in large companies. OSH representatives benefit from such a right in Denmark, Ireland and Norway. In Italy, an agreement with the employer is required but those few cases observed are concentrated in large companies.

The right to access files and administrative reports is poorly observed. However in a number of countries (Austria, Belgium, Czech Republic, Denmark, Estonia, France, Greece, Hungary, Lithuania and Norway), the committee or the representatives are consulted before the annual report on OSH is published. In Belgium and Denmark, such reports are the basis for the annual OSH plan, while in Norway reports must be countersigned by employees' representatives.

The right of OSH representatives to be involved in risk assessment is common practice in Belgium, Denmark, Malta and the Netherlands (where their opinion is compulsory).

Finally, the right to stop production in case of pending and significant danger is granted only in Denmark and Norway – in the latter country, only with the intervention of the labour inspectorate.

In practice, such rights often carry several limitations. In those countries where OSH representatives (or committees) enjoy an unconditional right to deepen their awareness about OSH at the workplace, it is more likely that these rights will be upheld than in those countries where such rights can be exercised only with the employer's consent.

However, company-level surveys at national level all show that compliance with legislative requirements (for example risk assessment) increases with company size, as the following statistics make clear.

- In the Netherlands, risk assessment is performed in just 22% of companies with fewer than five employees, 48% in companies with 5–9 employees and 56% in companies with 10–49 employees.
- In Germany, OSH representatives participate in risk assessment on average in just 50% of workplaces: this ranges from less than 30% of workplaces with fewer than 50 employees, to over 60% in workplaces with more than 1,000 employees.

- In Denmark, more than three companies out of four with fewer than 10 employees both perform a risk assessment and hold discussions about the work environment between the employer and the employees or their representatives.
- In Spain, where there are no enforcing clauses in favour of OSH rights to call on the employer for further OSH investigation, only one workplace out of four performs a risk assessment (one out of six in those with fewer than 10 employees).

In Germany, the right to call for investigation is reinforced by the rights of the works council; these include the right to:

- be consulted on the selection of external and internal OSH experts;
- be involved in the inspection activities that internal OSH experts perform;
- appoint workers with the relevant knowledge and experience to support the works council.

Furthermore, the works council has the right to consult the company doctor, qualified safety officer or risk prevention representatives, who are obliged by law to cooperate. Important OSH issues and related proposals made to the employer must also be reported to the works council.

In the Netherlands, the constraint on the works council's taking action on individual claims is counterbalanced by its codecision rights on risk assessment and annual planning. The annual plan of action for OSH and the evaluation of its implementation are at the core of the work of OSH committees in Estonia, Finland, France, Norway and Romania.

The French CHSCT includes working conditions in general in its domain of intervention (for example, equal opportunities and access to employment for women, and resolution of maternity issues). It also plays a notable role in stress and psychosocial risk, musculoskeletal disorders (MSDs), emerging risks such as those that are carcinogenic, mutagenic or toxide for reproduction (CMR) and nanotechnology, and environmental matters.

In Denmark, funds negotiated by the social partners reimburse employers for the costs of investigations and surveys, thus providing a notable incentive. Guidelines, information materials and questionnaires are accessible to enterprises free of charge; these are made available mainly through:

- trade unions and employers' organisations;
- the Danish Working Environment Authority (AT);
- the National Research Centre for the Working Environment (NFA);
- the Working Environment Information Centre (VFA);
- eleven industry-level Working Environment Councils (BAR).

For example, the Copenhagen Psychosocial Questionnaire (<u>COPSOQ</u>), developed by NFA researchers, is widely used among enterprises as part of the written assessment of health and safety conditions in the workplace (*arbejdspladsvurdering*, APV) required in <u>Denmark</u>.

In Luxembourg, the consultation process is highly proceduralised. The safety delegate makes a record of the result of their observations. This is countersigned by the departmental head in a special register, which is kept available in the establishment's head office. Each week, the safety delegate, accompanied by the head of the establishment or their representative, is allowed to make a tour of inspection of the establishment's head office and its building sites or other workplaces of a temporary nature.

Table 4 summarises the powers of employee OSH representatives in each country of the EU27, and Norway.

Table 4: Powers of employee OSH representatives, by country

	Only representatives	Committees or representatives	Committees and representatives
Individual claims	CZ, DK, IE, LU, NO	BE, BG, CY, EE, FR, LV, RO, SE, SK	FI, LU
Call for investigations and surveys and appoint experts	DK, IE, NO	AT, BE, BG, FR, PL, RO, SE, SK	DE, FI
Involvement in risk assessment	DK, MT, NL	BE	
Right to stop production	DK, NO		

Source: national questionnaires

Composition of health and safety committees

Health and safety committees are generally instituted according a bipartite principle, taking into account the specific competencies of their members. This seems to prevail in Austria and Germany. In France, representatives of both the employers and employees are integrated on the committee with local labour inspectors, occupational health doctors and social security representatives.

In Austria, OSH officers are staff representatives appointed by the employer for a four-year period to represent the interests of the employees, to support them and to advise the employer on all OSH matters within the company. They therefore need to be approved by either the employees or the works council, and have the right to withdraw from the role. In addition, the OSH committee integrates representatives of the employer and the works council with occupational health doctors, OSH experts and the OSH officer. In Germany, the composition of the OSH committee is the same. Occupational health doctors, a qualified safety expert and the risk prevention representative are obliged by law to cooperate with the works council. Important OSH issues and related proposals made to the employer must also be reported to the works council.

In Belgium, occupational health doctors participate in OSH committees as a third party with a consultative role. In Poland, occupational health doctors are included on the employers' side and labour inspectors on the employees' side.

The working time reserved for OSH inspection by the employees' representative is a crucial issue, since it allows them to check OSH in practice. In Luxembourg, the 'appointed employee' for OSH is allowed 70 seconds per day per employee in companies with 16–49 employees (reduced to 45 seconds in those employing 100–249 people), plus a further 70 seconds for each position at risk.

Actors supporting implementation of regulations

As discussed in the EU-OSHA report, <u>Labour inspectorates' strategic planning on safety and health at work</u> (European Agency for Safety and Health at Work, 2009b), inspectorates may undertake further activities aimed at improving the implementation of health and safety at work; these may include:

- providing general information through guidelines and websites;
- contributing to national OSH strategies;
- providing consultancy and targeted mainstreaming activities (including training) at a
 workplace level both during their inspection activities and when called on to do so by a
 workplace stakeholder;
- collecting employers' reports on work accidents, occupational diseases and compliance with legal requirements;
- reporting on health and safety at work;
- promoting research on health and safety at work.

Most labour inspectorates (or workplace health and safety inspectorates, or ministries with responsibilities for labour) publish an annual report and promote further research through the establishment of a national institute for health and safety research.

According to Rogers and Streeck (1995), workplace employees representation plays a key role in enforcing both labour contracts and laws by providing an 'on-the-ground monitoring and enforcement mechanism, rooted in the daily operation of the firm', thus allowing inspectorates to concentrate on non-unionised workplaces.

Three types of cooperation can be detected from national questionnaires:

- access of individual workers to OSH inspectors;
- direct participation of labour inspectors (rather than OSH or social security inspectors) in workplace OSH committees (this is compulsory in France and Poland, while in Romania, these inspectors can be invited);
- the right of workers' representatives or committee members to contact inspectorates when safety measures are inadequate and the employer does not want to implement them.

The right of individuals to take action appears to be granted in all countries except Poland, although action by employees' representatives is the prevailing method in most countries. There are, however, differences in the degree of protection afforded to individuals: for instance, according to Danish legislation, employees consulting the labour inspectorate have the right to remain anonymous and to have access to documents and rulings concerning the company's working environment.

Cooperation is enhanced when social partners participate in joint committees contributing to the elaboration of OSH strategic plans (as in Austria and Norway) and not only to mere consultative bodies.

Cooperation between labour inspectorates and social partners can develop according to different patterns. In Norway, such cooperation is already close and is harmonised by incorporating social partners in public goals. On the other hand, Dutch labour inspectorates use sectoral OSH catalogues maintained by social partners as the reference standard for their inspection actions.

In some countries, social security plays an important role in promoting OSH at work. For example in Italy, INAIL has worked with social partners to promote a new standard, which is almost equal in effect to Occupation Health and Safety Assessment Series (OHSAS) 18001. OHSAS 18001 certifies the 'Occupational Health and Safety Management Systems Specification' and covers such issues as:

- planning for identifying hazards;
- risk assessment/control;
- OSH management;
- awareness and competence;
- training;
- communication;
- emergency preparedness and response;
- performance measuring and improvement.

OHSAS 18002 certifies the guidelines for the implementation of OHSAS 18001.

Training of OSH representatives and employees

The EU Framework Directive on health and safety sets an obligation on employers to adequately train, at their expense, their employees (article 12) and their representatives. Training must be repeated regularly, in order to take into account such issues as:

- technological and organisational changes;
- the insurgence of new risks;
- changes to risks.

National implementation of the Directive introduces a general obligation on employers to train their employees and workers' representatives. Three models of the creation of a training framework can be seen.

- Social partners agree the amount of individual OSH training. This is the case in Austria, Bulgaria, Denmark, Hungary and Italy, where the minimum amount of training activities for OSH representatives is specified and ranges from 16 hours (in Hungary) to 40 hours (Denmark). The Romanian construction industry organisation, CASA, follows such an approach.
- National public or bipartite institutions set up reference training modules and thus establish
 the national standard. This is the case with the Finnish, Maltese and Spanish national
 institutes for health at work, the French National Agency for the Improvement of Working
 Conditions (<u>ANACT</u>), the Cypriot labour inspectorate, the Greek EL.IN.Y.A.E. and the
 Swedish Prevent bipartite organisations. In Luxembourg, the Chamber of Private Sector
 Employees (<u>CEP-L</u>) offers a one-day training course.
- Governments set the national minimum requirements. For example, the Norwegian Ministry of Labour leaves employers free to choose the training provider and the timescale. The Estonian government envisages following such a strategy.

Correspondence between the national standards and the training provided is ensured either by certification or by accreditation of the provider to a recognised body. In some countries, such

as in Italy, certification is required only for training of employers or their OSH representatives – not for training of employees.

Several countries (for example Bulgaria and the Netherlands) report poor OSH training activities for workers' representatives.

Continuous training practices seem far less widespread. Six hours should be provided in Bulgaria, while a tripartite recommendation in Denmark envisages a reduction of initial training from five to three days in favour of ongoing training related to the particular conditions of companies, thus making the training more flexible and timely in coping with emerging risks and technological change (especially for SMEs).

Some public institutes offering training tend to tailor it by combining ongoing vocational training with workplace analysis and overall consultation on working conditions aimed at ensuring a healthy and safe work environment and well-being at work. This is the case of the Finnish Institute of Occupational Health (FIOH), ANACT in France and CASA in Romania.

Trends at national level

According to national contributions, analysis at a national level of health and safety at work, which takes into account company size, focuses on two issues:

- employers' efforts and activities with regard to OHS, such as OSH management and compliance with legislative requirements, and involving employees by means of information, consultation and training; such activities can be labelled 'resourcing' as discussed by Walters (2001, 2002);
- the impact of work on employees' health for instance, work accidents, work-related diseases and exposure to risk as perceived by employees; such outcomes are affected by OSH management, including methods used to inform and consult employees, and the intervention of external agents (that is, consultative and inspection activities).

Four types of sources of analysis can be identified from national questionnaires (Table 5):

- reports by labour inspectorates or OSH authorities;
- surveys carried out at company level by interviewing either employers or works councils;
- employee surveys;
- qualitative studies at company level.

The nexus between employees' involvement and health at work according to company size can be readily explored either from a single source or indirectly by combining different sources.

Some countries (such Belgium, Latvia, Lithuania, Luxembourg and Slovakia) do not supply any information on either issue according to company size, while the Czech Republic, Hungary, Portugal, Romania and Sweden rely only on administrative sources or reports from labour inspectorates. Meanwhile, Bulgaria and Greece rely only on qualitative reports. On the other hand, company-level surveys in Estonia, Ireland, France, Norway and Poland and employee surveys in Cyprus, Finland and Spain provide information on the issue. In Austria, Denmark, Germany, Italy, Slovenia and the UK, information comes from different combinations of sources.

Table 5: Sources exploring health at work and/or employees' involvement in OSH by country

	Administrative sources	Company-level surveys	Employee-level surveys	Qualitative studies
Austria		Labour inspectorate		Austrian Health Institute (1999)
Belgium				
Bulgaria				Project SMALL (2005)
Cyprus			Labour inspectorate	
Czech Republic	Labour inspectorate			
	National statistics			
Denmark	Trade union from AT (2004)	NFA	DWECS	
Estonia		WES		
Finland			Quality of Work Life Surveys	
France		Cnam-Rhones Alpes (2006)		
		Réponse		
Germany		Institute of Economic and Social Research (WSI) working condition surveys		<u>DNBGF</u> (2007)
Greece				General Directorate of OSH at Work (2002)
Hungary	Labour inspectorates report			
Ireland		Roscommon survey		
Italy	INAIL	INAIL (2001)	FIOM(2007)	
			Ispesl-Regione Veneto (2006)	
			Institute for Promotion of Work (IPL-AFI) (Bolzano)	
Latvia				
Lithuania				
Luxemburg				

	Administrative sources	Company-level surveys	Employee-level surveys	Qualitative studies
Malta				
Netherlands		Labour inspectorate	NEA	
Norway		Institute for Labour and Social Research (<u>FAFO</u>) (2001, 2007)		
Poland		Labour inspectorate (2006)		
Portugal	ACT, social reports			
Romania	Labour inspectorate (2007)			
Slovakia	Labour inspectorate			
Slovenia				
Spain			WCS	
Sweden	Swedish Work Environment Authority (AV)		Working Environment Survey (WES)	
United Kingdom		HSE		HSE

Notes: periodical survey or studies when year is not specified

Source: national questionnaires

Administrative reports: resourcing

In general, reports from public administrations consider mainly company size when investigating prevalence rates for work accidents and work-related diseases (as in the Czech Republic, France, Hungary, Italy, Malta, Portugal, Romania, Slovakia, Sweden) and compliance with legislative requirements (the Czech Republic and Portugal). They are often the only available sources in most NMS.

Resourcing is the dominant issue of administrative reports in the Czech Republic (according to the labour inspectorate report), Estonia and Portugal (where in particular OSH costs are the issue).

According to the Czech labour inspectorate's annual report in 2008, which summarised inspection activities in 2007, over 98% of inspected SMEs were non-compliant with at least one OSH issue and had an average of 4.4 deficiencies per inspection. The most frequent problems were:

- inadequate maintenance of machinery (81%);
- inadequate workplace characteristics (76%);

- lack of information and training (75%);
- insufficient risk analysis and risk assessment (63%).

Such outcomes are clearly affected by the inspection strategy, which targeted more risky businesses.

According the Estonian labour inspectorate, micro companies show the highest compliance rates (of 83%), while medium and large companies show the lowest (69% and 75% respectively). The reversal of the usual positive relationship between compliance and company size is because small and micro companies in Estonia tend to be recently established and 'started on the right foot', while older and larger businesses have encountered difficulties in achieving new OSH standards.

The Portuguese Social Report 2007 (<u>Balanço Social 2007 (in Portuguese, 1.35MB, PDF</u>), which summarises compulsory social reports produced by companies with more than 100 employees, gives information about the expenses associated with safety, hygiene and health at work on total personnel costs, by company size. As a percentage of their turnover, these costs are lower in companies with between 100 and 249 employees (at only 0.7% of turnover) than in companies with between 250 and 499 employees (where they stand at 0.9% of turnover). However, large companies – with 500 or more workers – report the lowest costs (at 0.6% of turnover).

Administrative reports: work accidents and work-related diseases

Most administrative reports from work insurance institutes and labour inspectorates focus on work accidents.

Work accidents are more prevalent among medium-sized companies in Romania (for companies with between 50 and 249 employees) and the Czech Republic (for companies with between 100 and 499 employees). However, in Spain and Sweden, SMEs in general are overrepresented in terms of work accidents. In Italy, incidence rates are higher among companies with fewer than 100 employees, while in France rates are highest for companies with 35 employees. By contrast, in both Hungary and Slovakia work accidents are more frequent in large companies. In Hungary, however, SMEs are over-represented in terms of fatal accidents (90%), these accounting for 71% of the total employed.

According to trade unions, such differing patterns among work accidents and fatal accidents is a clear signal of under-reporting, especially of less serious work accidents and in SMEs (Walters, 2002) as outlined by an analysis (in Danish, 300Kb, PDF) of administrative data carried out by the Danish Confederation of Trade Unions (LO). This view is supported by an inspection campaign carried out by the Hungarian labour inspectorate at the end of the 1990s, which found that at least 25% of work accidents had not been reported. One of the reasons for under-reporting is the extent of the illegal economy; this affects reporting both directly (it is difficult to estimate) and indirectly (small business face relatively greater cost pressures). In Latvia, under-reporting seems to be a much larger problem: according to informal information collected in the national questionnaire, 90% of work accidents are not reported due to lack of compliance, the high level of bureaucracy and, in particular, the fear of employees that they will lose their job.

Resource-oriented company-level surveys

Some labour inspectorates carry out company-level surveys in order to better target their inspection activities. Reports on inspections suffer from an intrinsic self-selection bias (that is,

a lack of representativeness) because of the 'natural' tendency to intensify inspections in the most risky industries and possible internal organisational problems such as understaffing, internal imbalances, and competencies conflicting with the inspection bodies of other public institutions.

In Austria, a labour inspectorate survey showed that small companies tend to focus on information while large ones stress cooperation and participation, especially among OSH officers. However, the index used shows relatively small gaps: information rights are fulfilled in 90% of small companies (86% in medium-sized and 87% in large ones), and involvement in meetings and inspections is higher in large companies than in medium-sized and small ones (94%, 86% and 85% respectively). These figures complement findings from a 1999 qualitative study performed by the Austrian Health Institute (ÖBIG) on OSH management in small enterprises which found that companies that had already set OSH measures shared three characteristics.

- The employer is convinced of the benefit of such measures.
- There are established and well-defined OSH responsibilities within the company.
- Employees are involved in OSH decision-making.

The annual Dutch survey, *Arbo in bedrijf* (Saleh et al, 2009), carried out by the national labour inspectorate, showed an increase in risk assessment, trained OSH employees and prevention employees in 2008 as company size increases. Risk assessment was performed in 22% of companies with fewer than five employees and in 92% of those with more than 100 employees, while prevention workers were lacking in 52% of companies with fewer than five employees and in 11% of those with more than 100 employees. The overall percentage of companies with risk assessment processes in place increased from 49% in 2004 to 54% in 2008; risk assessment models from sectoral employment associations (whether included or not in the collective agreement) play a significant role in companies with fewer than 50 employees and decline with company size. Such trends are confirmed by the employee opinions given in working conditions surveys: these showed employee information and consultation improving as company size increases, while small companies seem more responsive to solicitations from employees.

According to a report from Norway (in Norwegian, 1.49MB, PDF), both training and systematic OHS activities increased noticeably between 2001 and 2007 and increased with company size: for example, employee OSH training activities increased from 42% in 2001 to 52% in 2007. Company size was shown to have a positive impact on OSH training, which ranged from 44% among micro companies to 59% among companies with more than 200 employees (2007 figures).

The health and safety at work survey (in Danish) performed in 2006 by NFA in Denmark monitored in great detail health and safety actions carried out by employers grouped in six broad areas (OSH management, prevention, mental health, physical workload, noise, chemicals products and internal work environment). It broke down the data by sector and by company size. The report finds that risk assessment performance, the presences of OSH officers, employees' direct and indirect involvement in OHS, and interventions to prevent physical and psychosocial risk factors all increase with company size.

Reports from Ireland, <u>Italy (in Italian, various, Word and Excel)</u> and <u>Poland (in Polish, 5.8MB, ZIP)</u> suggest that company-level surveys in these countries restrict their focus to SMEs. These surveys were carried out by the Health & Safety Authority (<u>HSA</u>), INAIL and the Central Institute of Labour Protection (<u>CIOP-PIB</u>) respectively. The surveys focus on the implementation of EU directives by SMEs in order to estimate the extent of intervention

needed and to help select levers favouring implementation of legislative requirements. The Irish survey concentrates on the chemical and construction industries, while the Polish covers mainly manufacturing. The surveys apparently suffer from selection bias (meaning that employers who respond are more likely to be those who comply with national regulations than are those who refuse to be interviewed).

Integrated company-level surveys

A German survey of works councils (Ahlers and Brussig, 2004) investigated both resources and outcomes. A number of findings emerge from the survey.

- Large workplaces reported higher scores for psychosocial factors than the smallest ones (with fewer than 50 employees), of 95 versus 84.
- Only 5% of workplaces reported high levels of implementation and 47% reported no implementation or poor implementation.
- Physical risk factors were declining in 14% of small workplaces and 30% of large ones.
- Of companies with fewer than 50 employees, 81% had a qualified safety officer; this percentage rose as the company size increased.
- A lack of interest among employees over OSH issues was reported by 38% of works councils because other issues, such as company restructuring and job cuts, received priority.
- In workplaces with fewer than 50 employees, 29% carried out a risk assessment. This proportion increased to 61% among those with more than 1,000 employees. The quality of these risk assessments (approximated by the inclusion of psychological stress) increases as works councils participate. Where the works council lacks knowledge or access to advice, the quality of the risk assessments reduced significantly.
- OSH issues are best developed in establishments where management considers them a central issue and attaches a high priority to OHS.

The French Réponse (a linked employer/employee survey combining the opinions of employers, employees and employee representatives) concentrates solely on the nexus between industrial relations and health outcome. A survey from 2004–2005 by *Direction de l'animation de la recherche, des études et des statistiques* (DARES) (in French, 114Kb, PDF), made a number of findings.

- OSH committees were much more prevalent in larger companies: 17% of workplaces with 20–49 employees had OSH committees; this rose to 59% of workplaces with 50–99 employees and 96% of those with more than 500 employees.
- Both risk assessments and prevention strategies were commonly adopted: a risk assessment was adopted by 77% of small companies and 86% of larger companies (200–499 employees), while a prevention strategy was adopted by 73% of small companies and 88% of companies with 100–199 employees.
- While 94% of OSH committees received the risk assessment document, in 18% of workplaces, management did not distribute it to employees or their representatives.
- The extent of negotiation over working conditions increased from 47% (in the 1998–1999 wave) to 64% of workplaces in 2004–2005, due to the fact that the preparation of a risk assessment document became compulsory in 2004.

- Bargaining over working conditions is 74% more likely and written agreement over
 working conditions is 28% more likely when OSH committee is established than in
 workplaces where they are not established on working conditions, especially in those
 workplaces with repeated work accidents (this repetition indicating a worsening of
 working conditions).
- Two out of three employees reported they were more likely to get in touch with their superior than with their OSH representatives (where they had such a representative).
- Where there is an OSH committee, employees are less likely to complain about their working conditions: in companies with OSH committees, on average 43% of employees complain about working conditions, as against, 47% in companies without such committees. However, this could be the effect of a self-selection bias.

Resource-oriented employee surveys

According to the 2007 Spanish national survey on working conditions (in Spanish), OSH activities increase in line with company size. This is the case with prevention delegates (from over 30% in companies with fewer than 10 employees to over 80% in those with more than 500 employees), risk assessment (from just over 16% to just over 41%) and OSH information and training (from a little over 39% to 65%).

According to a <u>regional survey in 2006 for Veneto (in Italian, 1.18MB, PDF)</u> by the Institute for Prevention and Safety at Work (<u>ISPESL</u>) the training and use of personal protective equipment (PPE) increases with company size (from 14.7% and 22.1% respectively in single-employer companies to 41.1% and 41.4% respectively in those with more than 500 employees). There is little information about the risk for companies with more than one employee.

According to the Estonian Working Life Barometer 2005 (in Estonian, 479Kb, PDF), 8% of respondents said that OSH committees were in operation at their workplace. This proportion increased to 36% at workplaces with more than 50 employees, where it is compulsory. On the other hand, the Estonian Labour Force Survey (LFS) for 2008 indicates that information for workers on OSH is made generally available in nearly all companies, ranging from 95% in micro companies to 99% in larger ones. In micro and small companies, 39% of the employees said they had been consulted on changes in working arrangements or issues concerning working conditions during the past year; the proportion is 43% in large companies and 45% in medium companies. As seen above, company size has a limited impact in Estonia on employees' information, consultation and training because of the OSH-compliant approach of new businesses, most of which are micro and small companies.

Outcome-oriented and integrated employee surveys

According to the 2008 Finnish <u>quality of work life survey</u>, information about OSH – and especially the quality of OSH management – improves as company size increases and, in general, exposure to risk factors declines, with the noticeable exceptions of exposure to chemicals and work exhaustion. The positive assessment of superiors' commitment to OSH and OSH organisation was found to improve with company size (from 62% for both in companies with fewer than 50 employees to 69% and 79% respectively in those with more than 250 employees). Similarly, the feeling of being well-informed increased with company size, although the rise was less noteworthy (from 75% to 80%). The reported prevalence of a number of negative outcomes fell as company size increased; this was particularly the case for work accidents (from 58% in companies with fewer than 50 employees to 50% in those with

more than 50 employees) and physical violence (from 32% to 17%). However, the reported prevalence of hazards caused by chemicals increased from 24% to 31%.

The 2008 version of the annual <u>survey (in Italian, 370Kb, PDF)</u> carried out in the Italian province of Bolzano highlights an increase in the adoption of adequate preventative measures but a decline in physical risk factors and strain with company size. It also noted that strenuous working conditions are on the increase.

Trends at EU level

Eurostat figures on accidents at work

Data from Eurostat is provided for five sizes of company:

- single-employer company zero employees;
- micro between 1 and 9 employees;
- small between 10 and 49 employees;
- medium between 50 and 249 employees;
- large 250 employees or more.

Accidents at work: aggregate level

At an aggregate level, the incidence rates for work accidents display a constant decline from over 4,000 days lost per 100,000 employees in 1996 to fewer than 3,000 days lost per 100,000 employees in 2007 for all companies in the EU15 and Norway (Figure 1).

- Small companies showed the highest incidence rate in the 1990s, which was followed by a regular decline during the 2000s.
- Medium-sized companies, among the average performers in the 1990s, reported a sudden peak in 2000 and then showed the highest incidence rate during the 2000s.
- Micro enterprises have been moderately below average in terms of incidence rate since 1999.
- Single-employer companies are steadily below average, not withstanding a peak in 2001 due to changes in statistical calculation.

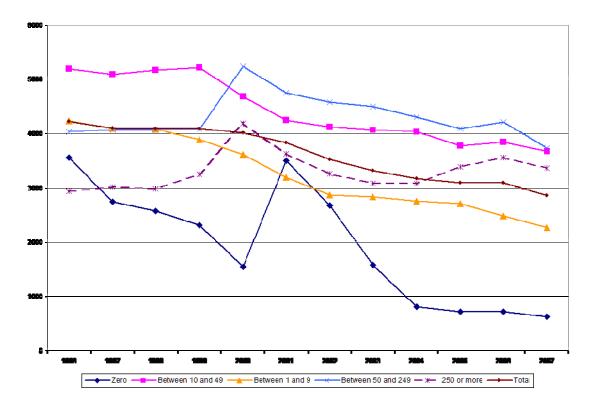


Figure 1: Accidents at work – incidence rates by company size, 1996–2007

Figure 1: Accidents at work – incidence rates by company size, 1996–2007

Notes: the figures are for the EU15 and Norway, for companies with more than three days lost, days lost per 100,000 employees

Source: Eurostat, 2010

Accidents at work: sector level

Incidence rates for accidents at work at a sector level better highlight relative performance (Table 6). Overall the incidence rate declined by 32.5% between 1996 and 2007, with the transport and communications (-42.4%) and agriculture (-42.2%) sectors showing the largest reduction in incidence rates and the financial intermediation and business services sector the smallest (-8.6%). However, the electricity, gas and water supply sector reported an increase (+3.35%).

Table 6: Accidents at work – variation in incidence rate by sector and company size, 1996–2007 (%)

Sector	No employee s	Between 1 and 9 employee s	Between 10 and 49	Between 50 and 249	250 or more	Average
Agriculture*						-42.2
Manufacturing	-92.3	-52.5	-19.6	-5.0	-28.3	-30.4
Electricity, gas and water supply	-97.9	-55.4	-50.3	+18.6	+37.0	+3.35
Construction	-74.2	-42.1	-30.1	-6.7	-26.4	-34.7
Trade and repair	-86.3	-41.0	-6.2	+38.6	+196.0	-13.0
Hotels and restaurants	-46.1	-41.0	-24.7	-12.2	+369.5	-23.3
Transport, storage and communications	-80.6	-57.5	-55.2	-45.7	+2.6	-42.4
Financial intermediation and business activities	-80.4	-33.5	-48.7	-6.2	+131.5	-8.6
Average – all sectors	-82.5	-46.6	-29.3	-7.7	+14.3	-32.5

Notes: * only aggregate figure with a full time series

Source: Eurostat, 2009

The reduction in incidence rates declines as company size increases, ranging from -82.5% in single-employer companies to -7.7% in medium-sized companies. Rates in the latter were stable in the late 1990s, saw a sharp increase in 2000 (over 5,000 per 100,000 employees), and then a regular decline in subsequent years. Large companies showed a swinging trend: the incidence rate increased moderately in the 1990s with a peak in 2000; the decline in 2001–2003 was followed by a moderate increase in 2004–2006 and finally a decline in 2007.

This is due to a composition effect: in the manufacturing and construction sectors, large companies reported a considerable reduction in incidence rates (-28.3% and -26.4% respectively), showing better performance than medium enterprises (-5% and -6.7% respectively). Although reporting lower-than-average incidence rates, the services sector showed a considerable increase among large companies, especially in hotels and restaurants (369.5%), trade and repair (196%), and financial intermediation and business services (131.5%). Composition effects between occupation and contracts according to company size could allow better understanding of such divergent trends.

A number of features emerge when SMEs are compared.

• Single-employer companies show the strongest decline in the manufacturing sector (of 92.3%) and the electricity, gas and water supply sector (-97.9%), with the smallest reduction being in the hotels and restaurants sector (-46.1%).

- Micro companies show the best performance in the transport and communications sector (a decline of -57.5% in the incidence rate) and the electricity, gas and water supply sector (a decline of -55.4%).
- Small companies show the strongest decline in the transport and communications sector (-55.2%) and the least decline in the trade and repair sector (-6.2%);
- Medium-sized enterprises report the strongest reduction in the transport and communications sector (-45.7%), while the same size of company in the electricity, gas and water supply and the trade and repair report sectors reports a considerable increase (+18.6% and +38.6% respectively).

At a sector level (Figures 2–7), this pattern is shared by the manufacturing and construction sectors. In the transport and communications sector, gaps are narrower. Large enterprises show the highest incidence rates over time in the trade and repair, hotels and restaurants, and financial intermediation and business services sectors (the latter since 2005).

Figure 2: Accidents at work – incidence rates by company size, 1996–2007, manufacturing sector

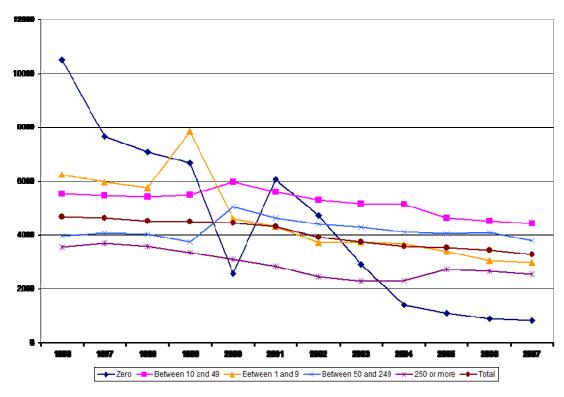
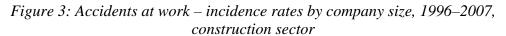


Figure 2: Accidents at work – incidence rates by company size, 1996–2007, manufacturing sector

Notes: Figures are for companies in the EU15 and Norway with more than three days lost, days lost per 100,000 employees



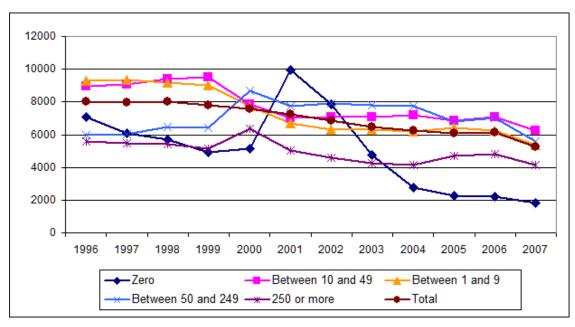
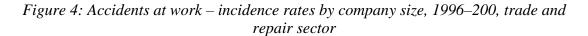


Figure 3: Accidents at work – incidence rates by company size, 1996–2007, construction sector

Notes: Figures are for companies in the EU15 and Norway with more than

three days lost, days lost per 100,000 employees



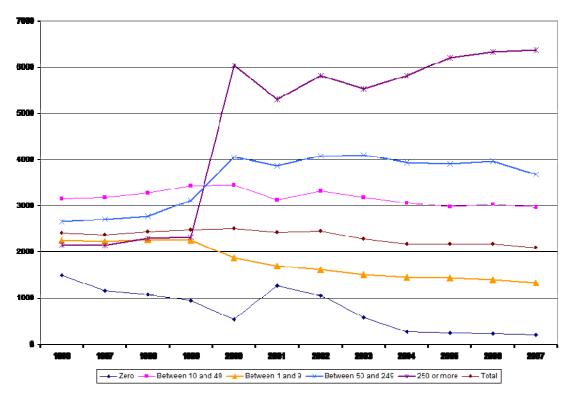
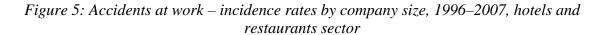


Figure 4: Accidents at work – incidence rates by company size, 1996–2007, trade and repair sector

Notes: Figures are for companies in the EU15 and Norway with more than

three days lost, days lost per 100,000 employees



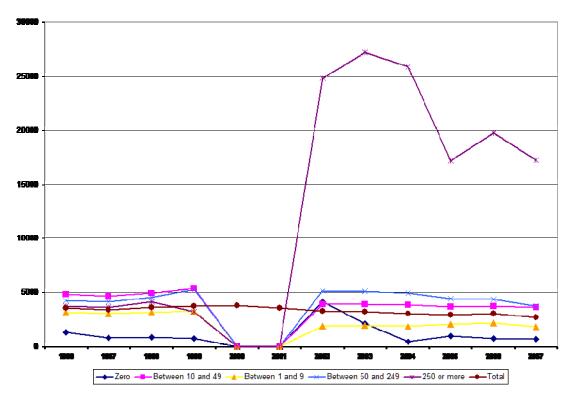
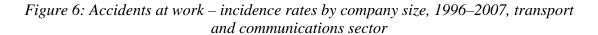


Figure 5: Accidents at work – incidence rates by company size, 1996–2007, hotels and restaurants sector

Notes: Figures are for companies in the EU15 and Norway with more than three days lost, days lost per 100,000 employees; no disaggregation by company size in 2000–2001



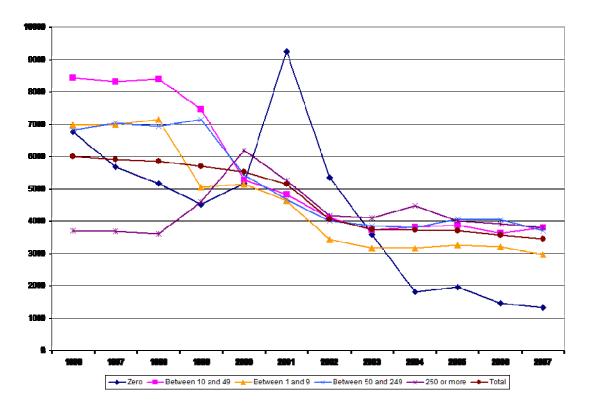
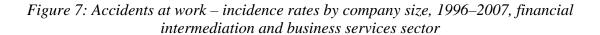


Figure 6: Accidents at work – incidence rates by company size, 1996–2007, transport and communications sector

Notes: Figures are for companies in the EU15 and Norway with more than three days lost, days lost per 100,000 employees Source Eurostat, 2010



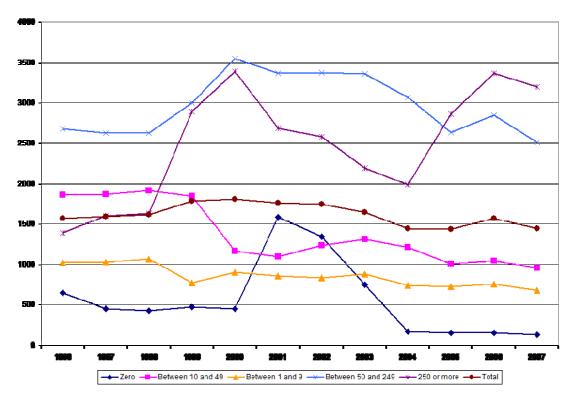


Figure 7: Accidents at work – incidence rates by company size, 1996–2007, financial intermediation and business services sector

Notes: Figures are for companies in the EU15 and Norway with more than three days lost, days lost per 100,000 employees Source Eurostat, 2010

Fatal accidents

Although there is a significant risk of under-reporting of non-fatal accidents as highlighted by several national questionnaires (Hungary, Italy, Latvia), this risk is much less for fatal ones. The overall trend in the incidence rate shows a considerable decline from 5.3 deaths per 100,000 employees in 1996 to 3.0 deaths per 100,000 employees in 2007 – a decline of 43.4% (Figure 8). Single-employer companies, micro companies, and small companies show the greatest reductions (of -66.7%, -45.6% and -44.4% respectively), though the incidence rate of the latter two is still above average.

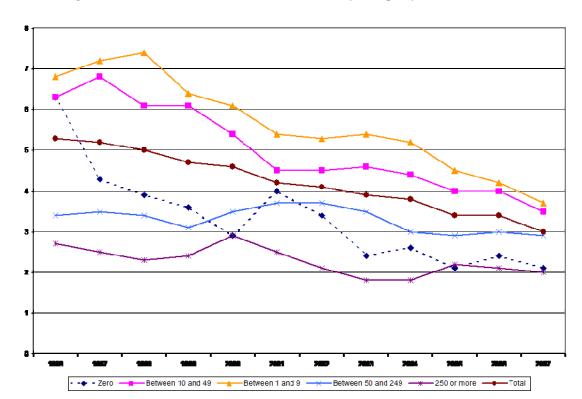


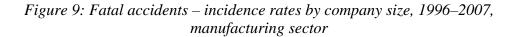
Figure 8: Fatal accidents – incidence rates by company size, 1996–2007

Figure 8: Fatal accidents – incidence rates by company size, 1996–2007

Notes: Figures are for the EU15 and Norway, number of fatalities per 100,000 employees

Source: Eurostat, 2009

At a sectoral level, the highest incidence rates for microenterprises are in the manufacturing and mining, construction, and transport and communications sectors (Figures 9–14).



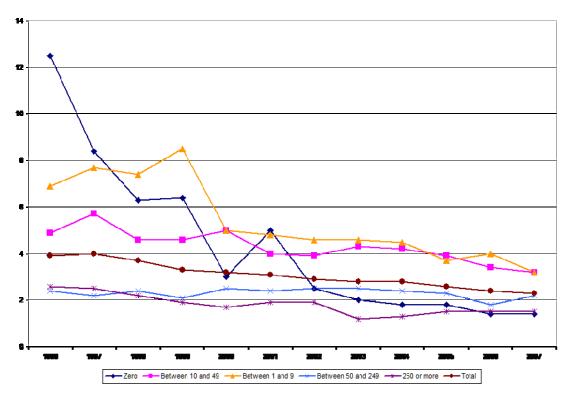
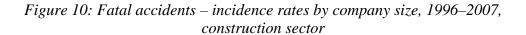


Figure 9: Fatal accidents – incidence rates by company size, 1996–2007, manufacturing sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees



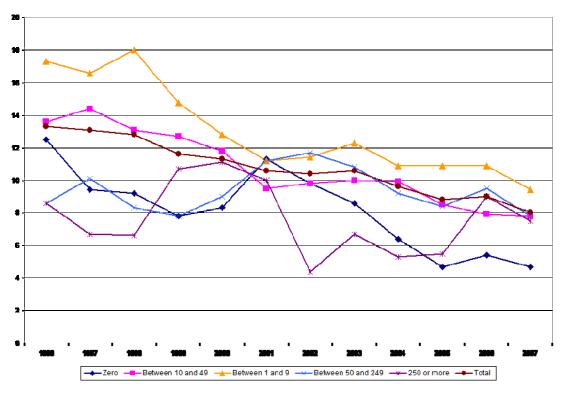
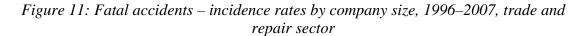


Figure 10: Fatal accidents – incidence rates by company size, 1996–2007, construction sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees



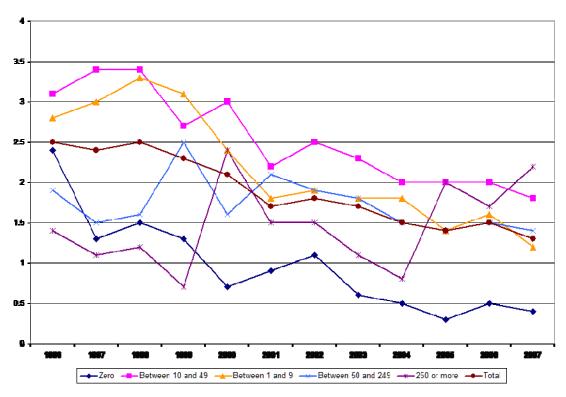
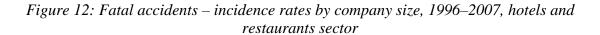


Figure 11: Fatal accidents – incidence rates by company size, 1996–2007, trade and repair sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees



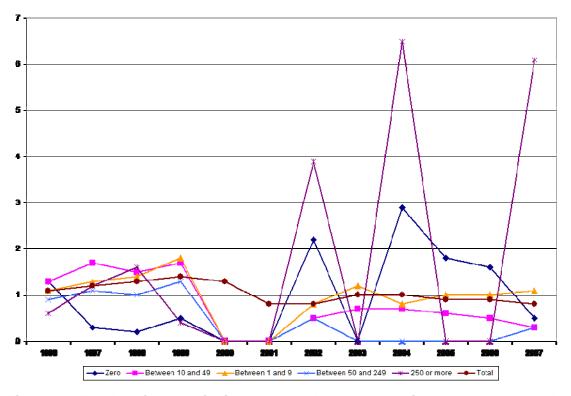
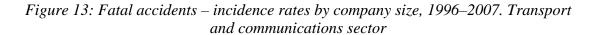


Figure 12: Fatal accidents – incidence rates by company size, 1996–2007, hotels and restaurants sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees

Source: Eurostat, 2009



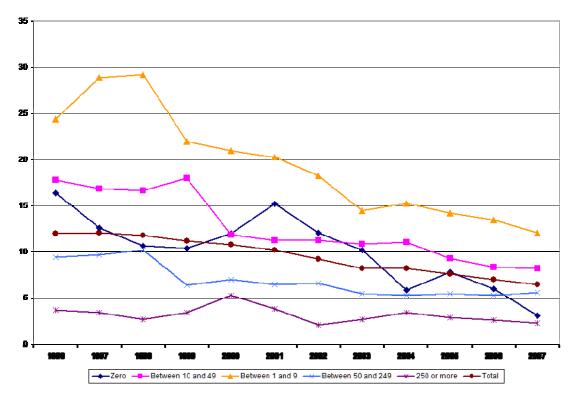
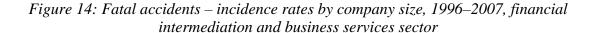


Figure 13: Fatal accidents – incidence rates by company size, 1996–2007, transport and communications sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees

Source: Eurostat, 2009



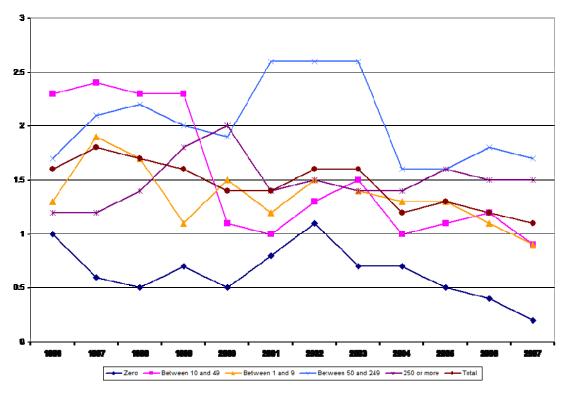


Figure 14: Fatal accidents – incidence rates by company size, 1996–2007, financial intermediation and business services sector

Notes: Figures are for EU15 and Norway, number of fatalities per 100,000

employees

Source: Eurostat, 2009

Trends from European Working Conditions Surveys

Every five years, Eurofound conducts a survey to study working conditions in Europe – its pan-European <u>European Working Conditions Surveys</u> (EWCS). The survey has been carried out five times:

- the first wave in 1990–1991;
- the second in 1995–1996;
- the third wave in 2000 in the EU15, then extended to cover the 10 new Member States, Bulgaria, Romania and Turkey in 2001;
- the fourth in 2005.
- the fifth in 2010.

The EWCS includes a specific question on OSH information (Question 12 in the third and fourth surveys: 'Regarding the health and safety risks related to performance of your job, how well-informed would you say you are?'). The proportion of respondents who considered themselves 'very well-informed' fell from 40.1% (in the EU15 and Norway, in 2000) and

44.7% (in the NMS, in 2001) to 38.2% in 2005 (in the EU27) (Figure 15). There is some improvement when those answering 'well-informed' are included: the combined percentage rose from 75.9% in 2000 and 81% in 2001 to 82.1% in 2005.

Figure 15: Extent of informedness on OSH risks at work, by gender, 2000–2005, EU27 (%)

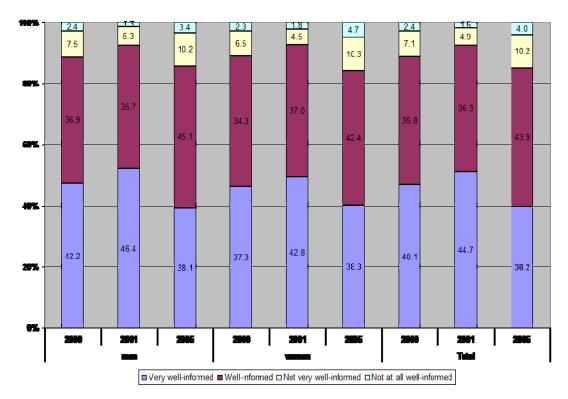


Figure 15: Extent of informedness on OSH risks at work, by gender, 2000-2005

Notes: Respondents were asked how well informed they were on OSH risks at work. 'No answer', refusals and 'don't knows' bring the total to 100%.

Source: Third and fourth waves of the EWCS.

Informedness and employment status

Those respondents classed as 'self-employed with employees' reported the highest figures over time for being at least 'well-informed' about OSH risks while performing their job, followed by 'employees' and 'self-employed without employees' (Table 7). The levels of informedness reported by 'other' are the lowest and do not follow the general increase between 2000 and 2005. The gap between 'employees' and 'self-employed without employees' appears to be on the increase (from 3.2% in 2000 and 2.7% in 2001 to 3.8% in 2005).

Table 7: Extent of informedness on OSH risks at work, by employment status, 2000–2005 (%)

Employment status	2000	2001	2005
Self-employed without employees	72.8	78.8	78.7
Self-employed with employees	83.6	83.7	89.6
Employees	76.0	81.5	82.5
Other	63.6	72.0	64.8
Average	75.9	81.0	82.1

Notes: 'No answer', refusals and 'don't knows' bring the total to 100%.

Source: EWCS

When restricting the analysis to employees, respondents with a permanent contract are the best informed, followed by those with a fixed-term contract and apprentices (Table 8). The latter do not display any increase over time like other respondents with a regular contract.

Table 8: Extent of informedness on OSH risks at work, by type of labour contract, 2000–2005 (%)

Type of contract	2000	2001	2005
Indefinite contract (permanent)	77.5	82.1	83.9
Fixed-term contract	70.4	80.4	80.5
Temporary employment agency contract	60.6	73.1	70.0
Apprenticeship or other training scheme	77.6	78.0	77.6
No contract	0.0	79.4	75.2
Other	66.9	63.8	78.8

Note: figures are for employees only.

Source: EWCS

Informedness and occupation

In regard to the degree of informedness about OSH risks in different occupations, the armed forces appear to be the best informed (over 90% consider themselves 'very well' and 'well' informed).

White-collar workers all show, between 2000 and 2005, a significant increase in the extent to which they are informed, the levels rising as follows:

- legislators, senior officials and managers from 74.1% to 86.2%;
- professionals from 75.3% to 86.1%;
- technicians and associated professionals from 73.3% to 86.8%;
- clerical workers from 70.5% to 81.1%;

• service workers and shop/markets sales staff from 74.1% to 80.3%.

On the other hand, levels of informedness for plant and machine operators and assemblers and elementary occupations remained almost stable, while skilled blue-collar workers experienced a notable decline between 2000 and 2005 – skilled agricultural and fishery workers from 79% to 72.7%, and craft workers from 85.2% to 81.7%.

The picture changes significantly between the third and fourth waves of the EWCS: while blue-collar workers reported being better informed than white-collar workers in 2000/2001, the reverse can be observed in 2005.

Table 9: Extent of informedness on OSH risks at work, by occupation, 2000–2005 (%)

Occupation	2000	2001	2005
Senior managers	74.1	83.5	86.2
Professionals	75.3	79.9	86.1
Technicians	73.3	79.4	86.8
Clerical workers	70.5	72.0	81.1
Service and sales workers	74.1	78.7	80.3
Agricultural and fishery workers	79.0	74.2	72.7
Skilled workers	85.2	86.0	81.7
Machine operators	79.7	87.1	83.3
Unskilled workers	72.9	79.8	73.9
Armed forces	94.2	92.9	95.8

Source: EWCS

Sectoral differences

Sectoral trends reflect – in a smoother way – those observed for occupations (Table 10). While levels of informedness are almost stable or show a only slight increase in agriculture, manufacturing and construction, they are clearly on the increase in the private sector and especially the public sector. In 2000–2001, those employed in manufacturing and construction had the highest proportion of 'very well' and 'well-informed' respondents, but those working in the public sector, health and education considered themselves the better informed in 2005.

Table 10: Extent of informedness on OSH risks at work, by sector, 2000–2005 (%)

Sector	2000	2001	2005
Agriculture	75.7	74.8	75.0
Manufacturing and mining	82.5	86.4	84.0
Construction	80.5	84.7	83.3
Trade	73.3	81.1	81.4
Hotels and restaurants	76.7	76.9	78.5
Transport and communication	75.0	78.3	81.3
Business services	68.0	77.4	81.9
Public administration, education and health	75.2	80.6	84.7
Other services	70.0	81.1	78.5

Informedness and company size

The proportion of respondents who feel at least 'well-informed' increases with company size (Table 11): single-employer companies show the lowest figures over time, while large companies with more than 250 employees show the highest.

It is worth noting that those employed in companies with 50–99 employees reported being better informed than those employed in companies with 100–249 employees. This was especially so in 2000; the gap was significantly less in 2005.

Table 11: Extent of informedness on OSH risks at work, by company size, 2000–2005 (%)

Number of employees	2000	2001	2005
Single-employer company	71.8	76.5	78.0
2–9	75.6	79.6	80.7
10–49	75.7	79.8	82.8
50–99	79.1	86.4	85.1
100–249	74.1	86.0	84.1
More than 250	80.1	86.1	87.0

Source: EWCS

Role of training

Most studies stress the role of training in improving awareness of OSH risks. Question 28 in the EWCS seeks information about various forms of training, but not its content.

In general, the proportion of 'well-informed' respondents is significantly higher among those who received training provided by their employer (over 6% in 2000 and 2005, 4% in 2001).

When other forms of training are provided, in 2001 the impact appears (quite surprisingly) negative, though it is positive in 2005 (Table 12).

Table 12: Extent of informedness, by form of training, 2000–2005 (%)

	20	2000		01	2005	
Form of training	yes	no	yes	no	yes	no
Training paid for or provided by your employer	80.4	74.0	84.4	80.4	90.2	83.6
Training paid for by yourself	N/A	N/A	78.6	81.0	89.0	85.0
On-the-job training	N/A	N/A	78.7	81.6	89.0	84.0
Other forms of on-site training and learning	N/A	N/A	80.9	80.8	90.2	84.2

Note: N/A = not applicable

Source: EWCS

Role of consultation and training

Similarly, most studies highlight that work environments where there is either direct consultation of workers with their boss or indirect consultation through employees' representatives have higher levels of informedness about OSH risks, with a positive impact on health at work and work accidents. Table 13 supports this general view.

- When employees are consulted by their boss about changes in the organisation of work or working conditions, the proportion of those who consider themselves at least well-informed about OSH risks while performing their job is higher than when they are not. In 2001, this difference was 5%; in 2005, it had risen to 5.9%.
- When employees discuss work-related problems with their boss, the proportion of those who feel at least well-informed about OSH risks was, in 2001, 2.7% higher than when they do not; in 2000, the difference was 4.5%.
- When employees discuss work-related problems with an employees' representative, the proportion of those who feel at least well-informed about OSH risks was 6.4% higher than when they do not.

Information gaps are almost stable over time.

Table 13: Extent of informedness, by form of consultation practice and training, 2000–2005 (%)

				0.4	0005	
	2000 2001		01	2005		
Form of consultation/training	Yes	No	Yes	No	Yes	No
Consulted about changes in the organisation of work and/or your working conditions?	77.3	71.6	82.2	77.2	85.8	79.9
Discussed work-related problems with your boss?	77.9	75.4	82.9	79.2	84.3	80.3
Discussed work-related problems with an employee representative?	81.1	74.7	86.0	79.6	86.0	81.7

Effect of level of informedness on health perceptions

Workers who feel that they are well informed about OSH risks are less likely to feel that work negatively impacts their health and safety. Moreover, it appears that between the third wave of the EWCS in 2000/2001 and the fourth wave in 2005, there was a drop in the proportion of workers who felt that work had negative health impacts (Table 14).

In 2000, in the EU15 and Norway, just over 45% of respondents who were 'not at all informed' about OSH risks felt that their health and safety was at risk; by contrast, only a little over 24% of those who were 'very well-informed' felt at risk. And in 2001 in the NMS, the respective figures were 59% and 40%.)

By 2005, the proportion of those 'not at all informed' about OSH who felt that their health and safety was at risk had dropped to less than 43%, while the proportion of those who were 'very well-informed' and who felt at risk was very slightly higher, at just over 25%.

In terms of the changes in workers' feeling that work has affected their health, in 2000 in the EU15 and Norway, nearly 74% of workers who were 'not at all informed' felt that work affected their health, compared with only 53% of workers who were 'very well informed'. (And in the NMS in 2001, the respective figures were 78% and 68%)

By 2005, the proportion of those 'not at all informed' about OSH who felt that their health was affected had dropped to 51%; meanwhile, for those who were 'very well informed' it had dropped to 31% – a striking decline.

Table 14: Impact of work on safety and health, by level of informedness, 2000–2005 (%)

	20	00	20	01	20	05
	Health or safety at risk because of work	Work affects health	Health or safety at risk because of work	Work affects health	Health or safety at risk because of work	Work affects health
Very well- informed	24.3	52.7	39.8	67.7	25.1	31.1
Well-informed	29.8	61.8	41.8	73.3	28.0	35.1
Not very well- informed	38.6	69.7	56.2	78.3	38.7	46.0
Not at all well- informed	45.4	73.7	59.2	78.4	42.6	51.0
Average	26.8	56.9	40.9	70.0	28.0	34.7

Effect of consultation and training on health perceptions

Only for the wave of the EWCS conducted in 2000 do findings indicate that consultation about changes in work organisation and/or working conditions had a significant impact on the feeling that health and safety is at risk because of work: just under 75% of workers consulted about such changes felt their health and safety at risk, as against an average of just over 77%.

In 2000–2001, those workers who discussed work-related problems with their boss reported a lower impact of work on both their perceived health and safety, and their overall health, than workers who did not discuss such matters; however, in 2005, workers who discussed problems reported a greater impact. And in 2001, workers who discussed work-related problems with an employee representative reported a higher perceived risk and a greater impact of work on their health.

It seems therefore that discussion and consultation over working conditions occurs more often when there some risks exist for health and safety, while the role of consultation in reducing OSH risks appears to have declined from 2000 to 2001.

On the other hand, provision of training (the survey does not specify whether it is focused on OSH or not) does not show a significant impact on perceptions of health impacts of work.

Table 15: Impact of work on safety and health, by type of consultation/training, 2000–2005 (%)

		2000			2001		2005			
Type of consultation/training	Healt h or safety at risk	Work affect s health	Avera ge	Healt h or safety at risk	Work affect s health	Avera ge	Healt h or safety at risk	Work affect s health	Avera ge	
Consulted about changes in work organisation /working conditions	74.8	77.0	77.2	71.9	72.0	72.3	37.5	38.6	38.0	
Discussed work- related problems with your boss	80.5	81.5	83.1	48.1	48.7	50.5	50.8	50.9	46.8	
Discussed work- related problems with an employee representative	46.2	43.3	42.5	25.6	25.7	25.6	20.4	20.3	17.1	
Training paid for or provided by your employer	30.0	31.4	30.5	22.9	24.5	23.5	26.1	26.8	25.9	

Effect of company size on perception of health risk

Workers' feelings that their health is at risk because of their work and work affects their health tend to increase with company size, following a U-shape pattern (Table 16).

Single-employer companies display relatively high figures (apart from the perception of health being affected by work in the 2001 wave in the NMS). There is a decline over time among micro and small companies and finally an increase as workplace size increases, apart again from the 2001 wave, where employees in large companies give worse ratings for health impacts than medium-sized ones. In the 2005 EWCS, micro companies display values close to single-employer ones, while companies with 10 to 99 employees display the lowest figures.

Two factors concord with such employee perceptions:

- in larger companies, workers are better informed,(Table 9), making employees more alert to possible risk factors;
- psychosocial risk factors increase as company size increases.

A composition effect according to the sector can further affect such patterns; such effects are investigated in the next section.

Table 16: Extent of informedness on OSH risks at work, by company size, 2000–2005 (%)

	` ,								
	20	00	20	01	20	05			
Number of employees	Health or safety at risk	Work affects health	Health or safety at risk	Work affects health	Health or safety at risk	Work affects health			
Single-employer company	28.0	57.4	41.8	64.5	29.2	36.6			
2–9	25.0	55.0	39.8	69.4	29.1	35.5			
10–49	25.5	56.2	39.6	72.0	25.5	33.2			
50-99	26.6	60.0	42.2	69.7	25.7	34.8			
100–249	28.5	60.2	48.9	72.9	26.8	34.0			
More than 250	31.9	59.9	41.5	70.1	31.9	36.3			

Note: Figures are for employees only.

Source: EWCS

A statistical analysis

This section summarises the main results of the determinants of levels of informedness about OSH risks at work as described in Question 12 of the fourth EWCS. Such determinants can be grouped as follows:

- ways of learning and becoming informed such as training (Question 28a-e of the fourth EWCS), forms of consultation with employer/supervisor and workers' representative (Question 30a-e), and a workplace climate favouring learning or not (Question 37e), and a feeling of job security (Question 37e) (none of which refer to OSH specifically); the impact of these variables ('resource variables' according to Walters' terminology (Walters, 2001, 2002; Walters and Lamm, 2003) is expected to be positive with the notable exception of the last one resulting from poor commitment on both sides, with respondents searching for a job rather than attending to OSH at work. Furthermore, the effect of both on-the-job and on-site training is uncertain: they could either complement formal training (in which case the impact is surely positive), or substitute for it (in which case the effect would depend on the accuracy with which they are carried out.
- institutional determinants due to the legislative framework and collective bargaining; these variables are drawn mainly from national questionnaires;
- controls describing company characteristics such as industry, company size, ownership regime (Question 5) and effects arising from specific regulatory traditions;
- controls attaining to personal characteristic of respondents such as education (International Standard Classification of Education, <u>ISCED</u>), age, gender, professional (International Standard Classification of Occupations (<u>ISCO</u>) one-digit categories) and occupational status (Question 3b) due to different specific exposures and to different propensities to pay attention to health and safety risk at work.

The following institutional variables are drawn from national questionnaires and by recoding countries accordingly:

- a binary variable accounting for simplification clauses of OSH duties in favour of small and micro companies (as summarised in Table 1), in particular the exemption from risk assessment or the time available to workers' representatives on an OSH committee to verify safety measures; both the establishment of occupational health services and the opportunity for the employer to carry out the role of OSH representative are not taken into account because they are considered as dependent on the organisational complexity;
- a binary variable summarising promotional measures in favour of SMEs (see Table 1), such as funding, consultation opportunities provided by either public or bipartite institutions or social security, reductions in insurance premium, etc;
- a four-item variable summarising company size thresholds for the establishment of OSH workers' representatives (Table 3) set at 20, 50 and over 50 employees;
- a binary variable describing whether OSH committees can be established at workplaces;
- a binary variable summarising countries where OSH workers' representatives are not only limited at a workplace level but also at a departmental level (Denmark, Slovenia) or are distinct from OSH committees.

Since the national questionnaires report recent regulatory dynamics, the backward reconstruction of the 2005 regulatory framework is quite plausible; much more uncertainty arises when referring to the 2000–2001 national regulatory framework. These regulatory dynamics are combined with company size to better highlight their effect.

Multinomial regression is performed by taking the variable 'not informed at all' as the reference value. The discussion of results focuses on the odds – that is, the influence of each determinant on any level of informedness about OHS, in terms of percentage increase or decrease.

Workplace resources

On-the-job training has a negative impact on all levels of informedness (-30.8% for 'very well-informed', -27.7% for 'well-informed' and -34.9% for 'not very well-informed'), thus outlining a substitution effect with respect to formal training, being mere socialisation practices and poorly oriented to OHS.

On the other hand, 'other forms of on-site training' almost double the odds ratio (OR) (+96.4% for 'well-informed', +88.8% for 'informed' and +114% for 'not very well-informed'), thus outlining their complementary role to more formal training.

Finally, formal training (both paid for by the employer and by the employee), the hours of training provided and 'other forms of training' display a non-significant effect on levels of informedness.

Among consultation activities, only consultation about changes in work organisation displays a statistically significant positive impact on how well informed staff feel about OSH (+75.7% for 'very well-informed', +59.4% for 'well-informed' and +53.3% for 'not very well-informed'). On the other hand, when 'frank discussion' with the boss about work-related problems is reported, staff tend to be less informed about OSH (-19.2% for 'very well-informed', -29.3% for 'well-informed' and -10.8% for 'not very well-informed').

Respondents who did not consider their job at risk are more than twice as likely to be 'very well-informed' on OSH at work than those who feel a very strong risk of losing their job in the next six months. The impact of job security is lower but still significantly positive for 'well informed' workers. This is consistent with findings from Alhers and Brussing (2004) that employees report a lack of interest about OSH when their workplace is undergoing restructuring with job cuts.

Conversely, working in an environment that offers good learning opportunities strongly increases OSH awareness; when respondents 'strongly disagree' that they have good opportunities for learning at workplace, the proportions those who are 'very well-informed' and 'well-informed' about OSH at their workplace are respectively almost 12 times and nine times less frequent with respect to those which 'strongly agree' that they have good learning opportunities. When respondents 'disagree' that they have good learning opportunities at work, then the proportions of workers who feel themselves to be 'very well-informed' and 'well-informed' about OSH are respectively nearly six and four times less frequent with respect to those who 'strongly agree' that they have good learning opportunities.

Table 17 summarises the results of the statistical analysis based on determinants of workplace resources.

Table 17: Extent of informedness by workplace resources determinants

	Very v	vell-info	ormed	We	II-inforr	Not very were med informe			
	В	sig.	odds	В	sig.	odds	В	sig.	odds
On-the-job training (no)	-0.372	0.001	0.689	-0.322	0.005	0.725	-0.441	0.001	0.643
Other forms of on-site training (no)	0.676	0.000	1.965	0.638	0.000	1.892	0.623	0.001	1.865
Other training (no)	-0.116	0.705	0.891	0.179	0.552	1.196	0.193	0.555	1.212
Hours of training paid by the employer	0.005	0.312	1.005	0.002	0.642	1.002	0.006	0.230	1.006
Consulted about changes in work organisation/ working conditions (no)	0.566	0.000	1.762	0.474	0.000	1.607	0.432	0.000	1.540
Discussed work-related problems with boss (no)	-0.213	0.038	0.808	-0.361	0.000	0.697	-0.114	0.307	0.892
I might lose my job in the next six months									
strongly agree									
strongly disagree	0.782	0.000	2.185	0.355	0.048	1.425	-0.063	0.754	0.939
disagree	0.861	0.000	2.366	0.660	0.000	1.934	0.290	0.166	1.337
neither agree nor disagree	0.657	0.002	1.930	0.613	0.003	1.845	0.483	0.033	1.621
agree	0.141	0.494	1.151	0.023	0.908	1.023	0.033	0.881	1.033
Learning opportunities at work									
strongly agree	0.000			0.000			0.000		
strongly disagree	-2.446	0.000	0.08	-1.762	0.000	0.172	-0.828	0.000	0.437
disagree	-2.143	0.000	0.117	-1.287	0.000	0.276	-0.512	0.028	0.599
nor agree neither disagree	-1.492	0.000	0.225	-0.761	0.000	0.467	-0.301	0.204	0.740
agree	-1.026	0.000	0.358	-0.564	0.005	0.569	-0.559	0.012	0.572

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; reference values are shown in brackets

Source: Calculations from fourth EWCS and national questionnaires

Institutional variables related to company size and country controls

The effect of the national regulatory framework is investigated both as a 'country effect', which accounts for the general configuration of OSH at work and the industrial relations environment, and 'specific effects' drawn from national questionnaires (Table 18).

When discussing company size, self-employed people working in a single-employer company and employees in SMEs display different attitudes compared with employees in large companies. Those in single-employer companies display a much higher OSH awareness than employees in large companies. This finding is statistically significant, illustrating the single-employer's feeling of having full knowledge about the business, including OSH (as highlighted by Walters and Lamm, 2003). Employees in SMEs are less aware and informed than those in larger companies, though this finding is not statistically significant.

When investigating the joint effect of company size and institutional variables, countries allowing OSH representatives in workplaces with at least 50 employees show statistically significantly lower levels of informedness among employees in small firms (10 to 49 employees) than the reference class (respectively seven times less when 'very well informed', 10 times less when 'well informed' and 12.5 times less when 'not very well informed'). They also show significantly lower levels in small companies in countries with different thresholds (or none) for setting up OSH representation. On the other hand, the lack of promotional measures in favour of small and micro firms shows a strong positive statistically significant effect on OSH awareness of those working in single-employer firms, (apparently paradoxical but consistent with the Walters and Lamm (2003) argument mentioned above) and on the extent to which workers in small companies (with 10–49 employees) feel 'well informed'.

Neither the presence of simplification clauses while complying with OSH prescriptions in favour of small and micro-firms nor the presence of multistage OSH workers representatives show any significant effect on the extent of informedness of both self-employed workers, and employees in small and micro companies. Similarly, the effect of OSH committees on OSH awareness among those working in SMEs is weak or not statistically significant.

Thus there is no conclusive evidence of the regulatory framework having an impact on employees' OSH information except the presence OSH representatives in small firms (10-49 employees). The effect of the measures singled out appears limited and generally non-significant, thus leading to the conclusion that workers in SMEs (especially small and micro companies) face similar awareness on OSH irrespective of the regulatory framework. A better historical comparative knowledge of OSH regulation is probably necessary to produce more definitive evidence. In addition, regulatory changes generally take time to be effective. As shown in Table 19, the feeling of being well-informed is strongly related to the length of time people have worked at their current workplace. However, the bulk of information from national questionnaires does not consider enforceability measures such as inspections and companies fulfilling their obligations in full; such information is available only from a few countries.

When considering country effect, the former EU15 countries (apart from Austria, Finland and Ireland) plus Malta and Slovenia display significant lower levels of self-assessed levels of informedness on OHS. It would seem that this pattern points to a wider gap between the importance employees assign to OSH and the actual knowledge of which work-related factors affect it.

Controls for occupational, personal and company characteristics are given in the annex.

Table 18: Extent of informedness, by institutional determinants and company size

		Very	well-ii	nformed	W	ell-info	ormed		ot very inforn	
		В	sig.	odds	В	sig.	odds	В	sig.	odds
	Intercept	8.036	0.000		8.187	0.000		6.017	0.001	
	Company size (250 employees and more)	0.000			0.000			0.000		
	single-employer	11.803	0.000	133626.42	13.171	0.000	524695.58	12.206	0.000	199897.87
	1-9 employees	-0.708	0.521	0.493	-0.466	0.669	0.627	-0.785	0.532	0.456
	10-49 employees	-1.743	0.111	0.175	-1.212	0.266	0.298	-0.727	0.557	0.484
	50-249 employees	-0.717	0.507	0.488	-1.325	0.219	0.266	-0.200	0.871	0.819
Company size * OSH promotion (250+ employees *	single-employer * No OSH promotion	3.223	0.080	25.100	1.585	0.372	4.881	0.704	0.703	2.022
OSH promotion)	1–9 employees * No OSH promotion	0.403	0.465	1.496	0.721	0.189	2.055	0.362	0.558	1.436
	10–49 employees * No OSH promotion	0.774	0.136	2.169	1.022	0.049	2.779	0.941	0.110	2.563
	50–249 employees * No OSH promotion	0.264	0.632	1.302	0.223	0.684	1.250	0.647	0.302	1.910
Company size * OSH simplification (250+ employees	single-employer * No OHS simplification	0.048	0.974	1.049	-0.073	0.961	0.930	-0.691	0.669	0.501
* OSH simplification)	1–9 employees * No OSH simplification	0.087	0.865	1.091	0.012	0.981	1.012	-0.498	0.380	0.608
	10–49 employees * No OSH simplification	0.654	0.195	1.923	0.715	0.154	2.043	0.413	0.462	1.512
	50-249 employees * No OSH	0.087	0.871	1.091	0.399	0.454	1.491	-0.187	0.755	0.829

		Very	well-ir	nformed	W	ell-info	ormed	Not very well- informed		
		В	sig.	odds	В	sig.	odds	В	sig.	odds
	simplification									
Company size * multi-stage workers' representation (250+	single-employer * No OHS complex representation	- 15.047	0.000	0.000	- 14.345	0.000	0.000	12.940	-	0.000
employees * multi-stage workers' representation)	1–9 employees * No OSH complex representation	-0.160	0.854	0.852	-0.290	0.738	0.748	0.154	0.874	1.167
	10–49 employees * No OSH complex representation	1.061	0.198	2.890	0.793	0.333	2.211	0.261	0.775	1.298
	50–249 employees * No OSH complex representation	0.847	0.314	2.333	1.157	0.165	3.182	0.140	0.882	1.150
Company size * OSH reps threshold (250+ employees *	single-employer * no OSH reps threshold	1.303	0.633	3.681	0.957	0.723	2.604	0.601	0.840	1.823
over 50 employees' threshold)	single-employer * OSH reps up to 20 employees threshold	0.474	0.700	1.606	-0.131	0.913	0.877	1.033	0.507	2.811
	single-employer * OSH reps 50 employees threshold	-1.796	0.324	0.166	-2.065	0.252	0.127	-1.737	0.412	0.176
	1–9 employees * no OSH reps threshold	-0.766	0.484	0.465	-0.649	0.551	0.522	-0.691	0.575	0.501
	1–9 employees * OSH reps up to 20 employees threshold	0.136	0.819	1.146	0.201	0.730	1.223	0.880	0.215	2.411
	1–9 employees * OSH reps 50 employees threshold	-0.570	0.576	0.565	-0.346	0.732	0.707	-0.540	0.635	0.582
	10–49 employees * no OSH representation threshold	-1.789	0.111	0.167	-1.963	0.079	0.140	-1.987	0.112	0.137
	10–49 employees * OSH reps up to 20 employees threshold	-0.269	0.695	0.764	-0.704	0.300	0.495	-0.151	0.848	0.859

		Very	well-ir	nformed	W	ell-info	rmed	Not very well- informed		
		В	sig.	odds	В	sig.	odds	В	sig.	odds
	10–49 employees * OSH reps 50 employees threshold	-1.903	0.067	0.149	-2.312	0.025	0.099	-2.532	0.028	0.080
	50–249 employees * no OSH representation threshold	-0.875	0.452	0.417	-0.669	0.565	0.512	-1.371	0.292	0.254
	50–249 employees * OSH reps up to 20 employees threshold	-0.414	0.541	0.661	-0.088	0.897	0.916	-0.363	0.642	0.696
	50–249 employees * OSH reps 50 employees threshold	-0.457	0.668	0.633	-0.221	0.835	0.801	-1.751	0.139	0.174
Company size * OSH committee (250+ employees *	single-employer * No OSH committee	1.804	0.384	6.076	1.010	0.625	2.745	1.726	0.436	5.619
OSH committee)	1–9 employees * No OSH committee	0.919	0.262	2.508	0.626	0.443	1.870	1.376	0.124	3.961
	10–49 employees * No OSH committee	1.078	0.166	2.939	0.983	0.205	2.672	1.464	0.085	4.324
	50–249 employees * No OSH committee	0.314	0.699	1.369	0.493	0.542	1.637	1.473	0.100	4.361

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; reference values are shown in brackets

Source: Calculations from fourth EWCS and national questionnaires

Table 19: How well-informed by institutional determinants, country effects

	Ver	y well-infori	med	V	Vell-informe	ed	Not very well-informed				
	В	sig.	odds	В	sig.	odds	В	sig.	odds		
Austria	-1.580	0.147	0.206	-1.458	0.180	0.233	-1.866	0.114	0.155		
Belgium	-3.511	0.001	0.030	-3.118	0.003	0.044	-2.958	0.009	0.052		
Cyprus	-1.546	0.255	0.213	-2.184	0.107	0.113	-2.254	0.129	0.105		
Czech Republic	-0.872	0.426	0.418	-0.776	0.477	0.460	-2.088	0.079	0.124		
Germany	-2.362	0.019	0.094	-2.139	0.032	0.118	-3.928	0.001	0.020		
Denmark	-2.718	0.013	0.066	-2.752	0.012	0.064	-3.425	0.005	0.033		
Estonia	-1.511	0.358	0.221	-1.242	0.447	0.289	-2.144	0.232	0.117		
Spain	-2.916	0.001	0.054	-2.104	0.020	0.122	-2.210	0.024	0.110		
Finland	-0.366	0.751	0.694	-0.168	0.883	0.845	-2.247	0.093	0.106		
France	-3.412	0.000	0.033	-2.705	0.005	0.067	-2.302	0.026	0.100		
Greece	-2.043	0.036	0.130	-2.302	0.017	0.100	-2.497	0.019	0.082		
Hungary	-0.804	0.413	0.447	-0.261	0.790	0.770	-1.540	0.145	0.214		
Ireland	-0.793	0.448	0.453	-1.685	0.107	0.185	-0.854	0.452	0.426		
Italy	-2.741	0.005	0.064	-1.954	0.044	0.142	-1.705	0.101	0.182		
Lithuania	-0.894	0.579	0.409	-0.716	0.656	0.489	-1.180	0.485	0.307		
Luxembourg	-4.365	0.007	0.013	-3.614	0.022	0.027	-4.267	0.019	0.014		
Latvia	-2.024	0.152	0.132	-1.924	0.170	0.146	-1.991	0.190	0.137		
Netherlands	-3.733	0.000	0.024	-2.995	0.001	0.050	-2.627	0.008	0.072		
Malta	-4.830	0.013	0.008	-3.799	0.041	0.022	-3.903	0.056	0.020		

	Very well-informed			v	/ell-informe	d	Not very well-informed			
	В	sig.	odds	В	sig.	odds	В	sig.	odds	
Poland	-2.005	0.044	0.135	-2.231	0.025	0.107	-3.093	0.004	0.045	
Portugal	-1.882	0.052	0.152	-1.508	0.116	0.221	-2.231	0.034	0.107	
Sweden	-1.868	0.025	0.154	-1.377	0.096	0.252	-1.541	0.093	0.214	
Slovenia	-2.679	0.049	0.069	-2.411	0.075	0.090	-3.387	0.027	0.034	
Slovakia	-1.378	0.317	0.252	-1.405	0.306	0.245	-1.638	0.270	0.194	
United Kingdom	-2.120	0.020	0.120	-2.564	0.005	0.077	-2.252	0.022	0.105	
Bulgaria	-1.671	0.136	0.188	-2.312	0.038	0.099	-2.730	0.026	0.065	

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; Romania given as reference value.

Source: Calculations from fourth EWCS and national questionnaires

Policies promoting OSH in SMEs through employee involvement

Governmental policies and nationwide partnerships

National policies promoting health and safety at work display three main patterns:

- standards and policies set by national institutions without significant collaboration with social partners (Czech Republic, Luxembourg);
- tripartite involvement in setting priorities and public leadership in implementation, leaving social partners scope for bilateral agreements both at a sectoral and company level (Estonia, France and Norway);
- tripartite involvement in setting priorities and implementation, with a vast array of combinations ranging from tripartite institution to bipartite and unilateral projects.

Actions taken under a tripartite model show a wide range of strategies. In some countries, social partners are involved in policy design and public institutes carry out their implementation: in France and Norway, social partners participate in priority setting at a national level.

The French promotion of health and safety in SMEs is represented by the fund FACT (managed by ANACT). This fund combines financial support with the provision of expertise by the network of regional associations for the improvement of work conditions (*Association régionale pour l'Amélioration des conditions de travail*, ARACT) for studies and investigations carried out on direct improvement in companies with fewer than 250 employees or groups of companies or professional associations of SMEs. Such studies and investigations seek to boost knowledge inside companies, in part by using OSH committee as a way of transmitting information.

In Norway, social partners engage in promotional actions by setting and revising guidelines at a sectoral level. The labour inspectorate concentrates on control and dissuasion, thus exerting pressure on both enterprises and social partners to trigger them to take responsibility themselves after having shared the policy process. The election of OSH representatives is one of the duties social partners have to carry out.

In Germany, wide partnerships are formalised by INQA, which aims to promote the goal of combining employees' expectations of healthy and satisfying working conditions with the need for enterprises to be competitive in an internationally integrated economy (**DE0612039Q**). Recently, under the INQA umbrella, IKK initiated an <u>alliance for health (in German)</u> in 2008 with social partners in SMEs. It developed several tools to support companies with their OSH tasks by providing information, advice and exchange of experience between participants.

Other patterns are not so formalised and 'centralised' under a general 'framework' institution. In Austria, each stakeholder carries out their own initiatives but in close and informal cooperation with AUVA playing a pivotal role including offering prevention services to small companies for free.

In Sweden, there is a set of joint institutions and diversified cooperation patterns initiatives with different partnerships according to specific targets (training, combating alcoholism) and located within a context of general cooperation among public, bipartite and tripartite institutions and stakeholders. Partnership among public institutions is consolidated: the work environment agency AV employs labour inspectors and cooperates closely with the Public Employment Service, the National Board of Health and Welfare, and the Swedish Social Insurance Agency; all cooperate with social partners' in health and safety, in rehabilitation at workplaces and at a policymaking level. The Swedish social partners have established:

- AFA Insurance (<u>AFA Försäkring</u>), a labour market insurance that ensures that both private and public companies according to collective agreements carry out preventive measures and research for improving health in working life and provide the employees with knowledge, support and inspiration for those who want to improve their work environment, their lifestyle and health;
- Alna Sverige AB (<u>ALNA</u>), an agency promoting education about alcohol and other drugs and their implication for health in the workplace in Sweden.

Finally, the trade unions set up a joint non-profit organisation with Prevent, an acknowledged leadership in OSH training and provision of information on the work environment in Sweden.

In other countries, such as in Finland, cooperation among social partners is centralised at a national level in the branch committees of the Centre for Occupational Safety (*Työturvallisuuskestus TTK*, TTK), setting safety standards and promoting them by means of the so-called Occupational Safety Card training. The Occupational Safety Card is designed first and foremost for the manufacturing sector, but it is equally applicable for the construction industry, public sector, shipbuilding, etc. Its use is voluntary, the principal employer deciding whether or not it is necessary. Occupational Safety Card training provides basic information on OSH by reducing overlaps in training among different employers. It pays particular attention to shared workplaces, aiming to enhance practical collaboration between employers and contactors.

The Dutch approach has a number of peculiarities. The labour inspectorate relies on (regularly updated) social partner guidelines at a sectoral level as the reference standard for its inspections. Cooperation among social partners inspired the work and health covenants for a sectoral approach to risk management; this approach is actively encouraged and subsidised by the Ministry of Social Affairs and Employment. The overall aim has been to reduce exposure to sector-specific psychosocial and physical risks by about 10% over a period of approximately three years. Public funding ended in 2006 and an assessment in the construction industry, one of the most important sectors for OSH, highlights that the impact of these covenants is limited to the short term.

Sectoral partnerships: bipartite institutions

Bipartite bodies play an important role in promoting health and safety in Belgium, Denmark, Greece, Italy, Spain and Romania. Such bodies were established in the 1960s in Belgium and Italy in the construction industry. In Italy they spread to the other SME-dominated sectors during the 1990s (handicrafts, trade, hotel and catering, agriculture) and now provide funding for territorial workers' representatives. The Danish Working Environment Councils run by the social partners provide information, guidelines, etc. targeted at SMEs and are established in all sectors, thus ensuring almost complete coverage. In Greece, the OSH bipartite body EL.IN.Y.A.E is established at an intersectoral level though it is not SME-focused. In France, bilateral observatories are established at a regional level, playing a consultative and monitoring role. Bipartite bodies are only just starting up in Romania (where they are established only in the construction industry) and in Spain (in farming and food and drink industry).

Such institutions are focused on OHS, with the noticeable exception of Italy. There, the OSH joint technical committees are in fact part of multi-purpose bilateral bodies offering a wide spectrum of services such as training, complementary welfare and labour market matching. Such committees developed an extensive cooperation with INAIL at a local level in promoting a certification standard, guidelines and toolkits available online under the aegis of tripartite national agreements.

Sectoral partnerships: tripartite and multi-stakeholders institutions

Tripartite institutions promoting OSH have been established in Belgium, Ireland and Luxembourg in the construction industry. The Irish Construction Safety Partnership (CSP), launched in 2000, is a multi-stakeholder partnership since it also includes professional body interest groups. Over 400,000 workers have undertaken its Safe Pass programme – the basic health and safety awareness training now compulsory for all employees in the industry. A similar multi-stakeholder institution is the Luxembourg Building Sector Training Institute (IFSB), which recently launched a project that aims to train OSH coaches focusing on those companies with abnormally high levels of risk, with the objective of reducing the costs of inadequate safety measures at a national level by 20%.

Joint projects and campaigns

Joint projects and campaigns play an important role either by raising awareness or by bringing together a wide partnership in facing particularly critical challenges. From the national contributions, they are mainly promoted by employers' associations at a sectoral level and consultancy companies such as the Greek <u>AQUASAFE</u> programme, which deals with OHS-related prevention in the aquaculture sector. In the Belgian Pro-Safe project, the partnership includes the insurers' association, <u>Assuralia</u>, because labour insurance is privately managed and targets SMEs according to an intersectoral approach. Finally, in Italy there are partnerships between INAIL and employers' associations as part of the partnership-oriented approach established since the 2001 tripartite agreement on a safety certification promoted by INAIL.

In general, such joint projects are not based on a unilateral approach managed exclusively by employers. The good practice and awards project of the Belgian Pro-Safe initiative often stresses the importance of employee involvement in risk assessment, their training and suggestion triggering, while the Greek AQUASAFE programme has significant links with changes in sectoral national labour contracts.

Bipartite agreements

In general, national collective agreements provide the general framework to OSH at a sectoral level according to sector-specific hazards. This is not the case of those countries with decentralised collective bargaining such as Hungary, Malta and the United Kingdom. Four types can be identified

- Sectoral agreements providing specific funding to OSH activities In the Austrian banking and chemical sectors and in the German steel and chemical sectors, companies have to set out funds in order to finance workplace health protection measures according to company-level agreements. With the exception of the Austrian chemical industry, these agreements go beyond legislation.
- SME-dominated national labour contracts setting a levy on the wage bill In Italy, the levy varies from 0.25% in the hotel and catering sector to 24% in the construction sector. It is used to finance bilateral bodies, which are partly devoted to OSH intervention, both as joint technical committees and territorial-level representatives; these take up between 5% and 15% of the total levy.
- Agreements focusing on specific risk factors In France, for example, the Ministry of Labour and the three employer organisations in the metallurgy and chemical industries signed an agreement on the prevention of agents that are carcinogenic, mutagenic or toxic for reproduction (in French), while social partners signed one on the prevention of MSDs in the food industry. The Danish national agreement on well-being at work and a sustainable

psychosocial working environment was negotiated the first time in 2001 and relies on cooperation committees for their implementation.

• National collective agreements setting standards beyond legislation This can be seen in – for instance – the Swedish energy, electronic and technical, and retail sectors.

The Italian funding system for OSH in sectors dominated by SMEs differs from the Swedish financing scheme in that the latter is channelled through social security (a similar approach would be too complicated in Italy).

In 2006 the social partners in the steel industry for the first time concluded a collective agreement on issues related to demographic change (**DE0610019I**) in three Länder (North Rhine-Westphalia, Lower Saxony and Bremen) covering some 85,000 employees. Social partners at the establishment level decide themselves how the so-called 'demographic fund' is financed in order to promote health by shaping workplaces, work processes and organisation in accordance with the health and age of staff, and by reducing peak loads and training activities accordingly. However, no specific measure is singled out for SMEs.

Unilateral initiatives

Both public authorities and social partners may launch unilateral projects. Sometimes this occurs in a strongly cooperative environment (as in Austria), or with a strong enforcing role from the labour inspectorate (as in Norway). The main goal of such projects is to disseminate information dissemination, as do for instance the websites set up by the regional government of Andalucía and ConfeBask, the employers' association of the Basque Country, in Spain. In addition, trade unions often promote their information points and local-level agencies providing information, support and expertise. They also sometimes establish partnerships at a local level with micro-employer associations such as the Keighley Worksafe Project in the United Kingdom, a charity promoted by the local trade union (Walters, 2002).

Three initiatives go far beyond such a relatively restricted approach.

The Romanian PHARE pilot project, <u>Implementation of Harmonised Safety and Health at Work Legislation in Small and Medium Enterprises</u>, promoted by the labour inspectorate, aims to promote awareness among both employers and employees through training and extensive use of information tools (including a website) and by establishing six sectoral pilot centres carrying out risk assessment.

The Hungarian trade union, <u>Foundation for Workers Representatives on OHS</u>, was established in 1996. It announces tenders to fund projects from fines paid by employers who fail to fulfil OSH requirements. It regularly organises regional consultative forums and regional meetings for OSH representatives. It issues booklets and, in 2007, conducted a survey to explore the experiences of OSH representatives and committees.

The refining and petrochemical industries, where work accidents are strongly related to plant breakdowns (which could lead to environmental disasters), adopt very complex and systematic health, safety and environmental (HSE) procedures based on a participatory approach (such as the system used in DuPont). Such HSE policies require high safety standards from that contractors that provide maintenance services. In general, most SMEs adopt such policies, such as the refining division of <u>ENI</u>, while in the Netherlands they are adopted at sectoral level as the <u>VCA</u> system of health and safety certification. Such approaches rely on:

- strict standards for OSH when selecting contractors;
- widespread and regular dissemination of information and consultation among parties;

setting targets – for example, zero accidents for all companies operating within any site.

The network of companies operating in northern Finland, which has developed such common criteria safety, health, environment and quality for evaluating their subcontractors, follows similar lines.

Company-level good practice

Company-level good practice in SMEs reported from national contributions are concentrated among medium-sized plants that are part of global player groups such as the Swedish eyewear producer Polaris Optic AB, or large groups such as the French transport company Dachser (formerly Graveleau), the Swedish Cementa AB Slite (both owned by German groups) or Carlsberg Bulgaria. Their success in OSH management relies on cooperation between well-established OSH representatives and OSH management that strongly orientates the company's mission, actually managed according large company methodologies. However, awards included in OSH projects targeted at SMEs play an important role in eliciting good practice among small companies such as the good practice presented by the Belgian Pro-Safe initiative.

Commentary

There are wide differences in the approach to information and consultation issues regarding health and safety at work among EU countries, although there is a significant move towards wider consultation with social partners in policymaking – especially in those countries such as Spain and in the NMS, where the implementation of the EU framework directive on health and safety spurred activity and where a bureaucratic approach by public institutions prevails. Similarly, while most countries foresee simplification for small and especially micro enterprises, OSH promotion policies (such as the ambitious German joint alliance INQA) are even more widespread. An interesting policy approach in favour of the smallest companies is the supply of free consultancy OSH services by national insurance funds for work accidents (such as in Austria, Belgium and Italy), often combined with discounts on insurance premiums. However, such strategies still need to be evaluated.

In general, national-level analyses show that both compliance and the extent of employee informedness improve with company size (also in part due to the presence of OSH representatives), although such patterns often need more refined statistical analysis. However, few countries conduct regular and systematic monitoring – in a disaggregated way – of policy implementation and its outcomes in terms of work accidents, risk exposure and work-related diseases.

At a European level, the fourth EWCS highlights the positive impact – on levels of informedness – of prior consultation about changes to work organisation and working conditions, of learning opportunities in the workplace and the feeling of job security. In general, there is no definite evidence of the impact of training; nor does the impact of institutional variables drawn from national questionnaires show any conclusive effect, apart from a positive impact on levels of informedness by health and safety committees in small companies (20–49 employees) where the need for information sharing about OSH matters has been institutionalised.

Mario Giaccone, Cesos

Bibliography

Ahlers, E., Brussig, M., *Gesundheitsbelastungen und Prävention am Arbeitsplatz – WSI-Betriebsrätebefragung 2004* [Health pressures and prevention at the workplace – WSI-Works' Council Survey 2004], in WSI-Mitteilungen No. 11, 2004, pp. 617–624.

Antonelli, A., Baker, M., McMahon, A., Wright, M., Six SME case studies that demonstrate the business benefit of effective management of occupational health and safety, Research Report 504, Bootle, Health and Safety Executive, 2006, available online at http://www.hse.gov.uk/research/rrpdf/rr504.pdf (707Kb).

Cameron, I., Hare, B., Duff, R., Maloney, B., *An investigation of approaches to worker engagement*, Research Report 516, Bootle, Health and Safety Executive, 2005, available online at http://www.hse.gov.uk/research/rrpdf/rr516.pdf (1.2MB).

European Agency for Safety and Health at Work (EU-OSHA), *Occupational safety and health and economic performance in small and medium-sized enterprises: a review*, Working Environment Information Working Paper EN 9, Luxembourg, Office for Official Publications of the European Communities, 2009a, available online at http://osha.europa.eu/en/publications/reports/TE-80-09-640-EN-Noccupational safety health economic performance small medium sized enterprises review (591Kb, PDF).

European Agency for Safety and Health at Work (EU-OSHA), *Labour inspectorates' strategic planning on health and safety at work*, European Risk Observatory Working Paper EN 10, Luxembourg, Office for Official Publications of the European Communities, 2009b, available online at http://osha.europa.eu/en/publications/reports/TE-80-09-641-EN-N_labour_inspectorates (829Kb, PDF).

Eurostat, *Statistical analysis of socio-economic costs of accidents at work in the European Union*, Luxembourg, Office for Official Publications of the European Communities, 2004, available online at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-CC-04-006/EN/KS-CC-04-006-EN.PDF (1.09MB, PDF).

Gervais, R.L., Williamson, J., Sanders, V., Hopkinson, J., *Evaluation of the success in Britain of the Directive on minimum safety and health requirements for work with display screen equipment*, Research Report RR622, Bootle, Health and Safety Executive, 2007, available online at http://www.hse.gov.uk/research/rrpdf/rr622.pdf (2.64MB).

Health and Safety Executive (HSE), *Obstacles preventing worker involvement in health and safety*, Research Report 296, Bootle, Health and Safety Executive, 2005, available online at http://www.hse.gov.uk/research/rrpdf/rr296.pdf (550Kb).

Rogers, J., Streeck, W., *Works councils: consultation, representation, and cooperation in industrial relations*, National Bureau of Economic Research Comparative Labor Markets Series, Chicago, University of Chicago Press, 1995.

Saleh, F., Hoeben, J., Spijkerman, R., Erdem, Ö., Faas, T., Samadhan, J., *Arbo in Bedrijf 2008:* een onderzoek naar de naleving van arbo-verplichtingen, blootstelling aan arbeidsrisico's en genomen maatregelen in 2008, The Hague, Ministerie van SZW, 2009, available online at http://www.arbeidsinspectie.nl/Images/Arbo in bedrijf tcm290-276591.pdf (1.5MB).

Vogel, L., *Better Regulation: really better for health and safety at work in Europe?*, HESA Newsletter No. 35, Brussels, European Trade Union Institute, 2009, available online at http://hesa.etui-rehs.org/uk/newsletter/files/NWL_35_UK_p3.pdf (184Kb).

Walters D., *Health and safety in small enterprises: European strategies for managing improvement*, Brussels, Presses Interuniversitaires Européennes, 2001.

Walters D. (ed.), Working safely in small enterprises in Europe: towards a sustainable system for worker participation and representation, Brussels, European Trade Union Confederation, 2002.

Walters D., Lamm F., *OSH in small organisations: some challenges and ways forward*, Working Paper 15, Canberra, National Research Centre for OSH Regulation, Australian National University, 2003, available online at http://ohs.anu.edu.au/publications/pdf/wp%2015%20-%20Walters%20and%20Lamm.pdf (264Kb).

Annex: Multinomial regression on the determinants of information level on OSH at work

Table A1: Extent of informedness, by occupational determinants

	Very	well-info	rmed	We	ell-inform	ned	Not very well-informed			
	В	sig.	odds	В	sig.	odds	В	sig.	odds	
Labour contract (other)	0.000			0.000			0.000			
Indefinite contract	-1.269	0.092	0.281	-0.574	0.445	0.563	-0.890	0.254	0.410	
Fixed-term contract	-1.030	0.176	0.357	-0.418	0.583	0.659	-0.801	0.310	0.449	
Temporary agency contract	-1.896	0.019	0.150	-0.885	0.267	0.413	-1.477	0.077	0.228	
Apprentices	-1.090	0.242	0.336	-0.826	0.375	0.438	-0.661	0.496	0.516	
No contract	-2.489	0.001	0.083	-1.276	0.095	0.279	-1.628	0.041	0.196	
Occupation (armed forces)	0.000			0.000			0.000			
senior managers	-0.832	0.434	0.435	-1.695	0.108	0.184	-0.730	0.516	0.482	
professionals	-0.974	0.351	0.377	-1.792	0.084	0.167	-0.971	0.380	0.379	
technicians	-1.193	0.251	0.303	-2.230	0.030	0.107	-1.226	0.264	0.293	
clerical workers	-1.684	0.104	0.186	-2.465	0.016	0.085	-1.307	0.233	0.271	
service and sales workers	-0.940	0.367	0.391	-1.824	0.077	0.161	-0.542	0.622	0.582	
agricultural and fishery workers	-2.609	0.018	0.074	-3.342	0.002	0.035	-1.986	0.095	0.137	
skilled workers	-1.817	0.081	0.162	-2.410	0.020	0.090	-1.079	0.327	0.340	
machine operators	-1.612	0.122	0.200	-2.186	0.035	0.112	-1.259	0.254	0.284	
unskilled workers	-1.374	0.187	0.253	-1.973	0.056	0.139	-0.746	0.497	0.474	

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; reference values are shown in brackets.

Source: calculations from fourth EWCS and national questionnaires

Table A2: Extent of informedness, by personal determinants

	Very	well-info	rmed	We	ell-inform	ned	Not very well-informed			
	В	sig.	odds	В	sig.	odds	В	sig.	odds	
Education (tertiary education, advanced)	0.000			0.000			0.000			
no educational attainment	2.440	0.009	11.477	2.114	0.023	8.284	2.021	0.036	7.543	
primary education	-0.560	0.138	0.571	-0.211	0.563	0.810	-0.273	0.512	0.761	
lower secondary education	1.049	0.003	2.856	1.127	0.001	3.086	0.672	0.090	1.959	
upper secondary education	1.061	0.002	2.888	1.034	0.002	2.811	0.765	0.045	2.150	
post-secondary education	0.756	0.042	2.130	0.840	0.022	2.317	0.287	0.492	1.333	
tertiary education – first level	0.505	0.121	1.657	0.550	0.088	1.733	0.482	0.189	1.620	
Gender (female)	0.000			0.000			0.000			
male	0.304	0.003	1.355	0.235	0.021	1.265	0.239	0.035	1.270	
Age (55 years and more)	0.000			0.000			0.000			
24 years or younger	-0.543	0.009	0.581	-0.445	0.028	0.641	0.256	0.255	1.292	
25-39 years	-0.461	0.008	0.631	-0.459	0.007	0.632	-0.005	0.980	0.995	
40-54 years	-0.213	0.206	0.808	-0.299	0.072	0.742	-0.128	0.496	0.880	

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; reference values are shown in brackets.

Source: calculations from fourth EWCS and national questionnaires

Table A3: Extent of informedness, by workplace determinants

	Very	well-info	rmed	We	ell-inform	ned	Not very well-informed			
	В	sig.	odds	В	sig.	odds	В	sig.	odds	
Sector (education, health and other personal services)	0.000			0.000			0.000			
agriculture and fishing	-0.056	0.876	0.946	0.275	0.425	1.317	-0.406	0.308	0.666	
manufacturing and mining	0.191	0.346	1.210	0.208	0.298	1.231	-0.144	0.517	0.866	
electricity, gas and water supply	1.117	0.013	3.056	0.615	0.174	1.850	0.494	0.310	1.638	
construction	0.408	0.125	1.504	0.424	0.106	1.528	0.442	0.122	1.555	
wholesale and retail trade	-0.046	0.824	0.955	-0.045	0.826	0.956	-0.023	0.918	0.977	
hotels and restaurants	0.000	0.999	1.000	0.136	0.620	1.146	-0.260	0.389	0.771	
transport and communication	-0.201	0.370	0.818	-0.138	0.531	0.871	-0.155	0.531	0.857	
financial intermediation	-0.417	0.118	0.659	-0.256	0.332	0.774	-0.594	0.055	0.552	
real estate and other business services	0.088	0.711	1.092	0.235	0.316	1.265	0.154	0.549	1.167	
public administration and defence	-0.730	0.001	0.482	-0.472	0.025	0.624	-0.447	0.059	0.639	
Sector (other)	0.000			0.000			0.000			
private sector	-0.437	0.460	0.646	-0.860	0.137	0.423	-1.114	0.066	0.328	
public sector	-0.008	0.989	0.992	-0.617	0.294	0.539	-0.819	0.186	0.441	
joint private-public organisation	0.115	0.857	1.122	-0.546	0.382	0.579	-0.605	0.360	0.546	
not-for-profit	-0.394	0.616	0.675	-0.983	0.203	0.374	-0.292	0.717	0.747	

Notes: Figures are for estimated coefficients (B), statistical significance (sig.) and odds; reference values are shown in brackets.

Source: calculations from fourth EWCS and national questionnaires