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Worker representation and consultation on health and safety

An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER)

European Risk Observatory

Report

European Agency for Safety and Health at Work

ESENER

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Worker representation and consultation on health and safety

An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER)

European Risk Observatory

Report

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Foreword

Successful management of health and safety at work demands that workers be informed, consulted, and allowed to take part in discussions on all questions relating to OSH (occupational safety and health). As well as being recognised as a key success factor, this principle is established in law across Europe through the provisions of the EU framework directive (89/391/EEC). For these reasons, EU-OSHA's 2009 workplace survey (ESENER) featured worker participation as one of its three main topics (the others being management of OSH in general and management of psychosocial risks).

This report exploits the rich data that ESENER collected data through its 36 000 telephone interviews with managers and worker representatives in establishments with 10 or more employees across 31 countries. Following up on the initial descriptive overview of results published in 2010, this report is based on a more focused in-depth investigation of the data and comprises one of four 'secondary analysis' reports that are being published together with a summary available in 24 languages.

The findings from the authors of this report show that workplaces with worker representation on OSH tend to be better at managing both general health and safety risks and psychosocial risks such as stress, violence and harassment. This link is shown to be especially strong when the involvement of workers is combined with a high level of management commitment to OSH management. Indeed, it is exactly this synergy between management leadership and worker involvement that underpins our Healthy Workplaces Campaign 'Working together for risk prevention'.

Dr Christa Sedlatschek

Director
European Agency for Safety and Health at Work (EU-OSHA)

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Executive summary

The aim of this study was to undertake a more detailed analysis of data from the European Survey of Enterprises on New and Emerging Risks (ESENER) concerning the representation of workers in arrangements for health and safety management and to investigate the relationship between the effectiveness of health and safety management measures within enterprises and the involvement of employee representatives (ER) in these measures. To achieve this aim, our study has taken as its starting point the description of worker representation on occupational safety and health (OSH) provided by the published report of the ESENER findings. It has placed these findings in the wider context of research findings on worker representation on OSH by reviewing the international literature on the subject before looking more closely at the ESENER data itself. We undertook a secondary analysis of the ESENER data according to points 1 to 5 below and, in so far as the data allows us, we compared it with European and United Kingdom national surveys to address similar questions to those posed by the ESENER survey (point 6).

In this report we have:

1. identified the extent to which the ESENER survey confirms sets of practices shown in other studies to be associated with the involvement of workers in the management of OSH;

2. used multivariate analyses to define a typology of establishments according to their characteristics and the determinants of worker involvement;

3. drawn on scientific knowledge and information on the regulatory and business environment to explain the context of features that have greatest influence on enterprises' involvement of workers in the management of health and safety;

4. evaluated as far as we think is possible the effectiveness of worker involvement according to the analysis of responses to relevant ESENER questions;

5. considered possible relationships between the engagement of worker representation with arrangements for managing health and safety and national styles of regulation of these matters;

6. undertaken some comparisons with other national and EU-level surveys;

7. discussed the policy implications, identifying the main drivers and barriers that could be addressed in order to foster higher levels of worker involvement and to make their involvement more effective.

Methods

The ESENER study is a Europe-wide establishment survey on occupational safety and health (OSH) undertaken in 2009 yielding data from the interviews carried out with both OSH managers and health and safety representatives in 31 countries including all of the EU-27 Member States and additionally Croatia, Norway, Switzerland and Turkey. The new and emerging risks on which it focused were essentially those associated with the psychosocial hazards linked to modern work organisation. The survey asked managers and workers' health and safety representatives about the way in which health and safety risks in general, as well as psychosocial risks in particular, were managed at their workplaces.

Using the ESENER data the main part of our analysis examined the characteristics of workplaces that are associated with the involvement of workers in OSH management and the nature and extent of this involvement. It further considered how the involvement of employees contributes to the effectiveness of health and safety management and looked at country and sector-specific differences in the ESENER findings by using some simple groupings according to sector, country and national styles of regulation. Two additional pieces of analysis were undertaken. One was based upon the European Conditions of Work Survey and considered occupational ill health in the EU and whether employees feel well informed about the OSH risks associated with their employment. The other was a country-specific case study based upon data from the United Kingdom Workplace Employment Relations Survey 2004.

General findings

The previously published ESENER data reported on the 'impact of formal participation of employees in the management of health and safety risks' and found that all measures to manage general OSH risks investigated in the survey were **'more commonly applied where there is general formal representation in place'**. It observed the existence of OSH policies, management systems and action plans to be positively correlated with the presence of employee consultation, even after taking account of establishment size. Indeed, it suggested that, where there is representation in smaller firms, these effects are even more pronounced than when it is present in larger firms. It also found that the presence of formal representation was associated with better perceptions of the success of measures (such as the impact of OSH policy) to manage OSH risks and argued that the **'presence (and involvement) of employee representation is clearly a factor in ensuring that such OSH policies and action plans are put into practice'**.

As is evident from the review of the wider research literature outlined in this report, none of these findings is especially surprising. Generally they are in line with the main thrust of previous studies, in as much as they suggest associations between the presence of arrangements for worker representation, good practice on other aspects of OSH management and perceptions concerning the positive influence of arrangements for

representation. Indeed, the weight of the evidence found in the international literature would seem to broadly support the idea that better health and safety outcomes are likely when representative worker participation forms a part of employers' management of occupational safety and health and that, in various ways, joint arrangements, trade unions and worker representation on health and safety at the workplace are likely to be associated with such outcomes.

However, as the report of the Epsare study undertaken for the European Trade Union Insttute (ETUI) previously pointed out (Menendez et al. 2008), large-scale international surveys that include data concerning the role of worker representation and consultation on OSH from all the EU Member States are rare. The particular significance of the ESENER findings therefore is that they represent a substantial quantity of data gathered from a large sample of respondents from all the Member States of the EU. There have been very few previously published studies on the role of worker representation and consultation in arrangements for managing OSH in many of these Member States. Therefore the ESENER findings add substantially to the knowledge base concerning these practices across the EU.

Specific findings of the secondary analysis

The factors associated with the presence of worker representation were consistent with previous work suggesting that worker representation is more common in larger organisations, the public sector, organisations with more older workers and in workplaces where health and safety, and the views of workers, are seen as a priority.

There was also a strong association with management commitment to health and safety which, in combination with worker representation (particularly both general and specific OSH representation together), was also significantly associated with each of a range of measures of OSH management including the presence of a health and safety policy, routine collection of sickness absence data and regular workplace checks on OSH. For example, after controlling for other factors, respondents from workplaces with both forms of worker representation and high management commitment to health and safety were almost 10 times as likely as those from workplaces with no worker representation and low management commitment to health and safety to report that their organisation had a documented health and safety policy in place.

Following analysis of a range of associations between both general workplace representation, specific OSH representation and measures of OSH processes and outcomes (such as the presence of OSH management systems, policies and plans, workplace assessments and actions following them), OSH management measures were found to be more likely to be seen as effective in workplaces in which there is worker representation, and in particular where it is combined with high management commitment to health and safety. Analyses further suggested that psychosocial risk management generally was more likely in workplaces where there was worker representation and particularly so where there was also high management commitment to health and safety.

A similar pattern of results was apparent when comparable analyses were carried out using the health and safety representatives' dataset, supporting the findings outlined above and confirming, in particular, the strong association with management commitment to health and safety.

Overall, therefore our findings suggested that, independent of other factors, management of health and safety is more likely, and is more likely to be effective, in organisations which not only have an employee representative but which also provide that person with an appropriate context in which to work. This includes ensuring high levels of management commitment to health and safety, comprehensive employee representative training, the support system and mechanisms to implement health and safety policy and practice and an active and recognised role in day-to-day health and safety management of both traditional and psychosocial risks.

Comparisons between sectors, countries and regulatory styles

Further analyses focused on comparing the key factors our analyses identified as associated with both formal health and safety management and its perceived effectiveness by sector, country and regulatory style. Sectoral comparisons confirmed the findings of previous national studies. First, they showed a greater presence of representation in utilities, the public sector and in manufacturing. Second, high levels of management commitment to OSH and participative arrangements in many of the sectors embraced by the 'producing' category used in the published ESENER report were apparent. Proportional presence of both general and specialist OSH worker representation in combination with high management commitment by country was highest in the Nordic countries, and lowest in the smaller southern European countries such as Greece and Portugal. Generally EU-15 countries dominate those with greater than average occurrence of such associations but there are some new entrants such as Bulgaria and Romania that are also quite prominent in this group, while some EU-15 countries such as Germany and France have less than average occurrence. Beyond these observations, the spread of representation in combination with high management commitment by country is not especially informative. To try to help explain this pattern we considered possible differences according to regulatory framework type, by tentatively dividing the 31 countries in the ESENER dataset into five groups to broadly represent different regulatory types:

1. Central: Germany, Netherlands, Austria, Belgium, Luxembourg, Switzerland

2. Nordic: Denmark, Finland, Sweden, Norway

3. Ireland and United Kingdom

4. Southern/Latin EU: Greece, Spain, France, Italy, Cyprus, Malta, Portugal

5. Eastern: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia, Croatia, Turkey

Our reasoning for this admittedly crude division was based around possible differences in regulatory cultures, character and arrangements on OSH management. It must be stressed, however, that the resulting groupings cannot be substantiated completely in every case and do not apply with equal power to the fit of each country. Nevertheless they represent a crude qualitative assessment of possible differences in the style and longevity of approaches to regulating OSH management in EU Member States, which we think might be relevant to the present analysis. Using this classification our analysis consistently placed Nordic countries and United Kingdom and Ireland ahead of the other groupings in terms of the occurrence of high management commitment **and** both general and specialist OSH forms of worker representation in place and these findings were not a function of enterprise size. We therefore suggest that a possible explanation for our observations might lie in the familiarity of the countries in these two groups with the kind of participatory management and process-orientated regulation of health and safety that has been their more longstanding experience in comparison with the countries in other groups. We think that this tentative finding could usefully be explored in further studies.

Comparisons between ESENER and the results of other national and EU-wide surveys

The nature of the data collection exercise underpinning ESENER, both in terms of the overall sample size and the complexity of collecting comparable cross-country data, means the survey is inevitably limited in terms of the level of detail that can be achieved with respondents. For example, relative to national-level surveys, it is able to collect more limited information about the characteristics of the participating workplaces and is unable to go into significant detail about the nature of employment relations at these workplaces. We reasoned that it might be useful, therefore, to explore comparisons with national surveys on similar matters where the collection of more detailed information was possible.

There are few national surveys in which information has been collected concerning the role of workplace arrangements for representation and consultation on OSH. Examples include the REPONSE and SUMER surveys in France, the Spanish Fifth National Survey of Working Conditions and the more recent National Survey on the Management of Safety and Health in Enterprises in Spain (ENGE 2009) as well as the series of Workplace Industrial/Employment Relations Surveys (WIRS/WERS) from the United Kingdom. We chose the latter as best suited for our purpose and undertook a detailed case study based upon the 2004 United Kingdom Workplace Employment Relations Survey to provide some comparative detailed national-level analysis.

Our findings confirm that WERS 2004 identifies a much lower proportion of enterprises with representation than that found in the ESENER survey. In United Kingdom terms this is a more realistic estimate, but it is also one that is in keeping with comparable data on union presence and worker representation in other EU Member States. Our analysis of WERS 2004 does, however, support the previously reported ESENER findings in terms of the characteristics of workplaces where representation on OSH is present.

There are even fewer European Union-level surveys of the experience of health, safety and working conditions in the workplaces of the EU in which similar information has been gathered. The nearest such survey is the European Working Conditions Survey (EWCS) and we further considered ways to compare our findings with relevant data reported in the EWCS. Unfortunately, there is little that is of direct relevance to our interests in the EWCS, since it does not directly address issues of worker representation and consultation on health and safety at work. However, respondents to the EWCS are asked if they think their health and safety is at risk because of their job and if their work affects their health. They are also asked about how well-informed they think they are about the health and safety risks associated with their jobs. We felt that the responses to these questions might hold some useful comparisons with our own analysis. Subjecting them to some further analysis we found that overall, those respondents to the EWCS who reported they were well-informed about the risks associated with their jobs were also less likely to perceive that work has a detrimental effect upon their health.

Conclusions and recommendations

Our analyses of the ESENER data point to conclusions at four related levels. They suggest that:

- Worker representation is more common in larger organisations and in those operating in the public sector. It is also more likely in workplaces where health and safety, and the views of workers, are seen as a priority.

- Formal management of traditional health and safety risks is not only more likely, but is also more likely to be perceived to be effective, in workplaces where there is worker representation and where there is also a high level of management commitment to health and safety.

- Psychosocial risk management is also more likely in workplaces where there is worker representation, particularly where there is also high management commitment to health and safety. In addition, this is more likely to be perceived to be effective in workplaces where employees are involved in the psychosocial risk management process (which is, itself, more common in organisations which also have worker representation in place), again particularly in combination with high management commitment to health and safety generally.

- Management of both traditional and psychosocial health and safety risks, and the perceived effectiveness of that management, are both more likely in workplaces in which workers' representatives have both an active and a recognised role and are provided with sufficient resources.

These conclusions, which are drawn from analyses that controlled for the other potentially influential factors, are consistent with and supportive of previous work in that they: (a) identify worker representation as a key part of the effective management of workplace health and safety risks; and (b) highlight the importance of the context in which workers' representatives are working, to the relationship between worker representation and OSH risk management.

Overall, previous research has tended to find relatively limited development of effective consultative arrangements for OSH in workplaces generally, and their existence pretty much restricted to those where a set of particular preconditions apply. The ESENER results would seem to support this latter observation although they also suggest a greater presence of arrangements for representation and consultation on health and safety than some previous national surveys. We think it is important to draw a distinction between indications of the presence of **some form of arrangement** for representation and consultation on OSH and that of the presence of **effective** arrangements. Overall, we think that the ESENER results support this distinction. While in common with other telephone surveys of this kind, it finds a relatively high level of occurrence of arrangements for worker representation and consultation reported amongst its respondents, elsewhere in its results it also demonstrates the same relationship between management commitment to OSH and the consultation of workers' representatives necessary for effectiveness, that has been shown in other studies to be a prerequisite for effectiveness. This is a relationship that cannot be assumed to exist merely because of the reported presence of arrangements for representation or consultation in workplaces.

With regard to recommendations emerging from this analysis we think they can be addressed to both policy and future research.

(a) Recommendations for policy

The message for policymakers that emerges from our further analysis of the ESENER data is twofold. Firstly, it confirms the need for continued support for worker health and safety representatives and the preconditions that help to determine good practice wherever it is found. Secondly, if as the wider literature suggests, these preconditions for the effective operation of statutory requirements for worker representation on health and safety in the EU exist in only a minority of workplaces, the number of which is diminishing, this is an issue that also requires attention. It seems unlikely that in these scenarios encouragement of the application of regulatory requirements and labour relations processes that were designed with assumptions based on a previous era of work organisation and labour relations in mind will be entirely effective. There would therefore seem to be a need for some rethinking of policy and strategy to address the consequences of these changes.

(b) Recommendations for further research

From a research perspective, since many of these consequences remain relatively little documented in terms of their impact on the effective involvement of workers and their representatives in arrangements to improve health, safety and wellbeing at work, there remains a rich field for further study. It would be useful to explore, for example, what can be learned from existing support for good practice in some sectors and countries that may be transferable to others. Or conversely, what can be learned from the barriers to successful involvement of workers and their representatives in some countries and sectors, to explore ways in which the challenges of such new scenarios might be addressed. There remains much to be understood concerning ways in which worker representation might most effectively address psychosocial and other new and emerging risks more effectively.

We think there is a strong case for the inclusion of further questions concerning worker representation and consultation on health and safety in a future ESENER. However, regarding the methods to be employed in future work, by definition econometric analysis of the sort achieved in quantitative surveys such as ESENER, while important, necessarily stands at some distance from particular workplace-level processes and practices. There is therefore a strong case to be made for combining such analysis with more in-depth qualitative study of the operation of health and safety arrangements. Such a combination allows greater understanding not only of the effectiveness of worker representation on health and safety at work but also the underlying processes that contribute to this.

In the case of follow-up to ESENER on worker representation and consultation therefore, there would seem to be several options that the EU-OSHA could usefully explore. Firstly, further quantitative surveys, such as a new ESENER, should ideally further explore the relationship between measures of the presence of arrangements for the representation and consultation of workers on OSH and those of its effectiveness.

Secondly, and in relation to such effectiveness, one area in which we perhaps have least information concerns the relationship between arrangements for representation and consultation and objective indicators of OSH outcomes — such as measures of the occurrence of injuries or ill health arising out of work. While we note the significant difficulties involved in designing and analysing surveys to meaningfully investigate associations between such objective measures and those on the occurrence of arrangements for representation and consultation, and especially the challenges presented in relation to EU-level surveys in this respect, if future ESENER data is to be used to add to existing knowledge this would seem to be an important issue to address.

Thirdly, previous studies identify several of the prerequisites for effective representation and consultation of workers on health

and safety. Among them are the extent to which workers' representatives are supported by workers' organisations such as trades unions and works councils within and outside establishments. Across the EU these arrangements vary enormously between countries and sectors. Further work is needed to gain a better understanding of these variations and how they condition the effectiveness of representative arrangements for OSH in the changing structural and organisational contexts in which work takes place in the EU. On a related subject, we have noted that the current ESENER questions were not sufficiently specific to be able to fully determine the nature of the experience of support from training, its importance or the variation in its quality. Future surveys could go some way further to distinguish the effects of different providers of training, pedagogies, or the length of training courses for effectiveness of worker representation and consultation on OSH.

Turning to qualitative studies, if it were possible to follow up the indicative findings of ESENER through broadly comparable case studies in different countries and sectors, far more in-depth information could be obtained concerning the supports and constraints of good practice as well as an improved understanding of what is transferable across sectors and countries in this respect. More significantly, such qualitative approaches could most usefully build on existing ESENER analysis in exploring the implications for good practice of changes currently taking place in the structure and organisation of work in the EU.

If the effectiveness of the participative approaches to managing OSH that characterise the measures of the EU Framework Directive 89/391 is of interest, then our indicative findings could also be the subject of further research. Our analysis points towards the tentative conclusion that countries with more embedded regulatory arrangements for participative OSH management are more likely to exhibit positive outcomes when the involvement of workers and their representatives is found in combination with high commitment towards OSH management. It is unlikely that such effects are solely the consequences of regulatory style. Our results are no more than suggestive of possible differences between countries in this respect, but they are arguably useful indicators of areas in which further research could be undertaken. Again, we think that further qualitative and comparative studies are likely to be the best approaches to reaching a greater understanding of these matters.

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Introduction

In June 2009 the European Survey of Enterprises on New and Emerging Risks (ESENER) completed a Europe-wide establishment survey on health and safety. The new and emerging risks on which it focused were essentially those associated with the psychosocial hazards linked to modern work organisation that are widely acknowledged to be a cause for concern in terms of their health consequences and related economic cost. The survey asked managers and workers' health and safety representatives from enterprises of all sizes (except micro-enterprises) about the way in which health and safety risks in general were managed at their workplaces and more specific questions concerning the management of psychosocial risk. Data are available from the interviews carried out with both OSH managers and health and safety representatives in 31 countries including all of the EU-27 Member States and additionally, Croatia, Norway, Switzerland and Turkey. The broad findings of the survey were reported in a European Risk Observatory Report published in early 2010 (EU-OSHA 2010). The purpose of the present study was to undertake a more detailed analysis of the ESENER survey data concerning the representation of workers in arrangements for health and safety management in order to add to what is already understood concerning the nature, extent and effectiveness of worker involvement in OSH management in the EU.

1. Aims of the study

The overall aim of our analysis of the ESENER data was to investigate the relationship between the effectiveness of health and safety management measures within enterprises and the involvement of employee representatives in these measures. To achieve this aim, the study takes as its starting point the description of worker representation on OSH provided in the European Risk Observatory Report (EU-OSHA 2010) of the ESENER findings. It places these findings in the wider context of research findings on worker representation on OSH with a review of the international literature on the subject before looking more closely at the ESENER data itself. In this latter analysis, we first summarise the published ESENER findings on worker representation on OSH. We then consider the main strengths and weaknesses of the survey data and acknowledge its limitations both in relation to what it is able to tell us concerning the existing situation of worker representation on OSH in Europe and in terms of its comparability with previous findings, including those at European level, such as exemplified by the European Working Conditions Survey (EWCS), and at national level as found in the United Kingdom Workplace Employee Relations Surveys (WERS), the French SUMER survey and the findings of the Fifth National Survey on Working Conditions in Spain. Next we report on the findings from our secondary analysis of the ESENER data according to points 1 to 5 below and, in so far as the data allows us, we continue by reporting our attempts to undertake further secondary analysis of data gathered by the above European and United Kingdom national surveys to address similar questions to those posed by the ESENER survey (point 6) and finally we present our conclusions and recommendations (point 7 below).

Specifically, in this report we have:

1. identified the extent to which the ESENER survey confirms sets of practices shown in other studies to be associated with the involvement of workers in the management of OSH;
2. used multivariate analyses to define a typology of establishments according to their characteristics and the determinants of worker involvement;
3. drawn on scientific knowledge and information on the regulatory and business environment to explain the context of features that have greatest influence on enterprises' involvement of workers in the management of health and safety;
4. evaluated as far as we think is possible the effectiveness of worker involvement according to the analysis of responses to relevant ESENER questions;
5. considered possible relationships between the engagement of worker representation with arrangements for managing health and safety and national styles of regulation of these matters;
6. undertaken some comparisons with other national and EU-level surveys;
7. discussed the policy implications, identifying the main drivers and barriers that could be addressed in order to foster higher levels of worker involvement and to make their involvement more effective.

2. The broad findings of the ESENER survey concerning worker representation on health and safety and on managing psychosocial risks

In keeping with wider understanding of participation on OSH and other industrial relations matters (see below), a distinction is made in the ESENER survey between 'informal or direct participation' between individual workers and their employers/managers and 'formal participation' through representation by trade union or other workplace representatives. In this report we are primarily concerned with 'formal participation'.

In terms of formal participation, the published findings of the ESENER survey indicate that 41 % of the sample from EU-27 countries had general workplace employee representation. Representation was most commonly in the form of a works council (35 %) and less commonly in the form of trade union representatives (19 %). As might be anticipated, formal representation was found to be more common in larger organisations (90 % of establishments with over 250 employees) and less so in smaller ones (in only just over one quarter of workplaces employing between 10 and 19 employees). Patterns of general workplace representation were found to vary substantially in EU countries, with greater frequency in the Nordic countries (60 %) and least so in southern European countries such as Greece and Portugal (less than 10 %). The survey notes that although in most countries works councils and trade union representatives may coexist in the same workplaces, in some countries only one or the other is found (for example in Austria, Germany and Luxembourg representation is solely through works councils whereas in contrast, in Sweden, Malta and Cyprus it is solely through shop-floor union representatives). In these countries the survey only asked questions concerning the relevant form of representation. There was also variation at sector level, with generally higher levels of representation in the public sector (61 %) than the private sector (37 %).

In terms of specific representation on health and safety matters — usually through the presence of legally mandated health and safety representatives and (in larger workplaces) joint health and safety committees, the ESENER survey suggests that representation on health and safety is higher than that for employee representation generally, with two thirds of establishments (67 %) in the survey reporting the presence of such arrangements. The largest share of this representation is found in workplaces with safety representatives (64 %) although many workplaces especially in the mid to large size range have both safety representatives and safety committees. The published report of the ESENER survey (EU-OSHA 2010) aggregates these arrangements with those for general representation (on the basis that in the absence of a specific form of health and safety representation, a trade union representative or works council might assume responsibility for representing workers on health and safety), producing very high percentages of representation in the survey overall. As a result it states:

> 'On average, a broad majority of three quarters (75 %) of establishments in the EU have at least one of these forms of formal representation in place.'

The published report of the ESENER survey goes on to examine the 'impact of formal participation of employees in the management of health and safety risks' and reports that all measures to manage general OSH risks investigated in the survey were found to be 'more commonly applied where there is general formal representation in place'. It finds the existence of OSH policies, management systems and action plans to be positively correlated with the presence of employee consultation, even after taking account of establishment size. Indeed, it suggests that where there is representation in smaller firms these effects are even more pronounced than when it is present in larger firms. It also finds that the presence of formal representation is associated with better perceptions of the success of measures (such as the impact of OSH policy) to manage OSH risks and argues that:

> 'The presence (and involvement) of employee representation is clearly a factor in ensuring that such OSH policies and action plans are put into practice.'

As will be evident from the review of the wider research literature outlined in the following section, these findings are not especially surprising and generally they are in keeping with the main thrust of previous studies in as much as they suggest associations between the presence of arrangements for worker representation, good practice on other aspects of OSH management and perceptions amongst the subjects of these studies concerning a positive influence of arrangements for representation.

Further findings reported in the published account of the ESENER survey, largely based on the analysis of interviews with employee representatives, generally indicate a high level of support for their activities in their enterprises, in terms of the time available to undertake their activities, (although insufficient time to contact employees on health and safety matters was mentioned by a quarter of representatives), satisfaction with information provided by their management, which was thought by the majority of subjects (on average over 80 %) to be in good time, and regularly provided in relation to accidents and changes to equipment and work organisation. They also suggest a very high level of involvement of representatives in risk assessment procedures, again 'with 81 % indicating they had a say in decisions on when and where to carry out risk assessments in the enterprise and 87 % being involved in the choice of follow-up action.' While these findings are themselves not surprising as indicators of good practice in the operation of arrangements for worker representation, the scale of their occurrence is in contrast to that reported in some previous quantitative studies as well as in qualitative studies in the literature. Again we will return to this contrast later.

Findings in the published report are also very positive concerning training. A large majority of representatives indicated that they received at least some training on the health and safety issues covered in the survey, although the subject matter was more geared to traditional safety concerns than, for example, psychosocial risks, bullying, discrimination or ergonomics. Two thirds of this large majority (over 90 %) who said they or their colleagues had received some health and safety training found it to be sufficient. The remaining one third felt additional training world be desirable, especially on issues such as those just mentioned. The main reason given for experiencing insufficient training was lack of information about its availability, with just over a third claiming lack of sufficient financial resources for training. Difficulties in obtaining time off for training was the least frequently cited obstacle to training.

3. Worker representation and consultation and psychosocial risks

One of the least studied aspects of the activities of health and safety representatives concerns their engagement with the prevention of psychosocial risks. As Walters (2011) discusses, there are a number of good reasons why such engagement may be especially challenging and it is therefore significant and important that the ESENER survey provides some information concerning this issue. The published report of the survey contains information on both the operation of formal arrangements for representation and consultation on the management of psychosocial risks and on the direct participation of employees on these issues. In the case of formal arrangements the survey establishes that questions concerning psychosocial risk are a significant part of dialogue between workers and their representatives — a fact also established by some national surveys (see for example the series of biennial surveys on the work of safety representatives carried out in the United Kingdom by the TUC). It further shows that, as with risk management measures generally, the existence of various arrangements to manage psychosocial risks is associated with the presence of formal arrangements for worker representation.

The ESENER survey also asked a series of questions concerning direct participation in measures to manage psychosocial risk. Most of these do not concern us here, however, it is interesting to examine the possible relationship between the extent of direct participatory activity on psychosocial risk and the presence or otherwise of arrangements for formal representation, since given other findings, it might be anticipated that there would be an association between these matters and greater levels/effectiveness of direct participation might be found where arrangements for formal representation exist than in situations where they do not. The published ESENER findings do not address this issue and it was therefore included in the aims of our further analysis.

4. What is already known about worker representation in occupational safety and health: an international review of the literature

Before presenting an outline of our approach to the further analysis of the ESENER survey and its results, it is helpful to first review the main findings of the quite extensive research literature addressing worker representation and consultation on health and safety at work, since the ESENER findings are perhaps best understood in terms of the extent to which they can be situated within existing knowledge and the degree to which they contribute further to this knowledge and understanding concerning the experience of worker representation and consultation on health and safety in Europe.

There is fairly extensive international literature on the role of worker representation in managing health and safety at work. It has been reviewed in several previous publications by one of the authors of the present report (see especially Walters 2006, Walters and Nichols 2007 and Walters and Nichols (eds.) 2009). It is widely accepted that these published reviews represent the most comprehensive treatment of the subject to date. The outline presented here therefore draws on these sources and updates them with reference to additional sources that have appeared since they were published. Clearly, in a summary report of this kind there is not the space to provide detailed treatment of the subject and therefore we focus on those issues that are most pertinent to our analysis of the ESENER survey. We first define what we mean by worker representation in health and safety, and then we consider the evidence on its coverage, role and effectiveness in influencing OSH management.

4.1. What do we mean by worker representation and consultation?

It is important to be clear about what exactly is meant by these terms. Difficulties arise because terms such as 'consultation' and 'participation' have come to cover a range of different practices, often with different expectations, supports and constraints influencing their outcomes (see for example, Alder et al. 2000, Bell and Phelps 2001, Eklund 2000, McQuiston 2000, Rest 1996, Shearn 2004). Two important sets of distinctions need to be made. Firstly, whether managers relate to workers on an individual basis or whether they do so through their collective representatives; and secondly, whether workers are passive recipients of information about the practice of health and safety management or have some chance to influence the direction of the outcomes of such engagement.

Direct participation: In health and safety this generally refers to arrangements for the engagement of workers with supervisors, managers or employers on health and safety matters that take place on an individual basis rather than through workers' collective representatives.

Evidence for its effectiveness or otherwise is limited. Nevertheless, there is reason to conclude that arrangements for direct participation may give workers a considerable influence on OSH, provided that some special conditions apply. For example, Karlsen et al. (1975), described by Gustavsen and Hunnius (1981: 134), demonstrated how workers' individual influence on OSH was conditional on both the strengths of their position externally in the labour market and internally within the labour process as well as on the extent of their trade union organisation, implying that direct consultation is likely to have disappointing results for the individual non-unionised employee.

Another important aspect of direct participation concerns the extent to which workers have a responsibility to work safely and protect themselves from harm. In EU countries, process-based general duties on health and safety management usually require workers to take some degree of responsibility not to endanger themselves, and to cooperate with their employers to enable the latter to discharge their responsibilities to manage risks effectively. But studies on the role of measures protecting workers' further individual rights to refuse dangerous work and their rights to information on the hazards they face are rare. It is therefore not clear what support these measures provide for the direct engagement of workers in arrangements concerning their health and safety. It is certainly the case that within smaller enterprises these legal measures are rarely utilised by workers (Walters 2001). Workers in such situations generally have been said to inhabit 'structures of vulnerability' (Nichols 1997, 154–169) and for a host of reasons their situation is likely to militate against them being able to take direct action implementing their legal rights to a safe and healthy workplace.

In the United Kingdom, recent initiatives have focused on 'worker engagement' through a range of methods that mix support for direct participation with behavioural-change techniques and, in some cases, also utilise support from workplace institutions of representative participation such as safety representatives and their trade unions. These approaches are essentially ways of enhancing the greater engagement of individual workers with management-driven efforts to instil forms of safe behaviour and to embed these practices into site safety culture — which includes changing the behaviour of managers too. Much has been made of the apparent success of such initiatives in the United Kingdom (Lunt et al 2008).

However, since the ESENER survey has gathered data on forms of representative participation, it is with this kind of participation that we are mostly concerned here.

Representative participation: Collective representation of workers' interests in health and safety is made possible through formal arrangements, by statutory or voluntary means. Requirements on such participation exist in most national jurisdictions

as well as being the subject of ILO Convention 155 and international regulatory provisions on health and safety management such as the EU Framework Directive 89/391. They generally provide for a number of minimum legal rights for effective worker representation through:

- selection of representatives on health and safety by employees;
- protection of representatives from victimisation or discrimination as a result of their representative role;
- paid time off to be allowed to carry out the function of safety representative;
- paid time off to be trained in order to function as a safety representative;
- the right to receive adequate information from the employer on current and future hazards to the health and safety of workers at the workplace;
- the right to inspect the workplace;
- the right to investigate complaints from workers on health and safety matters;
- the right to make representations to the employer on these matters;
- the right to be consulted over health and safety arrangements, including future plans;
- the right to be consulted about the use of specialists in health and safety by the employer;
- the right to accompany health and safety authority inspectors when they inspect the workplace and to make complaints to them when necessary.

However, the extent to which such rights are enacted and operational in all EU countries remains questionable. It is with the operation and effectiveness of these measures that the present review is primarily concerned.

Consultation: The key term embracing activities identified in the legal rights of workers' health and safety representatives to undertake inspections, investigate complaints and to receive training under legislation requirements is 'consultation'. Provisions also often require employers to consult employees 'in good time on matters relating to their health and safety'. Such requirements carry an implication that employers should provide adequate information, listen to what workers themselves and their representatives have to say on health and safety issues and respond. However, this does not necessarily mean that health and safety representatives have the power to insist on this in practice.

4.2. The coverage and effectiveness of worker representation on health and safety

Research literature addressing worker representation on occupational safety and health is mainly concerned with the coverage of such arrangements, the activities undertaken by worker representatives and their perceptions of the health and safety issues they confront as well as supports and constraints to their participation. Some of this research has looked at measures of effectiveness of representative engagement, mostly using proxy indicators of effectiveness, while a smaller number of studies have attempted to use more direct measures of health and safety outcomes to gauge the effectiveness of arrangements for representation. A few studies have also tried to explain the mode of operation of worker representation on health and safety, mostly within a wider labour relations context.

Although evidence points to incomplete uptake in most countries, one of the consequences of regulatory measures on employee representation and consultation on health and safety has undoubtedly been an increase in the overall number of worker representatives that are present in workplaces, as well as in the joint structures for consultation on health and safety with which they are associated in these workplaces. Such evidence as there is points to the coverage of representation on health and safety following patterns for representation generally, with the additional influence of specific regulatory measures adding to the mix of determinants of coverage. In national surveys of representation on health and safety therefore, its presence is related to establishment size and trade union density and we explore this further in the section on 'coverage' below.

There is only relatively limited properly conducted analysis concerning the impact of arrangements for worker representation on health and safety, on workplace social and economic relations, on the consequences of changing workplace organisation and structure for representation, or on the role of this form of representation in the strategies of organised labour, employers or the state in modern economies. A substantial amount of the writing about worker participation in health and safety ignores these contexts and is focused on describing examples of 'successful' actions involving joint arrangements for health and safety. Indeed, many accounts of such arrangements fail to distinguish between those that are concerned with representative participation and a range of other forms of employee involvement in health and safety. Although there are a small number of international overviews (see for example, Gevers 1988, Walters and Freeman 1992, Walters et al 1993, Walters 2000, Walters 2004, Menendez et al 2008), most of this work has been located within specific national jurisdictions and some has been undertaken at sectoral level. There are few examples of comparative international studies.

Most published research has been undertaken in Nordic and English-speaking countries and especially in the United Kingdom, Sweden, Norway, Canada and Australia. It is therefore possible that review of international research may lead to over-

emphasis of contexts provided by the regulatory and labour relations systems found in the countries that predominate in the literature.

The nature and orientation of the research interest in employee representation on health and safety is to some extent explained by features of the development of regulation of health and safety in Europe, Australia, New Zealand and Canada over the same period. Measures on 'information and consultation for workers and/or their representatives' are found in the provisions regulating health and safety management in all these countries. Along with notions concerning the employers' responsibility and competence to assess and manage workplace risk, they are arguably an important element of the rationale informing the regulation of self-regulation, such as is found in Nordic countries from the early 1970s, recommended by the Robens Report (1972), in the United Kingdom and influential in informing the character of measures subsequently adopted in countries as far apart as the Netherlands, Australia, New Zealand and Canada. In the late 1980s in the EU these requirements were included in the Framework Directive 89/391 and therefore applicable across all Member States.

The following findings emerge from the research in this field undertaken in the past 20 years.

Coverage: There have been few surveys with a primary aim of measuring the coverage/access to representation on health and safety (see for example HSE 1981), but there has also been useful secondary analysis of data collected by surveys with a different or broader primary purpose such as the Workplace Industrial (later Employment) Relations Surveys (WIRS/WERS) series in the United Kingdom, (see for example, Millward and Stevens 1986, Millward, et al. 2000, Kersley et al. 2006), the *REPONSE* survey in France, (Coutrot 2008) and the Fifth National Survey of Working Conditions and the more recent National Survey on Health and Safety Management (ENGE 2009) in Spain (Garcia et al. 2007). Broadly speaking, there is substantial variation in what their results suggest concerning the coverage of representation on health and safety. In some countries it falls a good deal short of that theoretically required by regulation. According to the *REPONSE 2004* survey in France, for example, nearly 30 % of establishments required by law to establish a Comité d'Hygiène, de Sécurité et des Conditions de Travail (CHSCT) had not done so and one fifth of those that had, held meetings less frequently than legally required (Coutrot 2008). Most complete implementation of regulatory requirements is likely to be found in larger workplaces in which there is a workforce of unionised 'permanent' employees. Access to safety representation is inversely proportional to workplace size, a feature that is independent of national provisions where there are size limits below which employers are not obliged to make arrangements to ensure that their workers are represented on health and safety.

A key issue that is evident from the data on both the characteristics of health and safety representatives and the coverage of joint consultative arrangements for health and safety is that in both the public and private sector they are typically found among employees of the main employer in larger workplaces. They are typically representative of these types of workers much more so than of the increasing number of workers found in small enterprises, outsourced activities, contracting and subcontracting arrangements, employed by employment agencies, as migrant labour and in the other forms of precarious employment (Quinlan et al. 2001). There appear to be few studies that have examined this in any depth or explored its consequences for strategies concerned with the future development of worker representation on health and safety.

With the possible exception of Sweden, countries with special arrangements to ensure access to representation for workers in small enterprises (such as regional or territorial representatives), have found that these do not seem to have had a measurable impact on the coverage of representation overall. Generally, following the introduction of regulatory measures, surveys have shown a measurable effect on the presence of health and safety representatives, but more widely, representation on health and safety appears to follow patterns for worker representation generally over time and it is further linked to that for trade union representation. However, data from national surveys are not always easy to interpret in this respect. The following digression on the British case illustrates this.

Although early surveys in the United Kingdom showed a significant rise in the appointment of health and safety representatives and establishment of joint health and safety committees following the introduction of the Safety Representatives and Safety Committees (SRSC) Regulations (see for example the evidence of surveys conducted in the United Kingdom by the HSE (1981) between 1978 and 1981), later surveys demonstrated less clear-cut effects. This is well illustrated by the WIRS/WERS series. Between 1980 and 1998 these surveys collected information on health and safety arrangements in British industry. They present broadly comparable information relating to the presence of three types of arrangements whereby employees had a formal voice: joint committees for health and safety, joint committees for health and safety and other matters and individual health and safety representatives, but there is little in the way of clear trends in the patterns of these arrangements that can be seen from comparison of the results over time during this period:

Table 4.2.1: **Health and safety arrangements in British industry, 1980–98**

%	1980	1984	1990	1998
All joint consultative committees	45	31	32	39
Representatives, no committee	21	41	24	29
Other arrangement	34	28	43	32

Workplaces with 25 or more employees — *Source:* Adapted from Millward et al. 2000: 117 Figure 4.1.

In 1996, to avoid proceedings in the European Court of Justice, the United Kingdom government introduced the Health and Safety (Consultation with Employees) Regulations into British legislation alongside the SRSC Regulations 1977, which were already in place. The new regulations placed an obligation on employers to consult employees not covered by trade union safety representatives under the SRSC Regulations, but allowed employers to determine for themselves whether such consultation was through elected representatives or directly with individual employees.

The effect of this new legislation did not become clear until a later WERS survey. Using a new categorisation of health and safety arrangements, the 2004 WERS indicated that, since 1998, there had been a drop in the established means of giving employees a formal voice through joint committees and worker representatives — from 51 % to 42 % of workplaces; and a rise in so-called 'direct methods' from 47 % to 57 %.

Table 4.2.2: **Health and safety arrangements in British industry, 1998–2004**

	1998	2004
Single or multi-issue joint committees	26	20
Free-standing worker representatives	25	22
Direct methods	47	57
No arrangements	2	1

Workplaces with 10 or more employees — *Source:* Kersley at al. 2006: 204 Table 7.12.

As Nichols and Walters (2009) show, whatever the precise content of direct methods, it is clear that the presence of such methods is a function of workplace size. Direct methods are much more common in smaller workplaces; joint consultative committees are much more common in larger workplaces; whereas there is no such clear pattern for employee representatives. However, health and safety arrangements are not only a function of size, they are also affected by union recognition and Nichols and Walters' further secondary analysis of WERS data shows that on average in the United Kingdom, workplaces that lack union recognition are consistently more likely to resort to so-called 'direct methods', even within the same size bands.

Such detailed analysis is not available from recent surveys in other countries, but allowing for the effects of national differences in regulatory approaches and labour relations systems, what are widely accepted as international trends in employment and trade union organisation would lead to an expectation of similar patterns.

These trends are difficult to measure precisely because there is a lack of comparable data on trade union membership across the European Union. Whilst in the United Kingdom there are questions on union membership in its Labour Force Survey, in a majority of countries within Europe, union densities (that is, the proportion of employees who are union members) are calculated from data derived from administrative sources. Where countries do not collect data through social surveys, the most comprehensive source of data is the ICTWSS Database: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (Visser 2009). This database presents estimates of union membership based upon administrative data, with adjustments having been made to account for members who are not in employment or who are self-employed.

Data on union density from the ICTWSS database and other sources, as summarised by Fulton (2009), are presented in Table 4.2.3. Countries marked with an asterisk represent those nations where data is based on administrative sources. The average level of union membership across the whole of the European Union, weighted by the numbers employed in the different Member States, is 25 %. The average is held down by relatively low levels of membership in some of the larger EU states, for example Germany with 20 %, France with 8 %, and Spain and Poland both with 16 %. The figures demonstrate the variations in union membership that exist across Europe, ranging from 71 % of employees in both Finland and Sweden to 8 % in France.

However, it should be noted that union membership is not the only indicator of trade union strength and Fulton (2009), for example, describes important differences in the formal structures of employee representation at the workplaces across EU Member States. In four states — Austria, Germany, Luxembourg and the Netherlands — the main workplace representation is through works councils, elected by all employees, and the law makes no provision for workplace structures for unions. In 11 others — Belgium, the Czech Republic, France, Greece, Hungary, Norway, Poland, Portugal, Slovakia, Slovenia and Spain — both union and works council structures can exist at the workplace at the same time. A further five states — Bulgaria, Estonia, Ireland, Latvia and the United Kingdom — could in some ways be seen as fitting into the same pattern. In all of them, unions in the past provided the only channel for representation, but now there is the legal possibility of elected employee representatives, which in many countries include health and safety representatives, being in place alongside the union. One key difference between this group and countries like Belgium and France, however, is that the legal rights of these elected representatives are quite limited. In the remaining eight states — Cyprus, Denmark, Finland, Italy, Lithuania, Malta, Romania and Sweden — workplace representation is essentially through the unions in the first instance, although the rights they enjoy vary considerably. Other surveys also show similar diversity of arrangements for employee representation among EU Member States, although the detailed national composition of such representation varies (see for example Eurofound 2011).

Table 4.2.3: **Union density and representation**

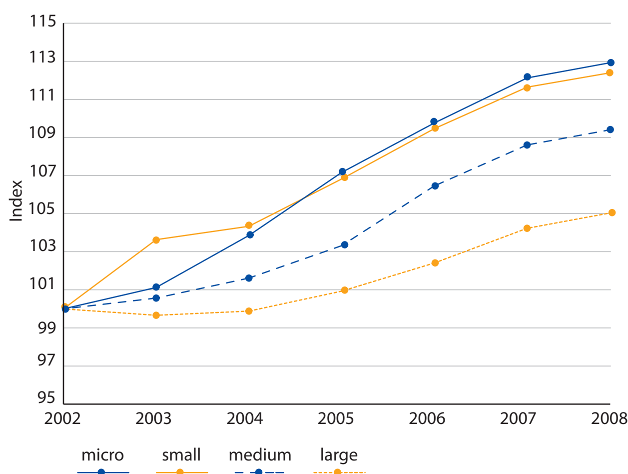
Country	Union density (% employees)	Main employee representation at workplace
Finland (*)	71	Union
Sweden	71	Union
Denmark (*)	68	Union — but employee groups from outside the union can be represented in the structure
Cyprus (*)	62	Union
Malta (*)	57	Union — with other representatives for those with no union
Norway	55	Union — 'works councils' exist in some companies but their role is to improve competitiveness
Belgium (*)	54	Union and works council — but union dominates
Slovenia (*)	41	Union and works council
Luxembourg (*)	40	Works council/employee delegates
Romania (*)	34	Union — other employee representation possible but rare
Italy (*)	33	Union — although largely elected by all employees
Austria	32	Works council
Ireland	32	Union — but other structures are possible and since 2006 these can be triggered by employees
United Kingdom	27	Union — but other structures are possible and since 2005 these can be triggered by employees
Slovakia (*)	24	Union and works council
Greece (*)	23	Union — works councils exist in theory but not often in practice
Czech Republic (*)	21	Union — but works council can be set up as well
Netherlands	21	Works council
Bulgaria	20	Union — but law also provides for the election of other representatives
Germany (*)	20	Works council
Portugal	18	Union — works councils exist in theory but less frequently in practice
Hungary	17	Union and works council
Latvia (*)	16	Union — although possible to elect other representatives
Poland	16	Union and works council — but most works councils are in unionised workplaces
Spain	16	Works council — although dominated by unions which are also present directly
Lithuania (*)	14	Union — or works council if there is no union
Estonia (*)	13	Union — but since 2007 employee representatives can be elected as well
France	8	Union and works council/employee delegates — but union normally dominates if present
EU total	25	

Source: Fulton (2009). (*) Data based on administrative sources.

Overall decreases in the number of larger establishments, as well as parallel shifts in many countries away from employment in sectors such as mining, manufacturing and heavy industries, in which trade union density has traditionally been high, has resulted in the reduced trade union presence widely experienced in most advanced market economies in recent years. Although in a few countries representation on health and safety may have held up better than that of representation more generally (see for example Gellerstedt 2007, on Sweden), our assumption is that, overall, these reductions would also lead to reduced coverage by the predominant form of formal arrangements to implement worker representation on health and safety — that is a form in which trade union representation is involved in one way or another. At the same time, although we accept that the presence of so-called 'direct methods' and non-union forms of consultation would not necessarily be reduced by these trends, we do not find any evidence that such forms entirely replace that of trade union representation.

To summarise, there are several issues that emerge from this digression on likely trends in coverage. First, we note there is considerable variation in the measures of the coverage of arrangements for worker representation and consultation reported in national and EU surveys. The ESENER findings fall within the top end of these measures, reporting high levels of representation and consultation and in common with other surveys of this kind we think there may be several good methodological reasons for this. However, these high levels of representation and consultation are in contrast to what might be anticipated in 'typical' workplaces in the EU and furthermore do not reflect what might also be anticipated from what is known of the restructuring of work during the past few decades, with the emergence of greater numbers of smaller workplaces (see Figure 4.2.1 below), the shift away from employment in sectors with traditionally high levels of worker representation and the increased proportion of non-unionised employees in the labour force as well as the challenges to organising representation among contracted, temporary, subcontracted and agency workers employed on the same worksites as organised permanent employees. Secondly, it is well established that smaller firms have different needs and management structures to those of larger firms and, in terms of consultation arrangements, are more likely to be informal. Thirdly and perhaps most importantly, most surveys of coverage say precious little about the operation or effectiveness of the arrangements they report. As we will explore further in subsequent sections, the more robust quantitative analyses that have attempted to do so suggest that arrangements for worker representation and consultation are likely to be most effective when trades unions are involved. Therefore measures of trade union representation are important when examining the coverage of arrangements for representation and consultation on health and safety. As we have noted above, although there are a few exceptions, generally the decline in such representation in workplaces in the EU is well known and we think that the high levels of arrangements for representation and consultation reported in the ESENER survey need to be understood in this context.

Figure 4.2.1 **Development of number of enterprises, non-financial business economy, by size class, EU-27, 2002–08 (Index 2002 = 100; 2007, 2008 estimates)**



Source: Eurostat, as elaborated by EIM.

4.3. Characteristics of health and safety representatives

Numerous surveys include a description of the characteristics of health and safety representatives. Generalisations based on such descriptions fail to identify any particularly obvious features that distinguish health and safety representatives from other worker representatives. They are likely to be reasonably experienced workers, the majority are men although there is a substantial proportion that is female, especially in sectors in which there is a high percentage of female workers ([1]).

Different regulatory frameworks and labour relations practices in different countries mean there are a range of relationships between representatives and trade unions. In some cases, the health and safety representatives are, by definition, trade union representatives. In other cases they may be elected candidates from trade union lists. In some situations they are non-union representatives. However, for the most part the relationship between representatives and the autonomous organisation of workers within workplaces is close, whether such organisation is through trade unions or works councils. Trade unions also play the major role in the provision of training and other forms of support for the majority of health and safety representatives in most countries. Although there are examples of non-union health and safety representatives operating as alternatives to trade union representatives in workplaces where employers are hostile to trade unions, the limited evidence on their activity suggests that to be successful such representatives require a similar level of support to that present in workplaces where there is some form (trade union or otherwise) of genuinely autonomous worker organisation in place (Walters and Frick 2000).

The importance of training in supporting health and safety representatives is widely accepted. It is a legal obligation in some countries and has been subject to detailed study in which the advantages of a labour education model for the pedagogy and delivery of training have been claimed (Biggins and Holland 1995, Culvenor et al. 2003, Raulier and Walters 1995, Walters 1996b, Walters et al. 2001). Here again, the published findings of ESENER are somewhat at odds with many qualitative and quantitative studies in the international literature. These studies indicate that representatives frequently find difficulty in getting time off to attend such courses as well as in some cases experiencing difficulty in obtaining access to them because they are not conveniently situated in relation to their domicile or place of work. A less obvious problem reported in some in-depth studies (see for example Walters and Nichols 2007) is that although arrangements for time off for training are in theory in place, the lack of replacement for the representatives concerned means that they are unwilling to burden their colleagues with the additional workload that is perceived to be a consequence of their absence on training courses. In times of economic downturn, such pressures are likely to be even greater and reduce attend-

([1]) This overview is based on a number of sources including Beaumont and Harris 1993, Biggins and Phillips 1991 a and b, Blewitt 2001, Hillage et al 2001, McDonald and Hrymak, 2002, Walters and Gourlay 1990, Walters and Nichols 2007.

ance on such courses as a consequence. The reported findings from the ESENER project do not identify any such problems however, suggesting that access to training is not a significant problem and that the representatives concerned have virtually all had some experience of training. Nevertheless, access and experience to **some form of training** is not the same thing as the experience of suitable and sufficient training and this has to do with the nature, quality and length of the training in question. The ESENER questions are not sufficiently specific to be able to determine this effect, and they do not distinguish different providers of training, pedagogies, or the length of training courses.

4.4. Activities of worker representatives on health and safety

A range of surveys undertaken in different countries have focused on the activities in which health and safety representatives have been engaged, the factors they perceive to be supportive or to constrain these activities, their perceptions of workplace risks and risk management and what they consider to be their training needs ([2]). Generally these surveys indicate a variety of health and safety representative activity, mostly orientated towards improved prevention. Common findings relate to limited involvement in risk assessment and in undertaking formal inspection procedures, lack of consultation 'in good time' or in relation to plans involving health and safety issues. Reasons given for the limitations to their activities are commonly to do with the time allowed for them by employers, lack of interest or understanding on the part of managers or supervisors — there is evidence to suggest that many managers have considerably poorer knowledge of the work environment than health and safety representatives (Milgate et al 2002; Hudspith and Hay 1998) — and sometimes lack of support from constituents. More in-depth studies have shown that the perception of insufficient time to undertake health and safety activities is more complicated than the straightforward denial of such rights by employers/managers. Current intensified and 'lean' work regimes may operate to prevent health and safety representatives feeling they can take time out of their normal work activities to carry out health and safety functions without inadvertently placing greater work burdens on colleagues. Shift patterns, lone working and travelling within and between worksites are also formidable barriers to health and safety representative activities.

In-depth studies also point to a tendency towards a greater concentration on 'safety' issues than on 'health' issues by health and safety representatives, although in many cases this may be a reflection of the limitations on what they are able to achieve caused by the poor understanding of the issues involved by their management counterparts (Walters and Frick 2000, Walters and Nichols 2007). Although trade unions and trade union approved training often focus on the underlying issues of work organisation that lead to poor health and safety outcomes such as stress and musculoskeletal injuries in previous studies, it is not clear that more than a minority of health and safety representatives are able to engage successfully with their management counterparts on the resolution of these issues in their workplaces.

The outline of the ESENER findings in Section 2 paints a more optimistic picture of the activities of health and safety representatives. They indicate high levels of involvement in risk assessment, both before and after workplace assessment, as well as experience of consultation in good time and little in the way of restriction to the time available to undertake representative functions. We think that the most likely explanation for these positive findings concerning the activities of health and safety representatives may be found in the nature of the survey sample. Overall, previous research studies tend to demonstrate the extent of a dependency on the prior existence of competent health and safety management arrangements and management commitment to participative approaches in order that health and safety representatives can contribute to preventive activities meaningfully (Walters and Nichols 2007). This suggests that an unusually large majority of the establishments participating in ESENER and in other surveys with similar results may have been of this type. However we also note that high levels of involvement in risk assessment have been reported in some national surveys such as ENGE 2009 in Spain and in VOV 2006 in Denmark. There are some indications that a similar bias in the sample may have been evident in the Danish survey and it also may be the case that a 'social acceptability' effect influenced the Spanish results, since it was an obligatory government survey. We will explore this further in the report of our analysis of the ESENER data in subsequent sections.

There has been some limited theoretical discussion in the literature concerning the mode of action of health and safety representatives. Early writings tended to focus mainly on conflict or consensus approaches (see Bagnara et al. 1985 and Gustavsen 1988 for examples). More recent explanatory frameworks focus on the nature of participation in political and labour relations contexts and on power relations in organisations, as well as on different understandings of health and risk and their implications for action. Canadian authors have for example suggested the ideal form of action for worker representatives on health and safety is represented by 'knowledge activism' in which worker representatives are able to engage in a kind of a 'political activism organised around the collection and use of a wide variety of health and safety knowledge', in which they are able to avoid their marginalisation otherwise brought about by professional and managerial colonisation of technical knowledge and at the same time also avoid polarising dialogue between themselves and employers into disputes in which occupational health strategies are simply a manifestation of the wider conflict between labour and capital (Storey 2005, Hall et al. 2006).

European writers have suggested that health and safety representatives operate in practice at various points along a continuum of possible participatory processes according to a range

([2]) See for example Garcia et al. 2007, Biggins and Phillips 199 a and b1, Blewitt 2001, Cassou and Pissaro 1988 Frick and Walters 1998, Hillage et al. 2001, Kawakami et al. 2004, Labour Research Department 1984, Shaw and Turner 2003, Spaven and Wright 1993, Walters and Gourlay 1990, Walters et al. 2005, Warren-Langford et al. 1993.

of economic, labour relations and personal circumstances (Walters and Frick 2000). Another view focuses on 'worker- centred' experiences and distinguishes this way of understanding health and safety issues from that of professional and managerial approaches. It suggests that such understandings can be reinforced through labour education and through trade union meetings inside and outside workplaces, thus strengthening a particular conceptualisation of occupational health that is useful in representing the interests of workers (Jensen 2002, Walters and Frick 2000, Walters et al. 2001). On a related subject, understanding not only the formal representational activities of health and safety representatives, but also their roles as a part of workers' communities in practice involves similar issues. Such a broader perspective and its 'bottom-up' relationship with organisational learning are important conceptually, but somewhat underdeveloped in terms of empirical study. In the main, this kind of theorising concerning ways of conceptualising the actions of health and safety representatives is limited in the extent of its development in the literature and not nearly as much written about as are the mainly managerially orientated conceptualisations of safety culture, risk awareness, risk communication, and so on, in the wider literature on preventive health and safety.

4.5. Effectiveness

Surprisingly, much of the research literature does not address the question of the effectiveness of representation on OSH directly and when it does, it focuses more on relationships between representation and proxy indicators of health and safety outcomes than on objective measures of outcomes such as work-related injuries, ill health or mortality. There are some good reasons for this, to do with the availability, reliability and interpretation of data. For example, asking managers about OSH outcomes invites very subjective responses and access to company-level (let alone establishment-level) data on more objective measures such as accidents is usually restricted (and even if it is available it would be very difficult to compare it internationally).

A number of studies consider the relationship between representative worker participation and better OSH management activities. They investigate the relationship between, for example, the presence or absence of worker representatives, trade unions and joint health and safety committees and specific aspects of OSH management activity undertaken by employers. The measures of such activity vary between studies but include such things as the presence of health and safety policies and their communication to workers, provision of improved health and safety information and training, the use of health and safety practitioners, the presence of written evidence of risk assessment, the existence of health and safety audits and inspections, accident investigations and so on. It is this type of data that has been sought in the ESENER survey.

Generally, previous studies of this sort indicate that participatory workplace arrangements are associated with improved OSH management practices, which, in turn, might be expected to lead to improved OSH performance outcomes. A range of studies of this kind are reviewed by Walters (1996a). They include investigations on the role of joint safety committees in the United Kingdom (Beaumont et al.1982, see also Coyle and Leopold, 1981) in which improved health and safety management practices were found to be associated not only with the presence of joint health and safety committees but with well-trained committee members and the use of established channels for relations between management and workers. Findings in other countries are broadly comparable; see for example, Bryce and Manga 1985 for Canada; Roustang 1983; and Cassou and Pissaro 1988 for France; Assennato and Navarro 1980 for Italy and Walters et al. 1993 for EU countries generally.

A series of Australian studies generally support the positive relationship between the presence of representative participation and better health and safety management arrangements as well as raised awareness of health and safety matters (Biggins et al. 1991, Biggins and Phillips 1991a and b; Gaines and Biggins 1992, Biggins and Holland 1995, Warren-Langford et al. 1993). For example, Biggins et al. (1991: 145–6), who surveyed health and safety representatives in an Australian state government power utility, found that representatives had an overall positive response to the operation of joint union committees, over a third of them judging these to have considerably improved health and safety in their workplaces and as many again thinking that they had done so to a moderate extent.

In Canada, a study found that non-unionised workplaces had lower levels of compliance than unionised ones which had procedural requirements for joint health and safety committees and that, in addition, worker members of joint health and safety committees who had completed core certificated training were more likely than those who had not begun such training to report improvements in a wide range of conditions. These included improved inspections, improved personal protective equipment, safer work practices, reduced stress, better ventilation and other matters (SPR 1994: 33, 56). Studies in the United Kingdom indicate that (trained) representatives participate in and stimulate workplace OSH activity through engagement with management structures and procedures, tackling new OSH issues and 'getting things done' to help resolve health and safety problems (Walters et al. 2001).

In small workplaces, regional health and safety representatives are found to stimulate 'activation' of health and safety as well as engaging with employers and workers in more prescriptive aspects of their tasks such as inspecting workplaces, as is shown in reviews of the Swedish experience (Frick and Walters 1998, Walters 2002a). In the United Kingdom the evaluation of the Worker Safety Advisor pilot scheme provided detailed evidence on how 'the activity of Workers' Safety Advisors made a difference to perceived standards of health and safety practice at small workplaces' (Shaw and Turner 2003). Such findings are further supported by reviews of experiences in other European countries such as Norway, Italy and Spain where the engagement of trade unions and peripatetic workers' representatives

are influential in raising awareness and contributing to the establishment of better OSH arrangements in small firms (Walters 2001; 2002a). There is also evidence that the presence of workplace trade union organisation influences the enforcement of OSH regulation (for example, Robinson 1991; Weil 1991; 1992).

It is relatively straightforward to locate the published ESENER findings within this literature. Broadly they confirm the positive association between the presence of arrangements for worker representation on OSH and management procedures to support prevention in the establishments. Like many previous studies however, the survey results tell us little about the direction of causation in such associations. That is, they do not provide objective evidence of drivers or support for the implementation of such arrangements. The data concerning perceptions of effectiveness of arrangements for formal representation suggest they are viewed by respondents with responsibility for health and safety in the establishments as influential in promoting safety management practices, such as that of the impact of OSH policies for example, but conclusions that their presence 'is clearly a factor in ensuring that such OSH policies and action plans are put into practice' may be overstating the significance of such opinions concerning the direction of causality. We will explore this further in our analysis in the following sections.

Studies attempting to establish a more direct relationship between the role of worker representation and indicators of improved health and safety performance such as injury or illness rates include studies of specific exposures, where incidences of ill-effects were greater in non-unionised situations. For example, Fuller and Suruda (2000) show that deaths from hydrogen sulphide poisoning were more frequent in non-unionised workplaces than unionised ones in the United States. Further examples include a comparison of health and safety outcomes for unionised and non-unionised construction workers in the US (Dedobbleer et al. (1990)) and Grunberg's (1983) early work on safety in manufacturing in Britain and France. Both of these studies indicate that better standards of health and safety were achieved in unionised workplaces than in non-unionised ones.

But generally, studies of joint arrangements and their relationship to OSH performance are not entirely in agreement concerning the beneficial effects of such arrangements. In the US, for example, Cooke and Gautschi (1981) researched manufacturing plants in Maine and found that joint management-union safety programmes in larger companies reduced days lost and that such plant-specific arrangements were more effective than external regulation. While another American study based on manufacturing, this time in New York State, concluded that major safety improvements were less a function of union participation in safety committees than a direct consequence of external regulations (Kochan et al. 1977: 72). Earlier research by Boden et al. (1984) on manufacturing plants in Massachusetts found that there was no general discernable effect of joint health and safety committees on the level of hazard in the plant (as judged by inspectors' citations). They also found that this was the case when committees were perceived to be effective, though they conceded that the particular evidence on which this was based was 'quite limited' (1984: 833). More recently, a study of US OSH committees conducted in public sector workplaces in New Jersey found that 'there was little consistent evidence for any significant effect of the simple existence of a committee on reports of illness or injury cases' (aside from there being 'some evidence that aspects of committee functioning play a positive role in perceptions of committee effectiveness'), but that 'committees with more involvement of non-management members, both in sheer numbers and in agenda setting, are associated with fewer reported and perhaps fewer actual illnesses and injuries' (Eaton and Nocerino, 2000: 288–89).

In Canada, Lewchuck et al. (1996) found that where management and labour had some sympathy for the co-management of health and safety through joint committees, the shift to mandatory joint health and safety committees was associated with reduced lost-time injuries ([3]). Also in Canada, whereas Havlovic and McShane (1997) concluded that 'there was some support for the idea that structured joint health and safety committees' activities help to reduce accident rates', an earlier comparative study on the North American logging industry had found that although joint safety committees were associated with improved fatality rates, they were only one of a number of factors associated with such improvements (Havlovic 1991). Other factors included training, enforcement and changes in managerial practices. Consistent with some of the above findings, a further Canadian study by Shannon et al (1996) found that 'participation of the workforce in health and safety decisions' was one of several factors related to lower claims' rates and an overview of Canadian work on this subject suggested that 'empowerment of the workforce' was one of a number of organisational factors consistently related to lower injury rates (Shannon et al. 1997). In an earlier study Shannon et al. (1992) had indicated that such 'empowerment' included the presence of unions and shop stewards, union support for worker members of joint health and safety committees and general worker participation in decision-making. A later extensive review of the literature, again conducted in Canada, pointed to 'a correlation between unionisation and the effectiveness of the internal responsibility system' and that joint health and safety committees were 'more likely to be found in unionised workplaces and [to be] more active in those workplaces' (O'Grady 2000: 191).

Exceptionally in the United Kingdom, it has been possible to undertake multivariate regression analyses of the relationship between various workplace employment relations structures such as the presence of trades unions, safety representatives and safety committees, and the incidence of injury and ill health, by using data collected in the Workplace Industrial Relations (later Workplace Employment) Relations Surveys 1990–2004. Again what can be achieved with these methods is somewhat constrained by the range and quality of available data. Moreover,

([3]) A further caveat that needs to be borne in mind here is that the variety of socially constructed reasons for reporting injuries may themselves be a powerful influence on data based on lost-time injuries, making such measures less reliable than those of fatalities or serious injuries.

such multivariate analyses also face methodological problems. For example the effects of trade unions on health and safety at work are difficult to disentangle because of the possibility that union presence may itself increase reporting, at least for certain types of injury, and because adverse conditions of work may bring trade unions into workplaces and result in the appointment of health and safety representatives in the first place (Nichols 1997). Either one of these processes could lead to the counter-intuitive result that trade union presence correlates with higher injury rates, not vice versa. In fact, as the authors of a review of the literature on this particular issue conclude, British studies using the WIRS/WERS data failed to establish a statistically significant relationship between the incidence of trade union membership and low industrial injuries (Davies and Elias 2000: 28). These include for example Reilly et al. (1995), Nichols (1997), Litwin (2000), Robinson and Smallman (2000) and Fenn and Ashby (2004), as well as some in other countries that used similar surveys such as Currington (1986) in the United States, and Wooden (1989) and Wooden and Robertson (1997) in Australia.

Such lack of consistency prompted Walters and Nichols (see Nichols et al. (2007); Walters and Nichols (2007): 30–40) to conduct a statistical reanalysis of 1990 WERS data as part of their larger study to investigate the effectiveness of health and safety representatives in the United Kingdom (Walters et al. 2005). This sought to improve technically on previous multiple regression analyses ([4]). Their results suggest with a fair degree of robustness, that, as judged by serious injury rates in manufacturing, it is significantly better to have health and safety committees with at least some members selected by trade unions than to have such committees with no members selected by trade unions, which suggests that there is a mediated trade union effect on safety; and that the presence of health and safety representatives also has a beneficial effect — and this after controls had been made for a number of variables including the percentages of manual and female employees, industry and region, union density and also size of establishment (which, as in many other studies, was found to have a negative relation to injury rate).

It is important to be clear that the ESENER findings do not provide evidence of the effects of worker representation on objective measures of health and safety performance, because such evidence has not been sought in the design of the survey. Therefore unfortunately, further analysis of its results cannot add to knowledge in this important area.

4.6. Worker representation and psychosocial risks

The activities and effectiveness of worker representatives on psychosocial risks are one of the least studied aspects of their role. The efforts of the ESENER survey are therefore particularly significant, partly because they attempt to address this important area and also because the issue of psychosocial risk at work is widely held to be of growing importance in modern work organisations. EU-level framework agreements on psychosocial risks are prominent recent developments in this field, partly in recognition of the difficulties in achieving appropriate instruments of regulatory intervention. The 2004 EU Framework Agreement on Stress at Work and the more recent 2007 Framework Agreement on Violence and Harassment at Work have both resulted in considerable activity in their application at national level. Arrangements at the workplace level are therefore of considerable interest.

Previous studies have confirmed that provision of information and advice, publications, training and campaigns were among the main actions undertaken by trade unions in relation to supporting representation on workplace stress. A European Foundation (2001) survey for example, found them to be an important means of training workers who have traditionally concentrated on physical and chemical risks and it detected a common practice in the introduction of specific modules on psychosocial risks in the training courses for safety representatives.

Most cases of successful involvement of worker representation in the management of psychosocial risks reported in the literature describe a model of prevention in which health and safety representatives address psychosocial risks by including them in their approach to risk assessment. A number of trades unions have published accounts of successful interventions to address psychosocial risk. In 2002, a special issue of the TUTB Newsletter devoted to trade union action on stress gave an indication of the range of trade union involvement in stress prevention including quantitative and qualitative surveys identifying stressful work, information dissemination, counselling services, campaigns, training activities and the development of guides and training materials on psychosocial risks (Koukoulaki 2002). At the same time the review noted that very few trade unions took a holistic approach to stress prevention; most focused on psychological harassment or workload in line with their national legislative provisions on prevention. In a more recent symposium on workers' participation in risk assessment organised by the ETUI (2009) several examples were presented of trade union supported initiatives for psychosocial risk assessment developed by trade union researchers in Spain, and other countries including the United Kingdom, Italy, Belgium and Germany. There are indications of significant transference of some of this work internationally, with for example, work originally developed in Denmark being taken up by trade union researchers in Spain and advanced considerably in its application there (Llorens et al. 2010). There are signs that unions are beginning to address psychosocial risk more holistically. In the United Kingdom for instance, some trades unions, such as Prospect, have produced material on organisational change and psychosocial risks, which presents numerous examples of how worker representatives and their trade unions have tried to address the problem (Prospect, 2009). In other countries unions have used arguments on psychosocial risk when successfully negotiating changes in staffing levels (see Gordon et al. 2008).

([4]) Briefly, as compared to Reilly et al. (1995), they reduced the large number of regional and industry dummies to make a more robust model; reduced the number of independent variables, some of which rested on fine and unclear distinctions; used a Poisson count method instead of a Cox zero corrected method (which entailed adding a bit to the many zero observations); and tested for endogeneity and interaction effects.

While these examples provide a wealth of detailed anecdotal material to support the thesis that worker representation can make a significant contribution to preventing or ameliorating the psychosocial causes of harm to workers, they do not, in the main, present robust evaluative research. They also tell us precious little about questions of the sustainability of this form of involvement, the preconditions necessary to achieve it, the parameters within which it is allowed to function or its place within the realities of economic restructuring and business reorientation that dominate the modern world of work.

4.7. Summary

The weight of the evidence found in the international literature considering the effectiveness of worker representation on health and safety would seem to be broadly in line with the idea that better health and safety outcomes are likely when employers manage OSH with representative worker participation and that, in various ways, joint arrangements, trade unions and worker representation on health and safety at the workplace are likely to be associated with such outcomes. Even so, the studies that have been conducted in this area vary considerably in quality, consistency, reliability and relevance to the central question concerning the effects of representative participation on health and safety outcomes and specifically on injury or illness rates. Large-scale surveys such as the ESENER survey gather a substantial quantity of data from a large sample of respondents. This confers considerable power. However, at the same time, as with all surveys of this kind it may have limitations conferred by its methodology on the representativeness of its findings. Bearing this caveat in mind, we have approached our secondary analysis by especially focusing on how ESENER sheds further light on what **works** in workplaces in which some support is found for participative approaches to health and safety management.

5. Methodological approaches to the further analysis of the ESENER data on worker representation and health and safety management

The analysis took place in three main ways.

Using the ESENER data the first and main phase of our analysis (Phase 1) examined the characteristics of workplaces that are associated with the involvement of workers in OSH management, examining both the nature and extent of this involvement. Analysis of the ESENER data then examined how the involvement of employees contributes to the effectiveness of health and safety management. A further analysis considered country- and sector-specific differences in the ESENER findings and a final stage of our analysis examined patterns of such differences by using some simple groupings of country-specific data according to national styles of regulation of health and safety management.

Two additional phases of analysis were undertaken. The first of these (Phase 2) is a country-specific case study based upon data from the United Kingdom Workplace Employment Relations Survey 2004. As a national survey, the WERS 2004 survey is able to provide more detail on the characteristics of workplaces and the involvement of employees in OSH management than can normally be achieved with cross-national studies, and therefore it offers some useful additional perspectives on the ESENER findings. The second element of our additional analysis (Phase 3) provides some context for our ESENER results through a comparative analysis of aspects of OSH within the EU based upon the European Working Conditions Survey (EWCS). It considers the relative incidence of occupational ill health across the EU and examines in further detail whether employees feel well informed about the OSH risks associated with their employment.

Phase 1, the analysis of the ESENER data was undertaken in six stages:

Stage 1: Worker representation — This stage simply considered: what workplace characteristics were associated with establishments reporting that workers are represented in some way on issues surrounding health and safety management; and how the nature of this representation varied according to different workplace characteristics. Within a multivariate framework, the issue of worker representation was considered as follows:

worker representation = function of (firm demographics, approach to OSH management)

This analysis was conducted on a sample that included all respondents to the management questionnaire.

Stage 2: OSH management — This stage considered what workplace characteristics, including the nature of worker representation, are associated with establishments reporting that they have systems, policies or other mechanisms for the management of OSH. More formally:

OSH management = function of (firm demographics, approach to OSH management, worker representation)

This analysis was also conducted on a sample that included all respondents to the management questionnaire.

Stage 3: Process, outcomes and inhibitors to OSH management — The final stage of the analysis of the management questionnaire considered those establishment characteristics that are associated with OSH outcomes, particularly OSH processes and reasons provided by respondents to the management questionnaire for not following particular courses of action. The analysis was generally undertaken on a subset of establishments that report having (or not having) a particular system of management in place and considered how workplace characteristics combine to influence OSH processes, outcomes and inhibitors. The analysis is expressed as follows:

Process/outcomes/inhibitors = function of (firm demographics, approach to OSH management, worker representation, OSH management)

The analysis, therefore, was conducted on a subsample of all respondents to the management questionnaire, selected on the basis of OSH management characteristics.

Stage 4: The case of psychosocial risk management — Where possible, the analytical approach described above was repeated and applied to the subset of ESENER data focused on the management of psychosocial risk.

Stage 5: Corroboration with ER variables — Data from the employee representative (ER) questionnaire was used in two ways. Firstly, to examine the robustness of the results, the analysis undertaken in Stage 3 was repeated including process/outcomes/inhibitor variables from the ER questionnaire. The second stage of the ER-based analysis derived variables that measured the level of agreement or disagreement between managers and employee representatives. The analysis identified where the responses of the ER questionnaire were 'better', 'worse' or similar to the equivalent question asked in the management questionnaire. Attention was given to identifying what characteristics were associated with agreement and disagreement, particularly with respect to the role of the ER within the organisation.

Stage 6: Wider contextual differences — The analyses in Stages 1 to 5 considered both: the workplace characteristics associated with worker involvement; and the association between worker involvement and OSH management and its outcomes; while controlling for workplace characteristics. These analyses, therefore, considered the workplace or organisational context in which worker involvement operates. The final stage of our analyses extended the work by focusing on these associations in terms of the wider contexts in which organisations operate. It therefore examined differences in association and in patterns of association by country, by type of regulatory framework and style and by industrial sector.

6. Summary of the findings of the further analysis of the ESENER data

This section summarises the findings of the analyses carried out in Stages 1 to 5 of the Phase 1 analyses. As a summary, it focuses on the main analyses and findings only, and just on those for the EU-27 countries. Full details of all the analyses, including results from both the EU-27 and full 31 country dataset, are given in the accompanying Technical Report (Annex 1). Available at: http://osha.europa.eu/en/publications/reports/esener_workers-involvement_annexes/view

The main measures used in the analyses, and referred to throughout this section, are outlined in Table 6.1. The findings presented are the result of multivariate logistic regression modelling (using both binary and multinomial models as appropriate). These models allowed the consideration of associations between the measures of interest (for example worker representation and the impact of an organisation's health and safety policy) after controlling for other potentially influential factors (such as workplace characteristics). It is important to bear in mind throughout, however, that the findings are drawn from analyses of cross-sectional data, so they give no indication of the direction (or causality) of relationships.

Table 6.1: **Summary of main measures used in the analyses**

Worker involvement	
Worker representation (Formal)	***None***
	General works council and/or trade union representative
	Specialist OSH health and safety committee and/or health and safety representative
	Both general and specialist OSH
Work involvement in psychosocial risk management (Direct)	***None***
	Consultation employees have been consulted on measures to deal with psychosocial risks
	Participation employees are encouraged to participate actively in the implementation and evaluation of psychosocial risk management measures
	Both consultation and participation
Workplace characteristics	
Firm demographics	***Site type*** single, multiple HQ/subsidiary
	Workplace size workforce size
	Sector public, private, producing
	Workforce make-up gender, age, foreign nationals
Approach to OSH management	***Management commitment to health and safety*** combination of measures of: (a) the regularity with which health and safety issues are raised in high-level management meetings; and (b) the degree of involvement of line managers and supervisors in health and safety management
	Reasons for addressing health and safety issues
	OSH risk types faced traditional and/or psychosocial
Health and safety management	
Health and safety policy	***Documented policy*** established management system or action plan on health and safety in place
Workplace checks	***Carried out regularly***
Sickness absence data	***Routine collection*** of the causes of sickness absence

Process and outcomes to OSH management	
Impact of health and safety policy	***Some or a large impact*** of the documented policy, established management system or action plan on health and safety
Action following workplace checks	***Actions taken*** following regular workplace checks
Support following sickness absence	***Providing support*** for employees returning from long-term sickness absence
Inhibitors to OSH management	
Reasons for not having a documented health and safety policy, system or plan	***Lack of resources*** and/or see it as ***unnecessary or of no benefit***
Reasons why workplace checks are not regularly carried out	***Lack of resources*** and/or see it as ***unnecessary***
Psychosocial risk management	
Health and safety management of psychosocial risks	***Having procedures*** to deal with work-related stress/bullying/ harassment/work-related violence
	Using methods or actions to deal with work-related stress/ bullying/harassment/work-related violence
Process and outcomes to OSH management of psychosocial risks	***Effectiveness*** of psychosocial risk management
Inhibitors to OSH management of psychosocial risks	***Lack of resources*** and/or ***lack of awareness***

6.1. Stage 1: Worker representation

Worker representation was associated with both workplace characteristics and the organisation's approach to OSH management. Those reporting at least one form of representation (see Table 6.1) were more often multiple site organisations, those with larger workforces (e.g. those with 500 or more workers were over 15 times more likely than those with fewer than 20 workers to report having a form of worker representation), those operating in the public sector and organisations with more older workers. They were also nearly twice as likely to report high management commitment to health and safety; they were more likely to identify traditional risks (with or without psychosocial risks) as of concern in their establishment; and they were more likely to identify requests from employees or their representatives (as well as legal obligation and labour inspectorate pressure) as important reasons for addressing health and safety issues.

Analyses of each form of worker representation separately showed a similar pattern of associations, suggesting that the context conducive to representation does not vary greatly.

The factors associated with worker representation, which were significant after controlling for other potentially influential factors, are consistent with previous work suggesting that worker representation is more common in larger organisations, and that it is more likely in workplaces where health and safety, and the views of workers, are seen as a priority. It is important to bear in mind, however, that these findings are drawn from analyses of cross-sectional data, so they give no indication of the direction (or causality) of relationships — that is they cannot shed light on whether worker representation encourages organisations to prioritise health and safety and the views of their workers, or vice versa. They nevertheless give an indication of the kinds of workplace situations in which worker representation is more common. These findings are summarised in Table 6.1.1.

Table 6.1.1: **Stage 1: Worker representation — summary of findings**

<table>
<tr><th colspan="2">Associations between:</th></tr>
<tr><td rowspan="2">Worker representation (*):
• At least one form</td><td>Firm demographics:
• Multiple site
• Larger workplaces
• Public services
• More older workers</td></tr>
<tr><td>Approach to OSH management:
• High management commitment to OSH
• Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment
• Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not economic performance) as important reasons for addressing OSH issues</td></tr>
<tr><td rowspan="2">Worker representation (*):
• General</td><td>Firm demographics:
• Multiple site
• Larger workplaces
• Public services
• More older & foreign workers</td></tr>
<tr><td>Approach to OSH management:
• High management commitment to OSH
• Identifying traditional or psychosocial risks only or both types of risks as of concern in the establishment
• Seeing requests from employees or reps (and not economic performance) as important reasons for addressing OSH issues</td></tr>
<tr><td rowspan="2">Worker representation (*):
• Specialist OSH</td><td>Firm demographics:
• Multiple site (HQ)
• Larger workplaces
• More older and fewer foreign workers</td></tr>
<tr><td>Approach to OSH management:
• High management commitment to OSH
• Identifying traditional only (and not psychosocial risks only) as of concern in the establishment
• Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not staff retention or clients' requests) as important reasons for addressing OSH issues</td></tr>
<tr><td rowspan="2">Worker representation (*):
Both forms</td><td>Firm demographics:
• Multiple site
• Larger workplaces
• Public services
• Fewer female and more older workers</td></tr>
<tr><td>Approach to OSH management:
• High management commitment to OSH
• Identifying traditional only or both traditional and psychosocial risks as of concern in the establishment
• Seeing legal obligation, requests from employees or reps and inspectorate pressure (and not economic performance) as important reasons for addressing OSH issues</td></tr>
</table>

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

6.2. Stage 2: Health and safety management

Our method took a 'stepped' approach to the consideration of how establishments deal with health and safety issues. This was made up of three steps:

(i) Approach to OSH management — the priority that health and safety is given by management and their commitment to it;

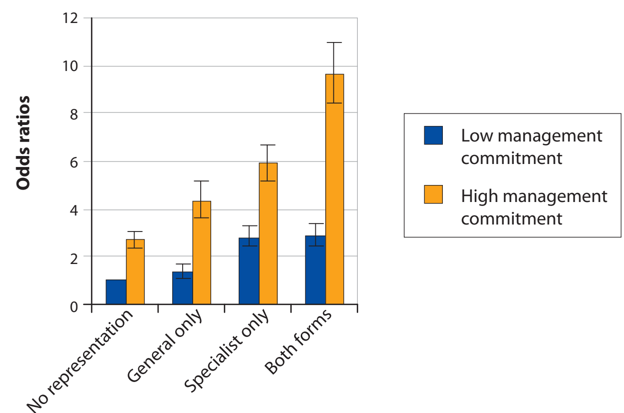
(ii) OSH management — the measures implemented to manage and monitor health and safety in the workplace;

(iii) Process, outcomes and inhibitors to OSH management — the outcomes of those measures, and the processes and reasons behind decisions about health and safety management.

This stage of the analyses focuses on OSH management (ii), and considers the workplace characteristics and approach to OSH management (i) associated with it, as well as the association with worker representation.

Overall, we found that specialist OSH representation only, and both forms of worker representation were associated with all three forms of health and safety management, with general worker representation only, also associated with both having a documented OSH policy in place and routinely collecting sickness absence data. For each health and safety management measure there was also a strong association with management commitment to health and safety which, in combination with worker representation (particularly both forms together), was also significantly associated with each of these measures. This is illustrated in Figure 6.2.1 which depicts the association between the forms of worker representation and having a documented OSH policy in place at both low and high levels of management commitment to health and safety. The figure shows that, after controlling for other factors, respondents from workplaces with both forms of worker representation and high management commitment to health and safety were almost 10 times as likely as those from workplaces with no worker representation and low management commitment to health and safety to report that their organisation had a documented health and safety policy in place.

Figure 6.2.1: **Association, after controlling for other potentially influential factors, between: (a) forms of worker representation (*) and (b) reporting that a documented health and safety policy is in place; shown at low and high levels of management commitment to health and safety**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Again, it is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that these measures of health and safety management are generally more likely to be found in workplaces where there is also worker representation and particularly so where there is also high management commitment to health and safety. Interestingly, our results also point to a particular association between specialist health and safety worker representation and carrying out regular workplace checks. These findings are summarised in Table 6.2.1.

Table 6.2.1: **Stage 2: Health and safety management — summary of findings**

Associations between:	
Health and safety management : • OSH policy	Worker representation (*): • General, specialist OSH (more strongly than general), both forms (most strongly) • Associations stronger in conjunction with high management commitment to OSH
Health and safety management: • Routine collection of sickness absence data	Worker representation (*): • General, specialist OSH, both forms (most strongly) • Associations stronger in conjunction with high management commitment to OSH
Health and safety management: • Regular workplace checks	Worker representation (*): • Specialist OSH, both forms • Associations stronger in conjunction with high management commitment to OSH

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

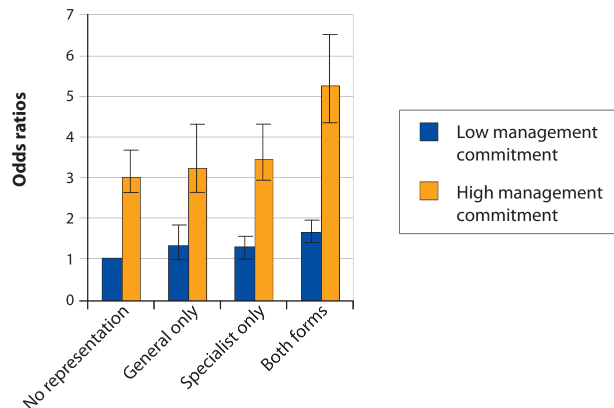
6.3. Stage 3: Process, outcomes and inhibitors to OSH management

This stage of the analysis focused on the process, outcomes and inhibitors of OSH management. It considered the workplace characteristics, approach to OSH management and OSH management measures associated with the process and outcomes of those OSH management measures, as well as the workplace characteristics and OSH management approach factors associated with inhibitors to OSH management. It also considered associations with worker representation for each of these sets of dependent variables.

Three measures of the process or outcomes of OSH management were considered (Table 6.1): taking measures to support employees' return to work following a long-term sickness absence; the reported impact of the organisation's documented policy, established management system or action plan (5); and actions taken as a follow-up to workplace checks (6). In terms of inhibitors, analyses considered the factors organisations identified as reasons for not having a documented OSH management policy and for not carrying out regular workplace checks (Table 6.1).

We found both forms of worker representation were associated with all three measures of the process and outcomes to OSH management, with specialist OSH worker representation only also associated with both the impact of an organisation's OSH policy and taking action following workplace checks. For each measure of the process and outcomes to OSH management there was also a strong association with management commitment to health and safety which, in combination with worker representation (particularly both forms), was also significantly associated with each of these measures. Taking the reported impact of an organisation's documented health and safety policy as an example, Figure 6.3.1 shows its association with each form of worker representation at low and high levels of management commitment to health and safety. This shows that, after controlling for other factors, respondents from workplaces with both forms of worker representation and high management commitment to health and safety were over five times as likely as those from workplaces with no worker representation and low management commitment to health and safety to report that their organisation's policy had some or a large impact.

Figure 6.3.1: **Association, after controlling for other potentially influential factors, between: (a) forms of worker representation (*) and (b) reporting some or a large impact of the enterprise's documented health and safety policy; shown at low and high levels of management commitment to health and safety**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

OSH management measures, therefore, are more likely to be effective in workplaces in which there is worker representation, and in particular where that is combined with high management commitment to health and safety. Again, the direction of these associations cannot be determined using these cross-sectional data. However, it is also interesting to note that specialist OSH representation was associated with effective policy and workplace check management measures. These findings are summarised in Table 6.3.1.

(5) Those reporting a large or some impact were compared with those reporting practically no impact.

(6) Those reporting at least one were compared with those reporting none of the following actions: changes to equipment or working environment; changes to the way work is organised; changes to working time arrangements; provision of training.

Table 6.3.1: **Stage 3: Process and outcomes to OSH management — summary of findings**

Associations between:	
Process and outcomes to OSH management: • Impact of OSH policy	**Worker representation (*):** • Specialist OSH, both forms • Associations stronger in conjunction with high management commitment to OSH
Process and outcomes to OSH management: • Support for employees returning from sickness absence	**Worker representation (*):** • Both forms • Associations stronger in conjunction with high management commitment to OSH
Process and outcomes to OSH management: • Action following workplace checks	**Worker representation (*):** • Specialist OSH, both forms • Associations stronger in conjunction with high management commitment to OSH

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Factors associated with inhibitors to OSH management varied with specific inhibitors. However, low management commitment to health and safety was associated with all the inhibitor measures except not seeing the benefit of or need for a documented health and safety policy, again highlighting the importance of an organisation's managerial approach to health and safety. These findings are summarised in Table 6.3.2.

Table 6.3.2: **Stage 3: Inhibitors to OSH management — summary of findings**

Associations between:	
Inhibitors to OSH management: ***No OSH policy*** • Lack of resources	**Firm demographics:** • Multiple site (HQ) • Larger workplaces
	Approach to OSH management: • Low management commitment to OSH • Seeing traditional only or both traditional and psychosocial risks as of concern
	Health and safety management: • No regular workplace checks
	Worker representation (*): • General • Specialist OSH • Both forms
Inhibitors to OSH management: ***No OSH policy*** • No benefit/need	**Firm demographics:** • Public services or producing industries
	Approach to OSH management: • Not seeing inspectorate pressure as an important reason for addressing OSH issues
	Health and safety management: • No regular workplace checks
	Worker representation (*): • Specialist OSH

	Associations between:
Inhibitors to OSH management: ***No OSH policy*** • Lack of resources and no benefit/need	**Firm demographics:** • Multiple site (HQ) • Public or producing industries • More female workers
	Approach to OSH management: • Low management commitment to OSH • Seeing traditional only or both traditional and psychosocial risks as of concern
	Health and safety management: • No routine collection of sickness absence data • No regular workplace checks
	Worker representation (*): • General • Specialist OSH • Both forms
No regular workplace checks • Lack of resources/legally complex	**Firm demographics:**
	Approach to OSH management: • Low management commitment to OSH
	Health and safety management:
	Worker representation (*):
No regular workplace checks • Lack of resources/legally complex and not seen as necessary	**Firm demographics:** • Smaller and medium-sized workplaces
	Approach to OSH management: • Low management commitment to OSH • Seeing both traditional and psychosocial risks as of concern • Seeing legal obligation as an important reason for addressing OSH issues
	Health and safety management: • No OSH policy • No routine collection of sickness absence data
	Worker representation (*):

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

6.4. Stage 4: The case of psychosocial risk management

The aim of this stage of the analysis was to repeat the approach taken in stages 2 and 3 above and apply it to the subset of ESENER data focused on the management of psychosocial risk. We first considered the health and safety management of psychosocial risks, before considering the associations between our variables and data on direct employee involvement in relation to psychosocial risks which were also collected by the ESENER survey.

6.4.1. Associations between worker representation and psychosocial risk management

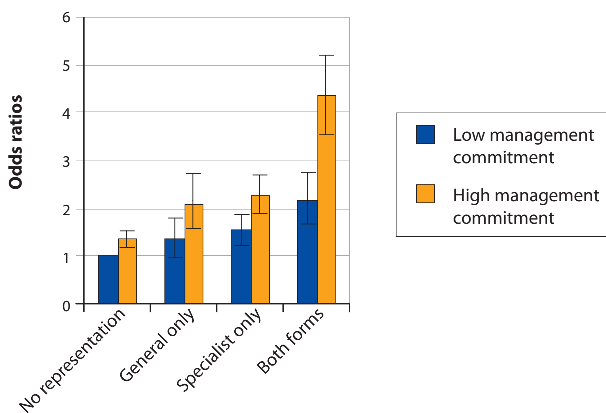
Two measures of psychosocial risk management were considered (Table 6.1): having procedures to deal with work-related stress and/or bullying or harassment and/or work-related violence; and reporting the use of at least one method or action ([7]) for dealing with psychosocial risk.

Both forms of worker representation, separately and in particular together, were associated with both forms of psychosocial risk management. For each psychosocial risk management measure there was also a strong association with management commitment to health and safety which, in combination with worker representation (specialist OSH and, particularly, both forms together), was also significantly associated with each of

([7]) This included at least one from the following: changes to the way work is organised; a redesign of the work area; confidential counselling for employees; set-up of a conflict resolution procedure; changes to working time arrangements; provision of rtaining; taking action when employees work excessively long or irregular hours; informing employees about psychosocial risks and their effect of health and safety; and informing employees about whom to address in the case of work-related psychosocial problems.

these measures. Taking the reported use of measures to deal with psychosocial risk as an example, Figure 6.4.1.1 shows its association with each form of worker representation at low and high levels of management commitment to health and safety. This shows that, after controlling for other factors, respondents from workplaces with both forms of worker representation and high management commitment to health and safety were over four times as likely as those from workplaces with no worker representation and low management commitment to health and safety to report that their organisation had used at least one measure to deal with psychosocial risk.

Figure 6.4.1.1: **Association, after controlling for other potentially influential factors, between: (a) forms of worker representation (*); and (b) reporting the use of measures to deal with psychosocial risk; shown at low and high levels of management commitment to health and safety**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Again, it is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that psychosocial risk management generally is more likely in workplaces where there is worker representation and particularly so where there is also high management commitment to health and safety. It is also more likely in workplaces where procedures for managing traditional health and safety risks (a documented policy and the routine collection of sickness absence data, though, interestingly, not regular workplace checks) are also in place. These findings, which are found even after controls have been made for workplace characteristics and approach to OSH management, are summarised in Table 6.4.1.1.

6.4.2. Direct employee involvement in psychosocial risk management

The ESENER questionnaire also included a measure of employee involvement (Table 6.1) by asking whether employees: (a) have been consulted regarding measures to deal with psychosocial risks; and (b) are encouraged to participate actively in the implementation and evaluation of the psychosocial risks management measures. Analyses similar to those carried out in stage 1 were repeated to consider factors associated with employee involvement in psychosocial risk management.

Employee involvement in psychosocial risk management was associated with workplace characteristics, the organisation's approach to OSH management and worker representation. Reporting at least one form of employee involvement (consultation, encouragement to active participation or both) was more likely in multiple site organisations, those with smaller workforces, those in the public sector and those with a particularly young workforce. In addition, those reporting employee involvement were over twice as likely to also have high levels of management commitment to health and safety, were more likely to identify both traditional and psychosocial risks as

Table 6.4.1.1: **Stage 4: Health and safety management of psychosocial risk — summary of findings**

Associations between:	
Psychosocial risk management: • Having procedures to deal with psychosocial risk	**Worker representation** (*): • General, specialist OSH, both forms (most strongly) • Associations stronger in conjunction with high management commitment to OSH
Psychosocial risk management: • Using actions or methods to deal with psychosocial risk	**Worker representation** (*): • General, specialist OSH, both forms (most strongly) • Associations stronger in conjunction with high management commitment to OSH

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

important concerns in their establishment, and were more likely to see requests from employees or their representatives and staff retention or absence management (as well as economic performance and the requests of their clients or their organisational reputation) as important reasons for addressing health and safety issues. They were also more likely to have at least one form of worker representation in place, and were over twice as likely to have both forms operating.

Although some of the factors associated with each form of employee involvement separately were similar (e.g. multiple site, public sector, high management commitment to health and safety, identifying staff retention or absence management as an important reason for addressing health and safety issues and having both forms of worker representation in place), there were also some interesting differences by type of employee involvement. First, workforce size: involving employees only by consulting them was more common in workplaces with more workers whereas involving employees only by encouraging them to actively participate was more common in workplaces with fewer workers. And second, form of worker representation: involving employees only by consulting them was more common in workplaces with general worker representation whereas involving employees only by encouraging them to actively participate was more common in workplaces with specialist OSH worker representation. This suggests that there are a number of factors which are associated with employee involvement in the management of psychosocial risk generally, and also that the way that employees are involved may vary with certain workplace conditions.

Again, these findings are consistent with previous work suggesting that employee involvement is more common in workplaces where health and safety generally, and both worker representation and staff retention, are seen as priorities.

These findings are summarised in Table 6.4.2.1.

In order to explore the relationship between management commitment, worker representation and employee involvement further, a combined variable was created. Analyses considered the association between the (reported) effectiveness of psychosocial risk management measures and worker representation and employee involvement independent of workplace characteristics, approach to OSH management, management of traditional health and safety risks and approach to psychosocial risk management (including both reasons prompting the establishment to deal with psychosocial risks and perception of the comparative difficulty of tackling psychosocial risks as opposed to other health and safety issues).

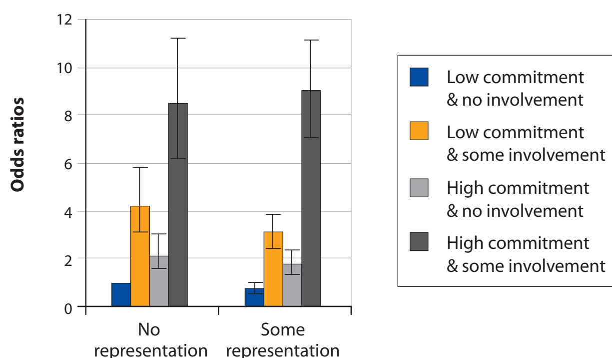
Overall, both forms of employee involvement individually were associated with effective psychosocial risk management, and both forms together were particularly strongly associated with effective psychosocial risk management. However, the association with worker representation was less clear cut, with workplaces with both forms of representation in place less likely than those with neither form in place to report effective psychosocial risk management. This may, perhaps, reflect a greater awareness of psychosocial risk management (in terms of both actual workplace practice and an aimed for 'ideal') on the part of managers of organisations with stronger worker representation in place. Again, however, the association with high management commitment to health and safety was clear, with the combination of high commitment and employee involvement most strongly associated with effective psychosocial risk management. Figure 6.4.2.1 illustrates this, showing that, after controlling for other factors, respondents from workplaces with high management commitment to health and safety and both forms of employee involvement were over eight times as likely as those from workplaces with low management commitment to health and safety and no employee involvement to report that their organisation's psychosocial risk management was effective.

Table 6.4.2.1: **Stage 4: Employee involvement in psychosocial risk management — summary of findings**

Associations between:	
Employee involvement: • Either consultation and/or encouragement to active participation	**Firm demographics:** • Multiple site • Smaller workplaces • Public services • Fewer older workers **Approach to OSH management:** • High management commitment to OSH • Identifying both traditional and psychosocial risks as of concern • Seeing requests from employees or their reps, staff retention, economic performance and clients' requests (but not labour inspectorate pressure) as important reasons for addressing OSH issues **Worker representation** (*): • General, specialist OSH and both forms
Employee involvement: • Consultation	**Firm demographics:** • Multiple site • Larger workplaces • Private and public services **Approach to OSH management:** • High management commitment to OSH • Identifying both traditional and psychosocial risks as of concern • Seeing staff retention and economic performance (but not labour inspectorate pressure) as important reasons for addressing OSH issues **Worker representation** (*): • General and both forms
Employee involvement: • Encouragement to active participation	**Firm demographics:** • Multiple site (subsidiary) • Small to medium-sized workplaces • Private and public services **Approach to OSH management:** • High management commitment to OSH • Identifying both traditional and psychosocial risks as of concern • Seeing legal obligation, requests from employees or reps and staff retention as important reasons for addressing OSH issues **Worker representation** (*): Specialist OSH and both forms
Employee involvement: • Both consultation and encouragement to active participation	**Firm demographics:** • Multiple site (subsidiary) • Smaller workplaces • Private and public services • More female and fewer older workers **Approach to OSH management:** • High management commitment to OSH • Not identifying traditional risks only as of concern • Seeing requests from employees or reps, staff retention, economic performance and clients' requests (and not inspectorate pressure) as important reasons for addressing OSH issues **Worker representation** (*): • General, specialist OSH and both forms

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Figure 6.4.2.1: **Association, after controlling for other potentially influential factors, between: (a) employee involvement; and (b) effective OSH management of psychosocial risks; shown at low and high levels of management commitment to health and safety and with and without the presence of worker representation (*)**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

It is important to stress that these cross-sectional data cannot identify causal relationships. Nevertheless, the analyses suggest that effective psychosocial risk management generally is more likely in workplaces where there is employee involvement and particularly so where there is also high management commitment to health and safety. It is also more likely in workplaces where procedures for managing traditional health and safety risks (regular workplace checks and the routine collection of sickness absence data, though, interestingly, not a documented OSH policy) are in place. These findings are summarised in Table 6.4.2.2.

Finally, analyses considered the factors organisations identified as making dealing with psychosocial risks particularly difficult. Overall, 13 % of EU-27 organisations identified a lack of resources (time, staff, money, training, expertise, technical support or guidance) as a factor, 14 % identified lack of awareness (or the culture within the establishment or the sensitivity of the issue) as a factor, 58 % identified both the factors and 16 % neither of them (weighted data).

Analyses assessed the independent associations of workplace characteristics, approach to OSH management, management of traditional risks, management of psychosocial risks, worker representation and employee involvement with these inhibitors.

Factors associated with inhibitors to OSH management of psychosocial risk varied with specific inhibitors. However, low management commitment to health and safety was associated with all the inhibitor measures again highlighting the importance of an organisation's managerial approach to health and safety. These findings are summarised in Table 6.4.2.3.

Table 6.4.2.2: **Stage 4: Process and outcomes to OSH management of psychosocial risk — summary of findings**

	Associations between:
Psychosocial risk management process and outcomes: • Effectiveness	**Worker representation** (*): • None or either form separately **Employee involvement:** • Consultation, participation and both consultation and participation (most strongly) • Associations stronger in conjunction with high management commitment to OSH

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Table 6.4.2.3: **Stage 3: Inhibitors to OSH management of psychosocial risk — summary of findings**

	Associations between:
Inhibitors to OSH management of psychosocial risk: • Lack of resources	**Firm demographics:** • Private services **Approach to OSH management:** • Low management commitment to OSH • Seeing both traditional and psychosocial risks as of concern **Health and safety management:** • No regular workplace checks **Psychosocial risk management:** **Worker representation** (*): • Both forms together **Employee involvement:** • Each form (consultation and participation) separately and both forms together
Inhibitors to OSH management of psychosocial risk: • Lack of awareness	**Firm demographics:** • Multiple site (HQ) • Larger workplaces • Fewer women and more older workers **Approach to OSH management:** • Low management commitment to OSH • Seeing traditional risks only or both traditional and psychosocial risks as of concern **Health and safety management:** **Psychosocial risk management:** • Psychosocial procedure in place **Worker representation** (*): • Each form separately and both forms **Employee involvement:** • Consultation only and both consultation and participation together
Inhibitors to OSH management of psychosocial risk: • Both lack of resources and lack of awareness	**Firm demographics:** • Multiple site (HQ) • Larger workplaces • Private or public services • More older workers **Approach to OSH management:** • Low management commitment to OSH • Identifying each risk type (traditional and psychosocial) separately or both types together as of concern **Health and safety management:** • No documented OSH policy • No regular workplace checks **Psychosocial risk management:** **Worker representation** (*): • Specialist OSH only and both forms together **Employee involvement:** • Not having both consultation and participation together

(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

6.5. Stage 5: Corroboration with employee representative variables

The ESENER dataset includes responses from 7 226 employee representatives. Using weighted data, this means that just under a fifth of the participating organisations from the EU-27 sample returned both management and employee representative data. Our analysis of this subset of data shows it represents a significantly different group of organisations drawn in the main from 'the better end of the spectrum' in terms of health and safety management.

We used further analysis of this data to test the robustness of the results from the analysis of the management data. The analyses from stage 3 were therefore repeated on the subset of data from organisations with an ER response. Changes were made to the worker representation variables used in these analyses for two reasons: first there were, necessarily, no organisations in the ER subset where the manager reported no worker representation; and second there were very few organisations in this subset where the manager reported having general representation only (N = 5, 0.1 %, using EU-27, weighted data). In addition, analyses were restricted to the process and outcome measures because of the small number of workplaces in the ER subset reporting not having policies, etc in place (and therefore being available for inclusion in inhibitor analyses: e.g. N = 660, 13.7 % reporting not having a documented OSH policy in place; N = 275, 5.7 % reporting not carrying out regular workplace checks (both using EU-27, weighted data)). These analyses, therefore, compare organisations with both forms of representation against those with only one form of representation. Where possible, new analyses were also run using 'mirrored' dependent variables from the employee representative dataset.

6.5.1. Robustness of the management data results — Conclusions

The management data analyses showed associations between worker representation and all three measures of the process and outcomes to OSH management. They also showed a strong association between management commitment to health and safety and each of these three measures which, in combination with worker representation, was also significantly associated with each measure. This suggested that OSH management measures are more likely to be effective in workplaces in which there is worker representation, and in particular where that is combined with high management commitment to health and safety. The pattern of results using the ER subset was broadly similar. In particular, the results confirmed the strong association with management commitment to health and safety. Associations with worker representation were less strong, which is likely to reflect both the smaller numbers of organisations included in the analyses and the fact that this was an employee representative subsample (and therefore one which could not be expected to show differences between workplaces with and without worker representation).

The management data analyses focusing on the process and outcome to psychosocial risk management showed associations between employee involvement and effective psychosocial risk management, but suggested a less clear association with worker representation, with workplaces with both forms of representation in place less likely than those with neither form in place to report effective psychosocial risk management. These analyses showed a strong association with high management commitment to health and safety, with the combination of high commitment and employee involvement most strongly associated with effective psychosocial risk management. Again the pattern of results using the ER subset was similar, with the associations with both management commitment to health and safety and employee involvement very clear.

Similarly, the management data analyses of the inhibitors to OSH management of psychosocial risk showed varied factors associated with specific inhibitors, but a common association with low management commitment to health and safety. Again this pattern was also clear in the analyses of the ER subset.

Overall, therefore, the corroborative analyses described above suggest that the management data analyses are robust.

6.5.2. Differences between managers and employee representatives

This stage of the analyses focused on deriving variables that measure the level of agreement or disagreement between managers and employee representatives to identify where the responses of the ER questionnaire were 'better', 'worse' or similar to the equivalent question asked in the management questionnaire. Analyses were then carried out to consider workplace characteristics' associations with agreement and disagreement between interviewees.

These analyses suggest first that there were relatively high levels of agreement between managers and employee representative; and second that a variety of workplace characteristics and employee representative role and training measures are associated with agreement and disagreement between manager and ER respondents. Low management commitment to health and safety was consistently associated with ER respondents' assessments being better than those of their management counterparts. This perhaps reflects the kind of workplace context in which health and safety is primarily the responsibility of the employee representative and other specialised colleagues rather than management. High management commitment to health and safety was also associated with worse ER responses on the carrying out of regular workplace checks, which may be the result of the management commitment measure being taken from the management questionnaire. This possibility is supported by the association between worse ER response and the employee representative not agreeing with all three of the statements on high management commitment to health and safety. In addition, there were relatively fewer associations between better ER responses and the ER role and resources measures, whereas measures such as problems with the receipt

of information from management, more frequent controversies between management and ERs, ER perception of management unwillingness or insufficiency in relation to psychosocial issues and ER training limited to traditional risks only were all associated with worse ER responses on at least one measure.

6.5.3. Associations between employee representatives' role and health and safety management and outcomes

Finally, analyses were carried out to consider any associations between measures of health and safety management and the process and outcomes of such management and measures of employee representatives' role in OSH management and their resources and training in OSH issues. Analyses controlled for workplace characteristics, management commitment to health and safety, worker representation and (for the psychosocial risk management and outcome variables) employee involvement in psychosocial risk management.

Our findings suggest that employee representatives' role and resources are associated with health and safety management and its outcomes, and that this is the case, after controlling for workplace characteristics and management commitment to health and safety, for the management and outcomes of both traditional and psychosocial risks. In particular, the regular and frequent meeting of a health and safety committee and employee representative training for both traditional and psychosocial risks were both associated with the management and outcome measures. In addition, employee representatives reporting that workplace checks were regularly carried out was associated with the management and outcomes of traditional risks, with an active role of employee representatives in this process particularly associated with some or a large impact of the health and safety policy (as reported by the employee representative) and with the collection of sickness absence data. Furthermore, employee representatives reporting having been asked by workers to deal with at least one psychosocial issue was associated with positive outcomes of traditional risk management (both providing support for employees returning from long-term sickness absence and taking action following workplace checks) and with psychosocial risk management (both having a psychosocial risk policy and reporting having used at least one psychosocial risk procedure (as reported by the employee representative)).

Overall, therefore, the findings suggest that, independent of other factors, health and safety management is more likely, and is more likely to be effective, in organisations which not only have an employee representative but which also provide that person with an appropriate context in which to work. This includes ensuring high levels of management commitment to health and safety, comprehensive employee representative training, the support system and mechanisms with which the employee representative can implement health and safety policy and practice and an active and recognised role in day-to-day health and safety management of both traditional and psychosocial risks.

7. Some comparisons between countries, sectors and regulatory styles

7.1. Comparisons by sector

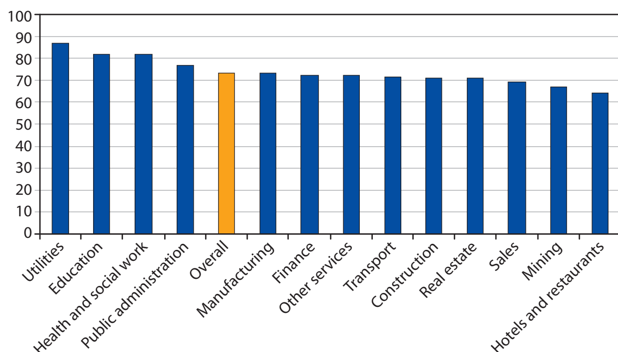
The ESENER data categorises enterprises into 13 NACE groups (Table 7.1.1).

Table 7.1.1: **Numbers of enterprises per sector**

Sector	N, % (Unweighted)	N, % (Weighted)
Mining and quarrying	196, 0.7	116, 0.4
Manufacturing	8 488, 29.6	5 598, 19.5
Electricity, gas and water supply (utilities)	349, 1.2	208, 0.7
Construction	2 756, 9.6	2 285, 8.0
Wholesale and retail trade; repair of motor vehicles and motorcycles and personal and household goods	4 203, 14.7	5 331, 18.6
Hotels and restaurants	947, 3.3	1 564, 5.5
Transport, storage and communications	1 313, 4.6	1 500, 5.2
Financial intermediation	706, 2.5	697, 2.4
Real estate, renting and business activities	2 724, 9.5	3 206, 11.2
Public administration and defence; compulsory social security	1 514, 5.3	1 491, 5.2
Education	2 166, 7.6	2 654, 9.3
Health and social work	2 141, 7.5	2 524, 8.8
Other community, social and personal service activities	1 146, 4.0	1 476, 5.2
Total	**28 649, 100**	**28 649, 100**

Figure 7.1.1 shows (weighted) proportions of worker representation by sector. Highest proportions were in the electricity, gas and water supply (utilities) sector (87 %) and lowest in the hotels and restaurants sector (64 %).

Figure 7.1.1: **Worker representation (*) (at least one form) by sector (%)**

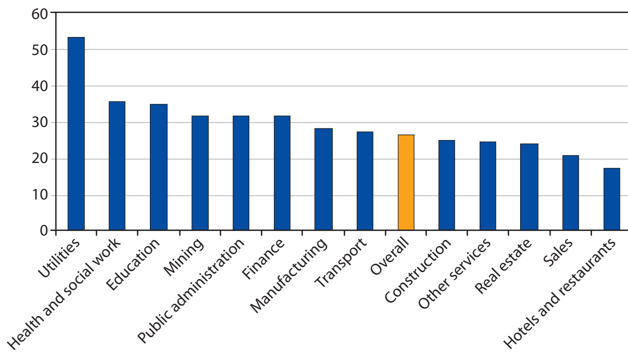


(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

The multivariate analyses considering associations between worker representation and both health and safety management and the process and outcomes resulting from that management consistently showed associations with both worker representation and high levels of management commitment to safety. In particular, all of these analyses identified the combination of these two factors as being significant, with those reporting high management commitment **together with** having both general and specialist OSH forms of worker representation in place by far the most likely to also report positively on each of the measures of health and safety management and its resulting process and outcomes.

Figure 7.1.2 shows (weighted) proportions of enterprises reporting the combination of high levels of management commitment to health and safety **together with** having both general and specialist OSH forms of worker representation in place by sector. Here again highest levels were in the electricity, gas and water supply (utilities) sector (53 %) and lowest in the hotels and restaurants sector (17 %).

Figure 7.1.2: **High levels of management commitment to health and safety and both forms of worker representation (*) by sector (%)**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

The published ESENER data report categorises sectors into three broad groups:

1. Producing industries: mining and quarrying; manufacturing; electricity, gas and water supply (utilities); and construction.

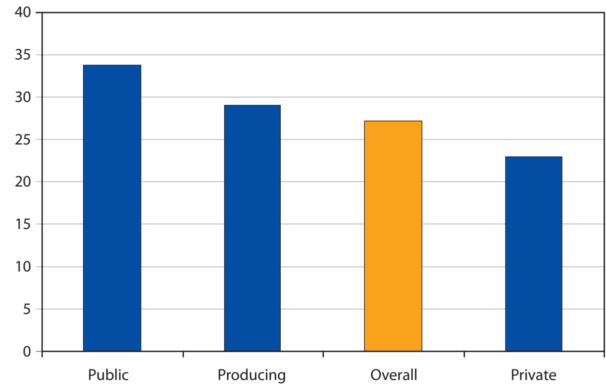
2. Private services: wholesale and retail; hotels and restaurants; transport, storage and communications; financial intermediation; real estate; and other service activities.

3. Public services: Public administration; education; and health and social work.

Figure 7.1.3 shows the management commitment and worker representation data by these three sectors. Highest proportions were in the public services sector (34 %) and lowest in the private services sector (23 %).

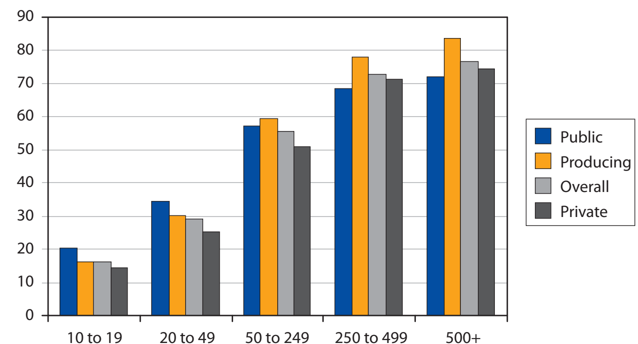
Further comparisons of these data were made by enterprise size (Figures 7.1.4) where the pattern remains broadly consistent for smaller firms, with highest proportions of high management commitment combined with both forms of worker representation in the public services sector and lowest proportions in the private services sector. However, among medium and large enterprises highest proportions were in the producing industries sector and lowest proportions were in the public services sector.

Figure 7.1.3: **High levels of management commitment to health and safety and both forms of representation (*) by sector groups (%)**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Figure 7.1.4: **High levels of management commitment to health and safety and both forms of representation (*) by sector groups and by enterprise size (%)**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

We find nothing especially surprising here. Previous national studies have noted the propensity for greater trade union presence and joint consultative arrangements in utilities, the public sector and in manufacturing as well as high levels of management commitment to OSH and participative arrangements in many of the sectors embraced by the 'producing' category.

7.2. Comparisons by country and by regulatory framework type

Further comparisons of proportions of enterprises reporting the combination of both high levels of management commitment to health and safety and both forms of worker representation were made by both country and by regulatory framework type.

Figure 7.2.1 shows that the Nordic countries all feature in the top 5 while the United Kingdom and Ireland feature in the top 10 with the greatest proportions of these forms of representation in combination with management commitment to safety.

In order to consider any differences by regulatory framework type, we tentatively divided the 31 countries in the ESENER dataset into five groups to broadly represent different types as follows:

1. Central: Germany, Netherlands, Austria, Belgium, Luxembourg, Switzerland

2. Nordic: Denmark, Finland, Sweden, Norway

3. United Kingdom and Ireland

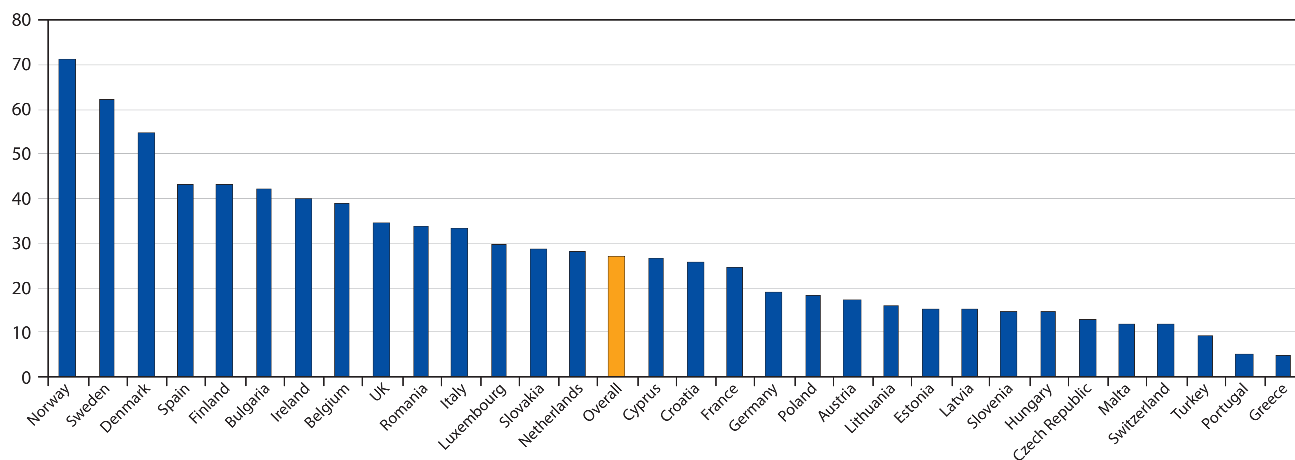
4. Southern/Latin EU: Greece, Spain, France, Italy, Cyprus, Malta, Portugal

5. Eastern: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia, Slovakia, Croatia, Turkey.

Our reasoning for this admittedly crude division was essentially based around a set of subjective postulates concerning possible differences in regulatory cultures, character and arrangements on OSH management. It must be stressed that these postulates and groupings would be difficult to substantiate completely in every case. Nor do they necessarily apply with equal power to the fit of each country with each of the above groups. Nevertheless we feel they are broadly justified as a qualitative assessment of possible differences in the style and longevity of approaches to regulating OSH management in EU Member States, which we think may have some salience in the present analysis.

We have derived them from an understanding that the implementation of the approaches to risk management that are found in the EU Framework Directive 89/391 were part of a trajectory of the development of process-orientated regulation on health and safety issues in the EU (and more widely in countries such as Australia and Canada), had antecedents especially in the Nordic and United Kingdom systems and was in addition influenced by the parallel development of standards for health and safety management systems (see Walters 2002 b for a fuller account of the development and implementation of the directive, also Walters 1996 c and 1998). These latter developments can also be linked to the growth of interest in quality management systems internationally (see Walters 2011). A combination of these factors leads to the conclusion that for at least two groups of EU Member States, namely the Nordic countries (2) and the United Kingdom and Ireland (3), the operation of national process-orientated regulatory standards emphasising a participatory approach to OSH management, largely pre-date the framework directive by around 20 years. On this basis there is a strong case for also including the Netherlands in this group because it too had introduced a process-orientated regulatory framework long before the adoption of the directive, in a sequence of regulatory changes which were acknowledged to be influenced both by the Robens Report and the HSW Act in the United Kingdom and by Nordic provisions (Walters ed. 2002). However, the provisions for worker health and safety representation in the Netherlands are quite different from those in both

Figure 7.2.1: **Proportions (%, weighted) of both general and specialist OSH worker representation (*) in combination with high management commitment to health and safety by country**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

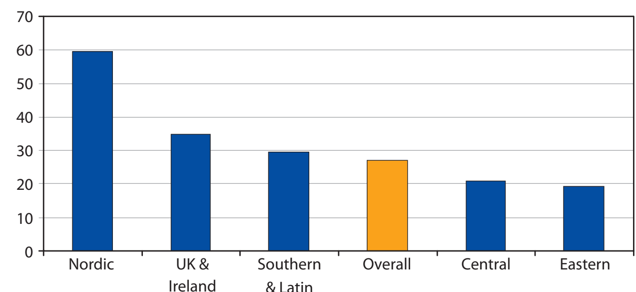
United Kingdom and Nordic models. Their emphasis on the central role of the works council in this respect aligns them more with the central European group. We have therefore included them within this grouping since our primary interest here is on these matters rather than OSH management more generally. However we recognise this is somewhat imperfect categorisation. The United Kingdom and Ireland and Nordic groups of countries also have other long-standing features that are supportive of process-orientated participatory approaches to arrangements for health and safety including well-established industrial relations cultures in which the role of trade union representation, negotiation and consultation as well as long-standing provisions for trade union-appointed health and safety representatives are prominent, as is a relatively high trade union density and strong union bargaining power. Although in countries like the United Kingdom the latter features have been considerably eroded in recent decades, their legacy is arguably still felt in terms of the OSH management culture, in larger unionised enterprises especially.

Other groups of countries came later to the process regulatory standards that typify the framework directive and in many cases their adoption of the directive required a complete overhaul of national provisions such as in some of the southern European countries like Italy, Spain and Greece (4) and in some central EU countries such as Germany (1). The countries in these groups (1 and 4) along with the eastern European countries (5), retained an older model of OSH regulation in which specification standards and prescription often combined with a more confrontational and rigid regulatory culture than was the norm in the countries in the Nordic (2) and United Kingdom and Ireland (3) groupings. They also arguably had more highly regulated employment relations systems in place in which the freedoms of collective bargaining to determine negotiated compromises were less in evidence and therefore the environment for the generation of participative approaches to health and safety management may have been constrained. As we have already said, these are oversimplifications and there are numerous exceptions, but if they are even broadly true, we would expect to find some differences in outcomes between the countries we have categorised in groups 2 and 3 and the rest.

Figure 7.2.2 shows the (weighted) proportion of workplaces in each group reporting that they had the combination of: high management commitment **and** both general and specialist OSH forms of worker representation in place. Proportions varied from 60 % of enterprises in the Nordic countries to 19 % in the eastern countries. (It needs to be stressed that these findings are not a function of enterprise size — see Figure 7.2.4 below). It would seem that a more likely explanation for them might reside in their familiarity with the kind of participatory management and process-orientated regulation of health and safety that has been the long-standing experience of countries in groups 2 and 3.

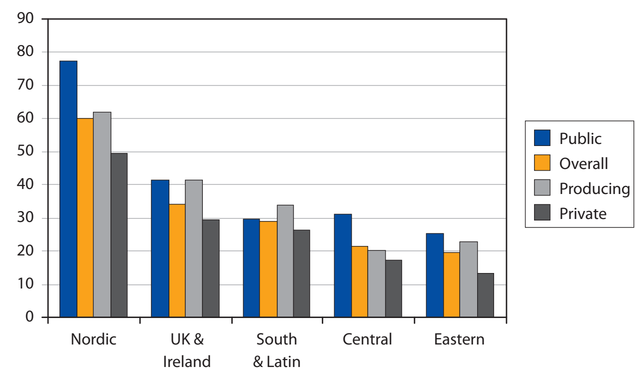
We next looked at high levels of management commitment and both forms of representation by sector groups and by regulatory framework type (Figure 7.2.3). The pattern of highest proportions of high management commitment combined with both forms of worker representation in the public services sector and lowest proportions in the private services sector was consistent for the central, Nordic and former eastern countries. It was also very similar in the United Kingdom and Ireland, though here proportions in the producing industries sector were almost identical to those in the public services sector. In the southern and latin countries, however, highest proportions were found in the producing industries sector. In addition, although overall proportions were highest in the Nordic countries (60 %), this was also where the greatest difference from highest (public services sector — 77 %) to lowest (private services sector — 49 %) was found (a difference of 28 points). The smallest difference was in the southern and latin countries (varying from 33 % for the producing industries sector to 26 % for the private services sector; a difference of 7 points).

Figure 7.2.2: **Proportions (%) of both general and specialist OSH worker representation (*) in combination with high management commitment to health and safety by country group**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Figure 7.2.3: **High levels of management commitment to health and safety and both forms of representation (*) by sector groups and by regulatory framework type (%)**



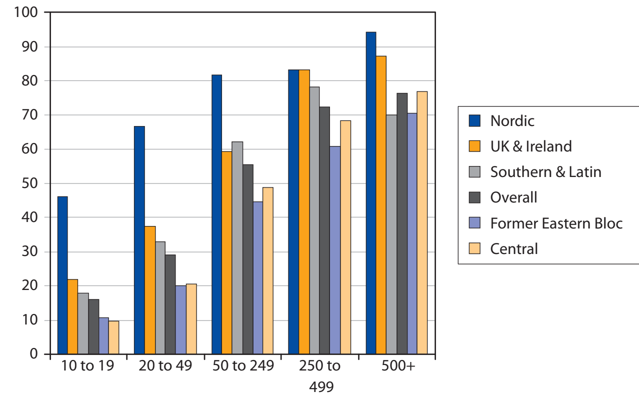
(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Figure 7.2.4 breaks our analysis down further by showing the same (weighted) proportions for each group of countries within five enterprise size-bands. First, it is clear that, as we might by now expect, the proportion of workplaces with this combination of factors increases by enterprise size: from 16 % overall of the smallest enterprises (with workforces of 10 to 19) to 77 % overall of the largest enterprises (with workforces of 500 or more). Second, it is also clear that the pattern by country group is broadly consistent across the enterprise size-bands with the Nordic countries having the highest proportions at each level, the United Kingdom and Ireland coming next in all cases bar one and the eastern countries having the lowest proportions at each level (except the smallest where the central countries were marginally lower). In addition, however, the differences from highest to lowest are much greater among the small and medium-sized enterprises. For example, among those with workforces of 20 to 49, 67 % of Nordic enterprises report having high management commitment and both forms of worker representation in place compared to 20 % of eastern countries (a 47 point difference) while comparable figures among those with workforces of 500 or more were 94 % and 70 % respectively countries (a 24-point difference).

This latter difference is particularly interesting given the combination of comparatively high trade union density in smaller firms in Nordic countries than elsewhere and the systems for regional health and safety representatives that operate in some of these countries, notably in Sweden in all sectors and in Norway in construction.

This is further supported by Figures 7.2.5 and 7.2.6 in which both general and specialist OSH worker representation in combination with high management commitment are shown by country for enterprise size ranges 10–19 and 20–49.

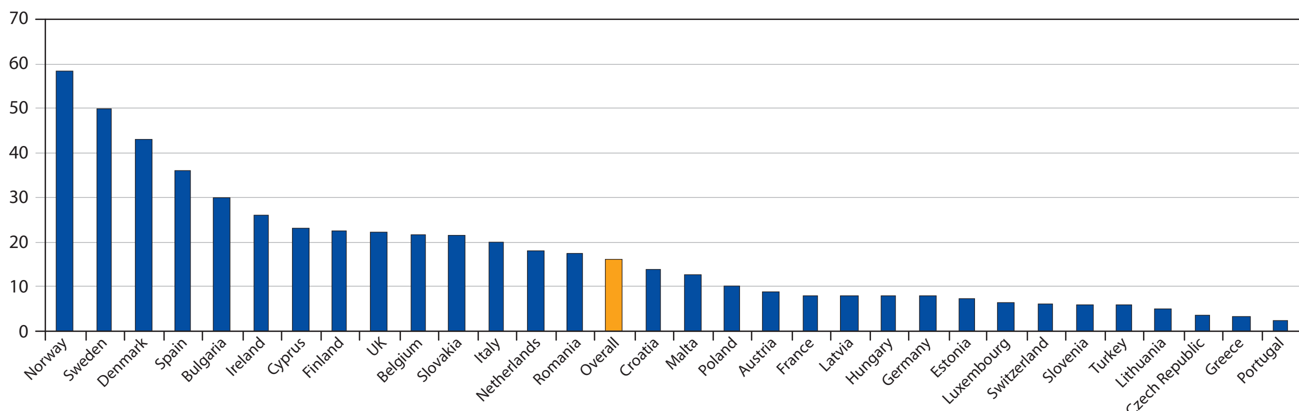
Figure 7.2.4: **Proportions (%) of both general and specialist OSH worker representation (*) in combination with high management commitment to health and safety by country group and enterprise size**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

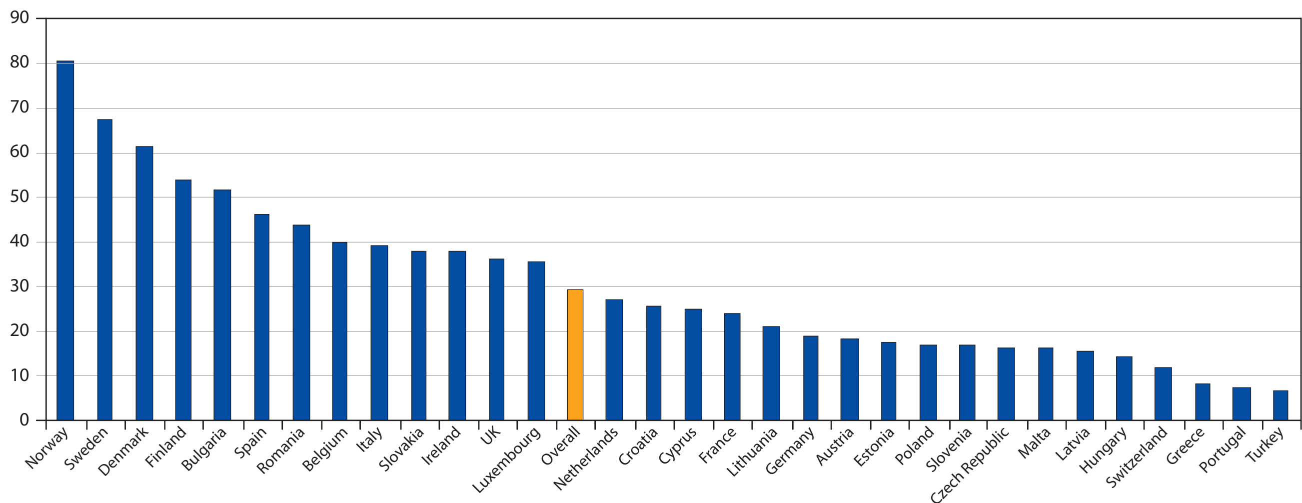
These findings are tentative but, given the limitations of the ESENER survey discussed above, in particular the over-representation of enterprises with worker representatives, the differences they suggest are likely to be understated in this dataset. These results are, therefore, useful indicators of the need for further investigations of what is going on in the operation of different national arrangements for participative OSH management, especially from the perspective of the wider regulatory and policy contexts in which they are set. We shall return to this in the concluding section of the report.

Figure 7.2.5: **Levels (%, weighted) of both general and specialist OSH worker representation (*) in combination with high management commitment to health and safety among enterprises with 10 to 19 employees by country**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

Figure 7.2.6: **Levels (%, weighted) of both general and specialist OSH worker representation (*) in combination with high management commitment to health and safety among enterprises with 20 to 49 employees by country**



(*) Forms of worker representation: General — works council and/or trade union representative; Specialist OSH — health and safety committee and/or health and safety representative.

8. A national case study — the United Kingdom Workplace Employment Relations Survey (WERS) 2004

8.1. Introduction

The nature and scale of the data collection exercise underpinning ESENER, both in terms of its relatively large sample size, the survey being conducted by telephone and the complexity of collecting comparable cross-country data, means that the level of detail that can be achieved with respondents is inevitably limited in some areas. It collects relatively limited information about the characteristics of the participating workplaces. Furthermore, in light of other investments in comparable European data on employment relations, such as the European Company Survey conducted by Eurofound, it was not the aim of ESENER to collect detailed information about the nature of employment relations at participating workplaces. We therefore undertook a detailed case study on the United Kingdom, based upon the 2004 United Kingdom Workplace Employment Relations Survey to provide some comparative detailed national-level analysis. We summarise some of the findings from this case study that help to support the ESENER analysis here. The full report of the case study is presented in the Technical Report (Annex 2). Available at: http://osha.europa.eu/en/publications/reports/esener_workers-involvement_annexes/view

The first of the Workplace Industrial Relations Surveys (WIRS) was conducted in 1980, followed by further surveys in 1984, 1990 and 1998 (when it was renamed the Workplace Employment Relations Survey (WERS)). The latest was conducted in 2004 with the aim of providing a nationally representative account of the state of employment relations and working life at British workplaces. Its scope extends to cover all workplaces with five or more employees, located in Great Britain (England, Scotland and Wales) and engaged in activities within Sections D (Manufacturing) to O (Other Community, Social and Personal Services) of the Standard Industrial Classification (2003). The survey covers both private and public sectors. The analysis of WERS is undertaken on the full sample of respondents. It is therefore noted that results are not directly comparable to ESENER due to the small establishments included within the WERS survey (those with five to nine employees).

8.2. Structure of the analysis

The WERS survey provides a rich source of data regarding worker representation, OSH management practices and the involvement of workers in these practices. It is possible to consider how the presence of different forms of representation affect the nature of consultation that occurs within the establishment with respect to health and safety matters and how the presence of different types of representation affects whether management negotiates, consults, informs or does not inform representatives about OSH issues. It also provides information about the incidence of workplace injuries and work related ill health during the previous 12 months, enabling rates of both workplace injury

and work related ill health to be estimated and further analysis to explore whether consultation at the workplace contributes to lower rates of occupational ill health.

8.3. Worker representation in the United Kingdom

It can be seen from Table 8.3.1 that unions are present within 31 % of workplaces with five or more employees (based upon weighted data). However, there is considerable variation in the nature of this union representation. Eight percent of workplaces have unions that managers regard as not being recognised for the purpose of negotiating pay and conditions and 15 % of workplaces have recognised unions that are without any stewards or representatives. This represents almost just under two thirds of all workplaces with recognised unions. Therefore only 8 % of workplaces in the survey are observed to have a recognised union with stewards or representatives. Data from the ESENER survey indicates that 13 % of workplaces with 10 or more employees within the United Kingdom have trade union shop-floor representation, broadly comparable with the estimate provided by WERS.

In addition to the presence of unions at the workplace, WERS asks about other forms of representation, including joint consultative committees, works councils or representative forums. Nine percent of workplaces with five or more employees report having such committees. This is considerably lower than the 37 % of United Kingdom workplaces with 10 or more employees reported by ESENER as having a works council. Whilst health and safety issues may be included in the remit of such committees, a large majority of these committees discuss a range of issues and therefore do not focus specifically on health and safety issues. Eight percent of establishments have employees other than union representatives who act as representatives of other employees in their dealings with management, in addition to any who are concerned exclusively with health and safety. As with the joint committees, these representatives may represent employees on issues of health and safety although they do not focus specifically on health and safety issues.

Table 8.3.1 also reports the proportion of workplaces that have forms of representation that are specifically related to issues of health and safety. It is noted that these forms of health and safety representation are in addition to the general forms of representation outlined above. Eight percent of workplaces report the presence of health and safety committees. Those workplaces with no such committees are additionally asked whether there are any health and safety representatives who are additional to any other ‘general’ representatives at the workplace, such as stewards. A further 2 % of workplaces report that they have such workplaces. Combined with health and safety committees, it is therefore estimated that 9 % of workplaces have specific forms of representation that are exclusively dedicated to issues of health and safety. However, it must be acknowledged that representation on health and safety issues may also be covered by other forms of general representation at the workplace.

Further analysis of WERS presented in the Technical Report (Annex 2) reveals that general representation and representation specific to health and safety at the workplace are complementary to each other as opposed to being substitutes for each other. That is, specific forms of representation tend to be present at workplaces where forms of general representation are also present. The high proportion of workplaces within WERS where unions are absent combined with the relatively low proportion that have a works council suggest that a far lower proportion of United Kingdom workplaces have some form of employee representation with reference to health and safety issues than that found within the ESENER survey, where for the United Kingdom almost 90% of establishments are reported as having either a works council, a recognised workplace trade union representative or a health and safety representative (or committee). We believe that the evidence from WERS provides a far more realistic estimate and one that is in keeping with comparable data on union presence and worker representation in other EU Member States.

Table 8.3.1: **General and specific worker representation**

Form of representation	Unweighted	Weighted
Coverage: Workplaces with 5+ workers		
Unionisation (total = 100 %)		
Non-unionised workplaces	41.0	68.8
Workplaces with non-recognised unions	11.9	8.0
Workplaces with recognised unions without a steward or representative	13.4	15.4
Workplaces with recognised unions with a steward or representative	33.7	7.8
Other forms of general representation		
Workplaces with committees of managers and employees concerned with consultation	35.9	8.7
Workplaces with non-union reps or representatives from non-recognised unions	18.4	7.6
Specific representation		
Workplaces with a dedicated health and safety committee	30.5	7.7
Workplaces without a committee which have a dedicated health and safety representative	4.1	1.6
Either	34.6	9.3

In Table Ax2.2 of Annex 2 in the Technical Report we consider how the nature of union representation varies across establishments with different characteristics. It is more likely in larger establishments, those in the public sector and on a related subject those sectors of the economy dominated by public sector employment such as utilities, transport, education and health. Worker representation on matters of health and safety is greater within larger workplaces and workplaces within the public sector. In terms of variations by sector, workplaces within traditional heavy industries (manufacturing, utilities), transport and communication and public administration exhibit the highest levels of specific representation. Levels of representation are lowest within the construction and other business services sectors. As with general representation, levels of representation are higher in workplaces that have been established for longer. Levels of specific representation are lower in workplaces that are dominated by female employment, a pattern also observed in terms of the presence of union representatives or stewards. Specific representation is also higher within workplaces that are dominated by the employment of people from minority ethnic populations. Additional more detailed analysis of factors affecting forms of representation presented in the Technical Report (Annex 2) confirms these findings and together this generally corroborates what we found in the ESENER sector analysis reported earlier.

8.4. Workplace characteristics and consultation

Within WERS, managers are asked about the nature of consultation that occurs on health and safety matters (Technical Report, Annex 2, Tables Ax2.5 and Ax2.6). Levels of consultation are lower within smaller workplaces where almost a third of managers report that there is no consultation between themselves and employee representatives. The absence of consultation is more likely to occur within private sector United Kingdom-owned establishments and within those workplaces that have been established within the last 10 years. In terms of the industrial sector, establishments within the construction, wholesale and other business services sectors are more likely to report low levels of consultation. Managers of workplaces characterised by a relatively high concentration of older workers and workers from ethnic minority backgrounds appear less likely to report that there is no consultation with representatives with respect to health and safety. In contrast, managers of workplaces characterised by a high concentration of women are more likely to report that there is no consultation with representatives in respect of health and safety.

The first part of Table Ax2.6 (Technical Report, Annex 2) demonstrates how differences in the nature of union representation are associated with levels of consultation on issues surrounding health and safety. It can be seen that consultation is greatest within workplaces where unions are recognised and have a steward or representative. Eighty-two percent of managers in such workplaces report that they either consult or negotiate with employees on issues of health and safety. This is compared to just 23 % of managers at workplaces with non-recognised unions. Within non-unionised workplaces that have other representatives at the workplace, 48 % of managers report that they negotiate or consult on matters of health and safety. However, these workplaces have only been included in the analysis through the inclusion of a small group of non-unionised workplaces that have some other types of employee representatives and are not characteristic of all non-unionised workplaces. The levels of consultation within workplaces served only by non-union representatives are lower those observed in workplaces served by recognised unions, irrespective of whether or not such workplaces have a steward.

Levels of consultation are also relatively high within workplaces where there is also a works council present, where 77 % of managers report that they consult or negotiate with staff on issues of health and safety. But it is not clear whether the presence of such committees results in higher levels of consultation or whether it is other characteristics of such workplaces that contribute to higher levels of consultation.

In terms of specific measures, levels of consultation regarding health and safety where a health and safety committee is present are relatively high, being comparable to the levels of consultation that are observed among establishments with consultation committees and recognised unions with stewards. However, it must be recognised that the effect of specific forms of representation is being considered in the context of a sample of largely unionised establishments.

Additional analysis presented in the Technical Report (Annex 2) attempts to further disentangle the effects of workplace representation and consultation. As a result it is estimated that managers in those workplaces with a union steward are almost nine times more likely to report consultation taking place compared to those workplaces with non-recognised unions. By comparison, those workplaces with recognised unions but no steward are approximately three times more likely to report consultation taking place, underlining the association between both the recognition of unions and the representation of employees by stewards and consultation on issues of health and safety. After controlling for other workplace characteristics, including the nature of union representation, the presence of consultation committees and other non-union representatives was not found to be associated with increased levels of consultation. In terms of specific representation, the presence of a specific health and safety committee is associated with a 100 % increased likelihood of consultation taking place compared to those workplaces where there is no such committee (alternatively, such workplaces are twice as likely to engage in negotiation or consultation). Finally, the results demonstrate how specific and general representation have a complementary effect in contributing to increased levels of consultation. The combination of general and specific representation is associated with a 200 % increased likelihood of consultation taking place compared to workplaces that only have general representation.

8.5. Representation, consultation and occupational ill health

An important virtue of the WERS data is that, in addition to measures of OSH arrangements, WERS also asks managers to provide information about the incidence of workplace injuries and whether employees have suffered illnesses, disabilities or other physical

problems caused or made worse by their work. Responses to these questions can be used to estimate rates of both workplace injury and work related ill health. In theory therefore it should be possible to measure the effectiveness of OSH management practices with objective measures of workplace health and safety such as injuries and cases of ill health. However as we noted in Section 4, others who have attempted this have produced contradictory results. As Walters and Nichols have argued, there are good reasons for this (Nichols, et al. 2007, Walters and Nichols 2007). They include problems associated with unions being more likely to be found within hazardous workplaces, and employees whose occupational health is most at risk (or who already suffer from a work-related ill-health condition) may also be more likely to join a union. The presence of representation at the workplace may be further expected to improve rates of reporting among employees with respect to injuries and ill health. Therefore, whilst worker representation might be expected to improve occupational health at the workplace in comparison with the absence of such representation, the increased presence of representation in relatively hazardous sectors combined with improved levels of reporting among both employers and employees will make this difficult to demonstrate. These are apart from additional concerns regarding the quality of occupational health data collected via WERS, such as problems of recall bias similar to those previously identified with respect to individual level data collected from the United Kingdom Labour Force Survey (Davies and Jones, 2005; Davies, Lloyd-Williams, Wadsworth, 2011). Similar recall bias may apply in ESENER. In addition to recall bias, questions on OSH outcomes such as injuries and cases of ill health are also subject to social desirability bias to an extent that may vary according to cultural differences across countries.

As we saw in Section 4, Walters and Nichols went to some lengths to control for these factors in their analysis using previous WIRS data from manufacturing (Nichols et al. 2007, Walters and Nichols 2007). In so doing they were able to demonstrate with reasonable robustness that consultative arrangements that involve trades unions do have a positive impact on workplace injury rates. The time and resources available for this case study as part of the wider project undertaken here did not allow us to fully replicate their approach. It would be interesting to repeat Walters and Nichols' analyses using WERS 2004 (and later) data to establish whether the results are consistent with their 2007 findings.

Our results of the analysis of workplace injuries are therefore mixed (see Figure Ax2.2 of Annex 2 in the Technical Report). Within the production sector, the presence of non-recognised unions and recognised unions without a steward are associated with lower rates of workplace injury (Technical Report, Annex 2, Figure Ax2.2, panel 1). In contrast, the presence of any form of union representation within public services was associated with an increase in the relative incidence of workplace injuries (Technical Report, Annex 2, Figure Ax2.2, panel 3). Higher incidence of workplace injuries in those workplaces with health and safety committees is a consistent picture that emerges across each of the three sectors. In terms of work related ill health, a consistent picture also emerges across the three sectors, with the reported incidence of ill health being higher across all unionised establishments. These findings underline the problems associated with attempting to demonstrate that employee representation can have a positive influence on workplace health and safety. We think that the best explanation of these findings is found in the raised awareness of injuries and ill health and their reporting that may be associated with increased involvement of workers in consultation on issues related to health and safety. As such, it would also be expected that rates of ill health and injury would also be higher in workplaces where managers reported that workers are negotiated with or consulted on issues of health and safety and this is confirmed to some degree in Table Ax2.7 in the Technical Report (Annex 2). However, in contrast, a very consistent picture emerges within both the private and public service sectors of the economy. In terms of both injuries and ill health, those workplaces where managers negotiate with workers on issues of health and safety exhibit the lowest incidence of both injuries and ill health. The relative incidence of injuries and ill health is highest among those workplaces where managers report that they simply inform workers on issues surrounding health and safety.

However, because of limitations, referred to above, in the detail and depth with which we have been able to examine this data, we regard these results as preliminary and suggestive of the need for further investigation.

8.6. Summary

The analysis summarised in this section and presented in greater detail in Technical Report (Annex 2) demonstrates the varying forms of worker representation in the United Kingdom and how these specifically relate to the involvement of workers by employers in consultations on issues related to health and safety. It shows that, in the United Kingdom, union representation at the workplace is not a simple dichotomous distinction between those workplaces that are unionised and those that are not. The recognition of unions and the presence of union workplace representatives contribute to increased levels of consultation with employees on matters of health and safety. However, whilst the presence of consultation committees is correlated with higher levels of worker involvement in health and safety matters, multivariate analysis demonstrates that this mechanism is not estimated to have a separate and additional effect on worker involvement. The separate and additional effect of health and safety committees on worker involvement is also relatively small compared to the recognition of unions and the presence of workplace representatives. It has not been possible to demonstrate a direct relationship between worker representation and rates of work-related ill health and injury through the secondary analysis of WERS 2004 reported here (though we feel it would be worthwhile to extend the approach taken here to fully replicate the earlier work of Walters and Nichols (2007) to explore these relationships in more depth). However, within the private and public services, workplaces that negotiate and consult with employees on issues of health and safety are demonstrated to have lower rates of injury and ill health compared to those workplaces where workers are simply informed of issues related to health and safety, thus indicating the likelihood of similar effects of the role of union workplace representatives in arrangements for health and safety to those demonstrated in previous analyses of United Kingdom workplace industrial relations surveys.

9. Some comparisons with the European working conditions survey (EWCS) 2005 and 2010

There are relatively few European Union-level surveys of the experience of health, safety and working conditions in the workplaces of the EU. As we have already noted, this is one reason why the ESENER survey is an important and significant development. However, one such survey of quite long-standing is the European Working Conditions Survey (EWCS). Since its launch in 1990, the EWCS has provided an overview of working conditions in Europe. In each wave, the EWCS has been based on a random sample of workers, including both employees and the self-employed. The number of countries included in the EWCS sample has expanded over time to reflect European enlargements. It is therefore quite important that we consider possible comparisons between the findings from our secondary analysis of issues of worker representation and consultation in the ESENER data with relevant data reported in the EWCS. Unfortunately, there is little that is of direct relevance to our interests in the EWCS, since it does not directly address issues of worker representation and consultation on health and safety at work. However, two elements of its findings may be of some indirect relevance and we have therefore explored these more fully in the Technical Report (Annex 3) where we analyse some data from both the fourth and fifth waves of the EWCS. The fourth wave of the EWCS was conducted in 2005 and included data from EU-27 countries plus Norway, Croatia, Turkey and Switzerland. Fieldwork for the fifth EWCS took place from January to June 2010, with almost 44 000 workers interviewed in the EU-27, Norway, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Albania, Montenegro and Kosovo.

While no information is collected directly about the nature of worker representation or the involvement of workers on matters of health and safety (although some questions about representation more generally are included), respondents to the EWCS are asked if they think their health and safety is at risk because of their job and if their work affects their health. They are also asked about how well-informed they think they are about the health and safety risks associated with their jobs. Therefore, even if employers do not negotiate or consult with workers on issues related to health and safety, the EWCS will identify those workers who, at the very least, feel well informed about the risks associated with their work. Whilst it is of course the case that workers can inform themselves about the risks associated with their work (e.g. via their own experience) or be informed informally via the experience of colleagues imparted via on-the-job training, it would also seem reasonable to suggest that being well informed on issues of health and safety might be correlated with more formal mechanisms for providing information and consultation. In Annex 3 in the Technical Report, therefore, we explore whether those workers who report that they are well informed about the health and safety risks associated with their jobs are more or less likely to report that their jobs affect their occupational health.

We find that overall, those respondents to the EWCS who report that they are well informed about the risks associated with their jobs are less likely to perceive that work has a detrimental effect upon their health. However this observation masks a more complex situation. We also find that respondents who have discussed work-related problems with their bosses over the last 12 months are more likely to indicate that they feel well informed about the health and safety risks associated with their work, but within this group, such respondents are also more likely to report that their work has a detrimental effect upon their health, that their health and safety is at risk and that they have had an absence in the last 12 months due to a health problem or accident caused by work, thus highlighting the complex and context-specific nature of the relationship between being well informed of risks and occupational outcomes. Further analysis reveals that respondents within the United Kingdom and Ireland (closely followed by central Europe) are least likely to report that their job affects their health and are also least likely to report that their health and safety is at risk. Respondents from southern and eastern Europe are approximately 150 % more likely to report that their health has been affected by their jobs and are 70 % to 80 % more likely to report that their health and safety is at risk than respondents from the United Kingdom and Ireland. In terms of actual absence from work, however, the picture is quite different. Despite the relatively high incidence of respondents who report that their health is affected by their work and the relatively high incidence of those who state that their health and safety is at risk, levels of absence due to ill health or accidents caused by work are relatively low in the countries of southern and eastern Europe and are comparable to that estimated for the United Kingdom and Ireland. Respondents from Nordic countries are most likely to report the occurrence of a work-related absence during the previous 12 months.

We think these results point to the importance of other factors such as legislation to protect workers rights, the structure of welfare benefits and entitlement to paid sick leave in influencing the decision to take time off work as a result of ill health. Differences between these factors in the countries of the EU are more likely explanations for the differences in the results we have observed, rather than our results indicating any causative explanations to be found in relationships between perceptions of risks at work, feelings of being well-informed or otherwise and absence as a result of work-related harm.

10. Conclusions: implications for policy and future research

Our analyses of the ESENER data point to conclusions at four related levels. They suggest that:

- Worker representation is more common in larger organisations and in those operating in the public sector. It is also more likely in workplaces where health and safety, and the views of workers, are seen as a priority.

- Formal management of traditional health and safety risks is not only more likely, but is also more likely to be perceived to be effective, in workplaces where there is worker representation and where there is also a high level of management commitment to health and safety.

- Psychosocial risk management is also more likely in workplaces where there is worker representation, particularly where there is also high management commitment to health and safety. In addition, this is more likely to be effective in workplaces where employees are involved in the psychosocial risk management process (which is, itself, more common in organisations which also have worker representation in place), again particularly in combination with high management commitment to health and safety generally.

- Management of both traditional and psychosocial health and safety risks, and the effectiveness of that management, are both more likely in workplaces in which workers' representatives have both an active and a recognised role and are provided with sufficient resources.

These conclusions are consistent with and supportive of previous work in that they: (a) identify worker representation as a key part of the effective management of workplace health and safety risks; and (b) highlight that the context in which workers' representatives are working is an important factor in the relationship between worker representation and OSH risk management.

Many of the qualitative studies of the activity of health and safety representatives reviewed here also commented indirectly on the supports necessary for these activities and the barriers to its achievement. The literature to date, as summarised by Walters and Nichols (2007), offers a cogent analysis of the factors that promoted the operation of representative participation. They summarise them to include:

- properly constituted joint health and safety committees at site and departmental level;

- accountability of managers to the joint health and safety committee;

- engagement of health and safety representatives with the health and safety practitioners from the safety, health and environment departments;

- dialogue with local area and line managers within the establishment and with health and safety representatives;

- provision of the facility and time to undertake health and safety representative functions such as joint health and safety inspections, investigations of workers' complaints, making representations to managers and so on;

- involvement of health and safety representatives in risk assessment;

- involvement of health and safety representatives in reporting and monitoring OSH;

- access of health and safety representatives to workers;

- access to training for health and safety representatives.

The ESENER findings help to confirm some of these factors. But they also need to be seen in a wider context. Overall, previous research has tended to find relatively limited development of consultative structures and processes in workplaces generally and their existence pretty much restricted to those where a set of particular preconditions apply. Moreover, as the United Kingdom evidence makes clear, during the past decade there has been a clear shift away from formal joint arrangements for worker representation on health and safety and a parallel rise in so-called 'direct methods' for consulting with workers. Since such methods embrace many practices that fall outside the definition of proper consultation, the message for the future of worker representation in health and safety and for worker consultation generally is therefore quite challenging. However, in several respects the United Kingdom is not a 'typical' EU country in terms of its workplace arrangements for industrial relations. It is therefore not clear how widespread such change in other countries is and this would seem to be an important issue for future research. The same United Kingdom studies also suggest that, overall, health and safety representatives have only limited ability to find time to engage fully with these structures and processes, or to receive training to do so. Both these aspects are under the control of management and dependent on its will and capacity to facilitate such participation. There is little evidence of the influence of the regulatory agency intervening in issues of representation and consultation on health and safety and generally implementation and the workplace operation of the regulations that require them seem to be more dependent on the wider relationship between organised labour and management than on any external enforcement pressure. This may be a factor in explaining why, despite regulatory requirements, in much of the research on the activities of health and safety representatives in the United Kingdom and elsewhere, such activities are seen to fall somewhere short of their potential. The

ESENER results reconfirm the strong relationship that previous research has also shown between the presence of worker representation and good practice in health and safety management.

The message for policymakers that emerges from our further analysis of the ESENER data is twofold. Firstly it confirms the need for continued support for worker health and safety representatives and the preconditions that help to determine good practice wherever it is found. This includes the greater facilitation of appropriate training for health and safety representatives and generally greater encouragement of their role as change agents in the process of improving the management of health and safety risks in workplaces in which the preconditions for their effectiveness are possible (and the avoidance of implementation of such measures intending only to achieve an appearance of statutory compliance). Secondly, as the wider literature suggests, these preconditions for the effective operation of the present statutory requirements for worker representation on health and safety in the EU exist in reality in only a minority of workplaces. If the number of such workplaces is diminishing in the restructured world of work typical of the 'new economy,' this would seem to be an issue that also requires some attention. It seems unlikely that in these scenarios the encouragement of the application of regulatory requirements and labour relations processes that were designed with assumptions based on a previous era of work organisation and labour relations in mind will be entirely effective. There would therefore seem to be a need for some rethinking of policy and strategy to address the consequences of these changes.

From a research perspective, since many of these consequences remain relatively little documented in terms of their impact on the effective involvement of workers and their representatives in arrangements to improve health, safety and well-being at work, there remains a rich field for further study. It would be useful to explore, for example, what can be learned from existing support for good practice in some sectors and countries that may be transferable to others. Or conversely, what can be learned from the barriers to successful involvement of workers and their representatives in some countries and sectors, either to avoid their repetition in others, or in the case of large scale economic and demographic changes that are unavoidable, to explore ways in which the challenges of such new scenarios might be addressed. The contribution of ESENER to a better understanding of the involvement of worker representation in managing psychosocial risks is very welcome; nevertheless, there remains much to be understood concerning ways in which worker representation might most effectively address these and other new and emerging risks more effectively. There are further lessons to be learned from greater understanding of the possibilities for synergies amongst various prevention actors in the new economy and the extent and circumstances under which it may be possible for worker representatives to act as 'boundary spanning agents' ([8]) within its emerging structure. Regarding the methods to be employed in such future work, Walters and Nichols (2007) have pointed out that by definition, econometric analysis of the sort achieved in quantitative surveys such as ESENER, while important, necessarily stands at some distance from particular workplace-level processes and practices. It was for this reason that in their own research they combined their analysis of large-scale survey data with an in-depth qualitative study of the operation of health and safety arrangements. They argued that such a combination allowed greater understanding not only of the effectiveness of worker representation on health and safety at work but also the underlying processes that contribute to this effectiveness as well as their supports and constraints. Such arguments would also seem to apply in the case of future methodologies of research on worker representation in health and safety more generally.

In the case of follow-up to ESENER on worker representation and consultation therefore, there would seem to be several options that EU-OSHA could usefully explore.

Firstly, there is the option for including further inquiry into the presence of worker representation and consultation and its role in OSH management in a second edition of ESENER to be administered at some point in the not too distant future. The case for such inclusion is first and foremost because it forms a fundamental part of the regulatory requirement on OSH management in the EU and to ignore this in a survey on arrangements for the management of OSH risk would constitute a serious omission. Further survey work on worker representation and consultation on OSH would therefore seem to be inextricably linked to the reasons for undertaking a second edition of ESENER more generally. Since the pace of change in the structure and organisation of work in the EU has shown little sign of slowing there remains a continuing need for monitoring the effects of such change on arrangements for supporting good practice in OSH management in EU workplaces — including those on worker representation and consultation.

One of the problems we have noted in the preceding analysis is that, while we have been able to demonstrate associations between characteristics of workplaces and their management and the presence and activities of representation and consultation, the nature of a one-off survey means that it is not possible

([8]) 'Boundary spanning agents' is a term used by Marchington et al. (2005) to describe the role of certain personnel in more porous work organisations who increasingly serve to bridge communications gaps created by the restructuring and fragmenting of work organisations and the reorientation of business processes. Health and safety representatives (as well as health and safety advisers and managers) may well fill this role in many workplaces in practice, as they are often obliged to attempt to communicate directly with contractors or employees of employers other than their own on health and safety issues that may affect a wide range of workers. Walters and Nichols (2007) for example illustrate this occurrence with an account of the work of a senior trade union safety representative on a large construction site who, with the agreement of the principal contractor, liaised effectively between the workers of all the contractors and subcontractors on the site, the employees of the principal contractor and its management in representation and consultation on health and safety.

to show whether such relationships are causal or what they represent in terms of trends. Both could be made more achievable through a further survey in which some attention is paid, in the survey design, to questions of comparability with the present ESENER.

Secondly, further quantitative surveys should ideally address limitations identified during the present secondary analysis. In the case of representation and consultation on health and safety we have found these to be twofold. First there are some methodological issues in relation to response rates that may possibly explain the over-representation of arrangements for representation and consultation in EU workplaces overall. While these matters do not affect the validity of much of the ESENER findings concerning the operation of such arrangements, what supports them, or what might be regarded as good practice, they do affect the extent to which the levels of representation and consultation reported in the survey can be regarded as a reliable measure of the **extent of the effective occurrence** of these practices in workplaces generally in the EU. We would suggest that to achieve more representative findings in this respect would require more attention to ensuring a representative response during the conduct of the survey. This is not to minimise the challenges involved in such a task, but it is important if the results of the survey are to be used to make credible statements concerning the representativeness of its findings.

The other limitation we identified in the survey concerns the extent to which the proxy indicators of health and safety outcomes used in the survey add much to what is already known about the impact of representation and consultation on health and safety at national level. Nevertheless, there are some indications in our analysis in Section 7.2, that further comparisons of practices between Member States could be usefully explored in this respect. However, the area in which we perhaps have least information concerns the relationship between such arrangements and objective indicators of OSH outcomes — such as measures of the occurrence of injuries or ill health arising out of work. National surveys such as the United Kingdom WERS have sought such data in the past, but they are the exception rather than the rule. While we note the significant difficulties involved in designing and analysing surveys to meaningfully investigate associations between such objective measures and those on the occurrence of arrangements for representation and consultation — which are even more challenging in international surveys — it would be important to try and develop reliable questions that are able to address this issue in the context of a future ESENER.

Aside from the case to be made for another ESENER survey to be undertaken in the future, we think that much could be learned concerning good practice through the conduct of more detailed qualitative studies on worker representation and consultation in OSH. If it were possible to follow up the indicative findings of ESENER with such qualitative studies (through perhaps broadly comparable case studies in different countries and sectors), far more in-depth information could be obtained concerning the supports and constraints of good practice as well as an improved understanding of what is transferable across sectors and countries in this respect. It would also help to achieve the balance of research methods that Walters and Nichols (2007 and 2009) found most helpful in their studies (see above).

More significantly, such qualitative approaches could most usefully build on existing ESENER analysis in exploring the implications for good practice of changes currently taking place in the structure and organisation of work in the EU. It is important to note that the regulatory frameworks that underpin the arrangements for representation and consultation in EU workplaces were originally constructed in relation to a very different world of work to that which is experienced within the so-called 'new economy'. While in some countries (such as Italy) the legislation on OSH representation covers even micro-firms, as was shown in the overview report and confirmed in our analysis, there are some considerable differences in the level of OSH management actions carried out in-house among the smallest establishments. In countries such as Denmark and the United Kingdom high levels were reported, while in similar sized firms in Spain and Slovenia these activities were generally outsourced, leading to questions concerning whether this regulation is effective or if it only gives rise to a formal appearance of compliance. Generally, the nature of the present ESENER survey means that it is relatively weak in relation to furthering understanding of the implications for the support of good practice in representing and consulting workers on their health and safety interests in the new world of work and the regulatory, political and economic contexts in which it is framed. Here again, a combination of qualitative and quantitative approaches to research would seem to offer greater potential for advancing understanding of the implications of these changes and how best they might be addressed than by the use of quantitative methods alone.

If the effectiveness of the participative approaches to managing OSH that characterise the measures of the EU Framework Directive 89/391 is of interest, then the indicative findings we discussed in Section 7 could also be the subject of further research. Our analysis of the ESENER data suggests: (a) that the combined effects of the involvement of workers and their representatives with high commitment towards OSH management are associated with reporting positively on measures of health and safety management and their resulting process and outcomes; and (b) further that these conditions are more likely to be found in countries with more embedded approaches towards participative OSH management in their regulatory systems than in countries where these approaches to regulating OSH management are the result of more recent legislative changes. It is unlikely that such differences are solely the consequences of regulatory style. It would seem more plausible that they are caused by a combination of factors that include regulation but also embrace something of organisational cultures and labour relations as well as wider economic and political features of the countries concerned. Our results are no more than suggestive of these possible differences. However, given the limitations of the ESENER survey discussed above, in particular the over-representation of enterprises with worker representatives, such differences

are likely to be understated in this dataset. Arguably, therefore, these findings are promising indicators of areas in which further research could be undertaken. It would be useful to understand more precisely, for example, the drivers of good practice that support approaches to managing OSH in these situations as well as the features of arrangements for representation and consultation that work best in relation to different national systems and cultures. Additionally, it would allow opportunity to explore further and compare in depth the consequences of different kinds of specific arrangements for representation and consultation on OSH, such as those focused on works councils on the one hand and those focused on health and safety representatives and joint health and safety committees on the other. Again, we think that further qualitative and comparative studies are likely to be the best approaches to reaching a greater understanding of these matters.

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