European Agency for Safety and Health at Work

ISSN 1831-9343

EN

Third European Survey of Enterprises on New and Emerging Risks (ESENER 2019): Overview Report

How European workplaces manage safety and health

European Agency for Safety and Health at Work

ESENER

Third European Survey of Enterprises on New and Emerging Risks (ESENER 2019): Overview Report

How European workplaces manage safety and health

EU-OSHA's Europe-wide establishment survey aims to help workplaces deal more effectively with health and safety and to promote the health and wellbeing of employees. It provides cross-nationally comparable information relevant for the design and implementation of new policies in this field.

Project management: Xabier Irastorza and Ioannis Anyfantis

Authors: Andrew Howard, Radoslaw Antczak (Oxford Research) and Karen Albertsen (TeamArbejdsliv).

This report was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect the views of EU-OSHA.

EU-OSHA's Network of Focal Points.

Luxembourg: Publications Office of the European Union, 2022

Overview Report of the Third European Survey of Enterprises on New and Emerging Risks (ESENER 2019)

Print	ISBN 978-92-9479-675-2		doi:10.2802/413156	TE-RO-22-006-EN-C
PDF	ISBN 978-92-9479-674-5	ISSN 1831-9343	doi:10.2802/881291	TE-RO-22-006-EN-N

Contents

Country codes

Abbreviation (alphabetical order)	Country
AT	Austria
BE	Belgium
BG	Bulgaria
CH	Switzerland
CY	Cyprus
CZ	Czechia
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HR	Croatia
HU	Hungary
IE	Ireland
IS	Iceland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MK	North Macedonia
MT	Malta
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
RS	Serbia
SI	Slovenia
SK	Slovakia
UK	United Kingdom

1. Executive summary

1.1 Introduction

Building on the two previous waves (2009 and 2014) of the European Survey of Enterprises on New and Emerging Risks (ESENER), this overview report provides the results on the third wave (ESENER 2019). ESENER 2019 included responses from 45,420 establishments in 33 countries, comprising the EU-27 as well as Iceland, North Macedonia, Norway, Serbia, Switzerland and the United Kingdom.

ESENER is established as a leading monitoring tool for occupational safety and health (OSH) in Europe. It is a go to source for European and national policymakers when key evidence is needed to inform policymaking or the approach to further research.[1]

These results are published at a time when there is a vital need to reinforce the approach to OSH management. The COVID-19 pandemic has rapidly transformed the working environment, demanding re-evaluation of the risks that workers face and the adoption of measures tailored to new circumstances.

While the results cannot be interpreted as an indication of the extent of legal compliance, ESENER 2019 does provide insights into the steps and measures adopted to secure a safe working environment in establishments. The survey responses can be considered in the context of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (also referred to as the European Framework Directive on Safety and Health at Work) and supporting legislation that aims to encourage the introduction of measures to improve OSH – while recognising that OSH rules differ across countries, sectors and categories of workers.[2] In line with this, the ESENER results aim to contribute to the Vision Zero approach to work-related deaths in the EU[3] by providing data that help increase risk awareness and ultimately support the enforcement of existing rules and guidelines.

The approach and scope of ESENER 2019 aligns mostly with that of ESENER 2014, providing the opportunity to measure longitudinal trends. Therefore, the results help spotlight any changing patterns over time in key areas such as the reported presence of health and safety risks, OSH management, psychosocial risks, drivers of and barriers to OSH – including psychosocial risk management – and employee involvement. ESENER 2019, however, goes further in covering some new topics relevant to OSH management: these include digitalisation, perceptions of the quality of external preventive services, and evaluation of accidents or sickness absence.

This edition of the ESENER overview report focuses on complementing the evidence from ESENER with other primary and secondary data sources. It features chapters exploring the role of legislation as a barrier to and driver of OSH management and the impact of employee participation in OSH management.

Moreover, this report follows the approach taken by prior ESENER data analyses in comparing results by country, sector and establishment size. Where relevant, this information may encourage policy-makers to formulate policies to keep pace with the highest standards in Europe and address clear gaps.

In addition, regression analyses were conducted to explore factors that are associated with the adoption of OSH management measures, by assessing the strength of the relationships between different ESENER variables. As expected, the results confirm that when the right OSH management approaches are introduced, establishments are more likely to take steps to secure a safer working environment.

The ESENER results also point to a need for stronger OSH management, considering the technological changes in the economy, better management of the psychosocial work environment, and support for micro and small establishments in fulfilling their OSH management obligations, given their increasing importance as key players flexibly supporting global supply chains.

1.2 Key findings

- Establishments recognised that health and safety risks are endemic in their working environments. In particular, these include risks associated with musculoskeletal disorders (MSDs), and some psychosocial risks, linked to work with customers, patients and pupils, in particular. It was also noted that the reported presence of risks in establishments increases when an OSH representative is appointed and external OSH services are used.
- However, some psychosocial risks were reported less frequently, even though one would expect the opposite. This is mainly related to internal establishment factors such as 'long or irregular working hours' and 'poor communication or cooperation within the organisation'.
- Despite the challenges, the introduction of measures to address MSDs (such as ergonomic equipment) has not increased over the period from ESENER 2014 to ESENER 2019.
- Similarly, measures introduced to manage psychosocial risks are not widespread among establishments. Yet our analysis suggests that if establishments strengthen their approach by introducing procedures to deal with cases of threats and abuse,

1 EU Strategic Framework on Health & Safety at Work (2021-2027): https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12673-Health-&-Safety-at-Work-EU-Strategic-Framework-2021-2027-_en

2 Framework Directive on Safety and Health at Work (Directive 89/391 EEC): https://osha.europa.eu/da/legislation/directives/the-osh-framework-directive/1

3 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0323&from=EN

or action plans to reduce work-related stress, the prevalence of psychosocial risks may be reduced.

- The latest survey's results resemble those of prior waves, indicating that about three-quarters of EU-27 establishments conduct risk assessments regularly: this suggests that the EU Framework Directive on Safety and Health at Work continues to play a significant role in encouraging the use of formalised measures to manage OSH.
- However, micro and small enterprises (MSEs) continue to face acute OSH management challenges. While most large organisations conduct risk assessments regularly, smaller organisations, especially micro establishments, are less likely to do so. Moreover, such discrepancies are common among establishments of different sizes for most of the OSH management measures covered by ESENER.
- While ESENER 2019 gathered evidence before the onset of the COVID-19 pandemic, it can be suggested that establishments were not well prepared in advance of the crisis. For example, about a quarter of companies do not conduct risk assessments regularly, and many risk assessments do not entirely cover all relevant work premises such as homes, nor all persons at risk from hazards in the working environment. Moreover, despite the confirmed widespread introduction of digital technologies, most establishments have not discussed their OSH-related impact.
- In terms of the main reason given for not completing a risk assessment, establishments suggested that the 'risks are already known'. However, this research revealed that the chance for regular risk assessments increases when a health and safety representative is present in the establishment. To improve coverage of workplaces at home in regular risk assessments, it is also important that employees be involved in the implementation of OSH measures – this shows that employees play a valuable 'bottom-up' role in ensuring the completeness of OSH management activities.
- Comparing the findings of previous waves with ESENER 2019 has revealed a reduction in inspectorate visits across the EU-27. Yet, as one would expect, our analysis indicated that when establishments undergo an inspection, they are likely to become aware of more risks in their working environment.
- In terms of the level of commitment shown across the EU-27, there has been a reassuring slight increase in top management discussions on OSH. The analysis highlighted that if OSH commitment is strengthened, other OSH practices are then more likely to be adopted, such as regular completion of risk assessments and appointment of health and safety representatives.
- Yet compared to previous ESENER waves, it is concerning that the 'persons most knowledgeable about OSH' in establishments who were selected for interview under ESENER are now less likely to receive training.

2. Introduction

2.1 ESENER 2019 - OSH establishment survey

This overview report provides the results on the third wave of the European Survey of Enterprises on New and Emerging Risks (ESENER 2019). The data collection phase for ESENER 2019 was completed in summer 2019; the previous ESENER waves were finalised in 2009 and 2014.[4]

ESENER plays a key role in the monitoring of occupational safety and health (OSH) in Europe. Feedback from the 'person who knows best about OSH' provides unique insights on how health and safety is managed in the workplace. No other survey offers the same level of coverage of the practices and methods used to secure a safe working environment and help develop a safety culture. This is also the case for risks such as musculoskeletal disorders (MSDs) and psychosocial risks such as work-related stress, violence and harassment.

By considering the type of OSH insights provided, ESENER can inform policy-makers of the progress that has reportedly been made in establishments. In doing so, it highlights, where relevant, areas that would benefit from stronger actions or measures to support improvements in OSH management.

Moreover, the ongoing need for better policy-making to protect the working environment should be considered in light of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (also referred to as the European Framework Directive on Safety and Health at Work) and supporting legislation that aims to support the introduction of measures to encourage improvements in OSH.[5] Of course, the implementation of European legislation differs from one country to another, and the legal and practical compliance and enforcement aspects may vary by sector, category of workers and size of enterprise.

Moreover, ESENER 2019 is well placed to provide longitudinal monitoring of OSH management in Europe through comparisons with the prior wave, ESENER 2014.[6] This is possible due to the consistency in approaches followed in both waves, including:

- using a largely uniform set of survey questions;
- interviewing a single respondent per establishment, that is, the person 'who knows best about OSH';
- sampling establishments with five or more employees;
- covering a common set of sectors: NACE[7] Rev. 2 sectors, A to S (all activity sectors except for private households (NACE T) and extraterritorial organisations (NACE U)).

However, ESENER 2019 introduces and covers some new issues including digitalisation, perceptions of the quality of external preventive services, and evaluation of accidents or sickness absence. The evidence gathered in these areas provides further understanding on how OSH is managed in establishments.[8]

2.2 Key features and findings of the ESENER 2019 overview report

2.2.1 Core themes and report structure

Using both ESENER and other data sources, this report provides insight into the following key areas of OSH management:

- **Health and safety risks. (Chapter 3):** the risks faced by some employees in establishments, including safety, ergonomic, chemical and psychosocial risks. Responses to these questions shed light on the scale and general awareness of such risks.
- **OSH management (Chapter 3):** the approach to conducting risk assessments, the level of commitment to OSH, the approach to monitoring OSH, and the methods applied for the management of employee health and the uptake of OSH advice.
- **Psychosocial risks and digitalisation (Chapter 4):** the prioritisation of psychosocial risks, whether measures have been adopted to manage such risks, and the digitalisation trends in the workplace and their consideration in an OSH management context.
- **Drivers of and barriers to OSH and psychosocial risk management (Chapter 5):** the aspects that may encourage or discourage establishments from fulfilling their OSH duties.
- **Impact of legislation on OSH management (Chapter 6):** the specific impact of legislation on OSH management as both a driver of and a barrier to compliance.
- **Employee participation (Chapter 7):** the role of employee involvement in OSH management and how it is implemented in practice.

4 ESENER methodology: https://visualisation.osha.europa.eu/esener/en/about-tool

5 Framework Directive on Safety and Health at Work (Directive 89/391 EEC): https://osha.europa.eu/da/legislation/directives/the-osh-framework-directive/1

6 There are some key differences in the approach taken by ESENER 2009. While the OSH themes covered were similar, the questions used were worded differently. Two survey interviews were conducted: one with the highest-ranking person responsible for OSH, the other with an employee representative for OSH. Establishments with 10 or more employees were interviewed. NACE sectors B to S were covered.

7 NACE Statistical Classification of Economic Activities in the European Community: https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF.pdf/dd5443f5-b886-40e4-920d-9df03590ff91?t=1414781457000

8 Further details on the ESENER survey: European Survey of Enterprises on New and Emerging Risks (ESENER) results visualisation - Safety and health at work - EU - OSHA (europa.eu)

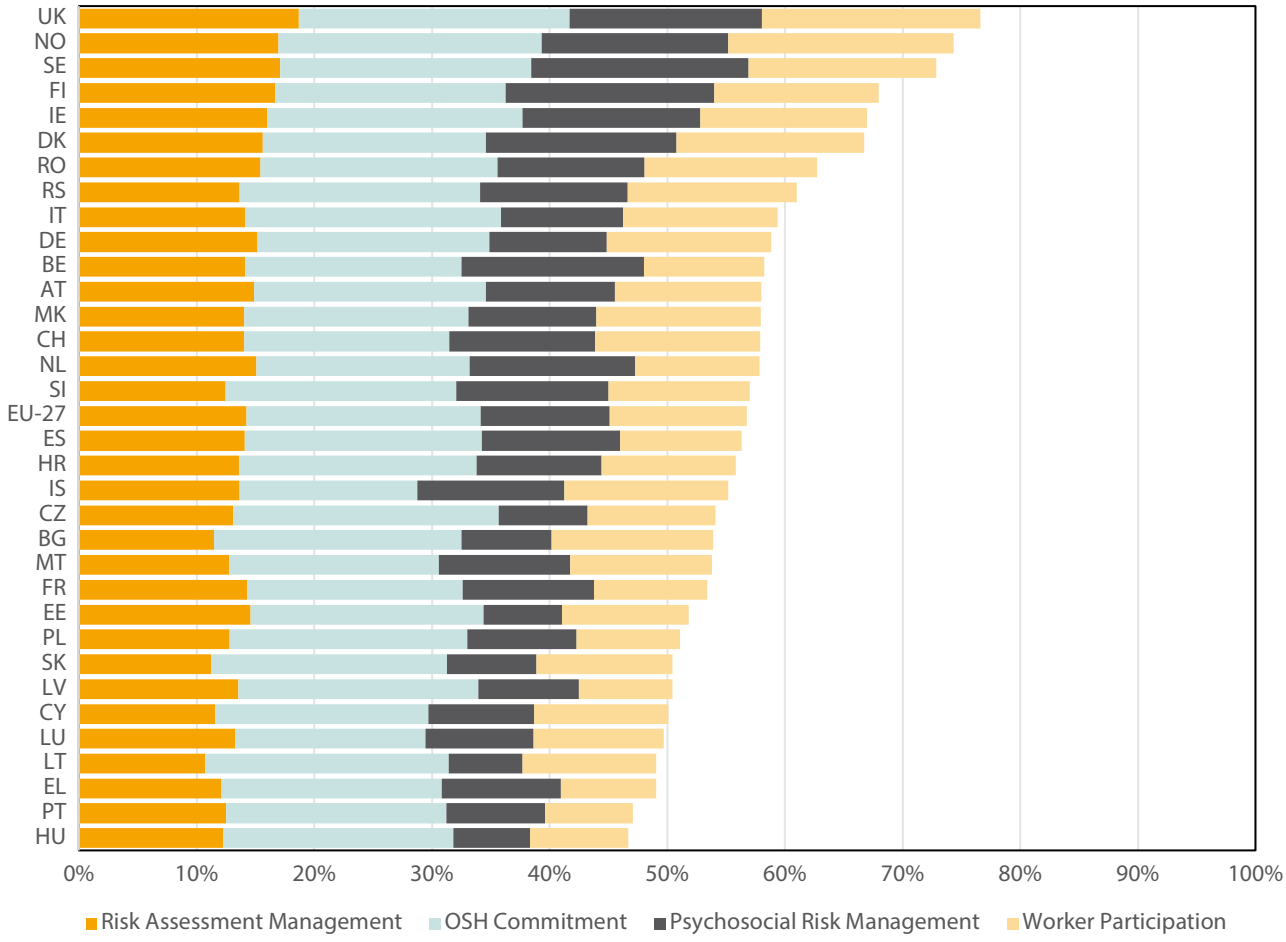
- **Function of the respondent (Chapter 8):** an analysis of whether the person responding to the ESENER survey (managers, OSH employee representatives, and so on) impacts the type of response provided.

2.2.2 Composite indicator on OSH management

As mentioned, ESENER provides insights into the national differences in OSH management in the workplace. This is key to policy-making: it shows that strong adoption of practices in one country may be achievable in others, thus providing, where relevant, encouragement for more focused measures to secure a safer working environment.

To provide high-level findings on the evidence provided by ESENER 2019, an OSH management composite indicator was formulated. This measure comprises and weights country results to 20 ESENER questions under several areas of OSH policy: risk assessment management, OSH commitment, psychosocial risk management and employee involvement[9] (see **Figure 1**).

Figure 1: ESENER 2019 OSH management composite indicator[10]



As with previous waves, and as highlighted by **Figure 1**, a key finding from ESENER 2019 is that there are significant distinctions in the approach to managing OSH across countries, and also across establishments in the same country. Where relevant, ideally the policy-making reaction would be to explore how these differences can be reduced; specific OSH management aspects examined under ESENER 2019 are discussed in more detail in the following chapters.

9 See Technical Annex for further details on the composite indicator methodology.

10 Each single indicator (risk assessment management, OSH commitment, psychosocial risk management, worker participation) is based on the establishments' weighted responses to a set of four to six ESENER 2019 questions. At this aggregate level, the results can be interpreted as the extent (percentage) a country fulfils an OSH policy area represented by each indicator. Yet, of course, for each disaggregated ESENER question, the results show the estimated percentage of establishments that reportedly follow a particular measure per country.

2.3 Overview of the ESENER 2019 survey

2.3.1 Structure of the ESENER 2019 questionnaire

The ESENER 2019 questionnaire comprises approximately 50 'content' questions seeking information from establishments on key areas of OSH management. These areas are explored in several sections of the ESENER questionnaire, as seen in **Table 1**.

Table 1: ESENER 2019 questionnaire[11]

Section	Questionnaire
1	Contact phase
2	Reminder and other callbacks
3	Special screening questions
4	Introductory questions
5	Day-to-day OSH management I: OSH expertise and general policy
6	(Traditional and new) health and safety risks in the establishment
7	Day-to-day OSH management II: risk assessments
8	New risks: psychosocial risks and digitalisation
9	Employee participation in OSH issues
10	Country boost NO SI IE
11	Final background and assessment questions

2.3.2 ESENER 2019 survey methodology

ESENER is a statistically representative survey based on a disproportional sample design that is corrected by establishment and employee weighting factors. ESENER 2019 included responses from 45,420 establishments and 33 countries from the EU-27, Iceland, North Macedonia, Norway, Serbia, Switzerland and the United Kingdom.

Since a harmonised, high-quality sampling frame is not available for all countries sampled, the 'best available frame' is selected for each country. However, efforts are made to ensure that the samples have cross-national comparability and a balanced overview of the composition of the national economy. Two pieces of information about the establishment – size class and sector of activity – are taken as a base for drawing the gross samples.

Some samples received national funding for additional 'boosts', namely Ireland (+ 1,250), Norway (+ 450) and Slovenia (+ 300).

The questionnaire was developed by a team comprising experts in survey design and in OSH (particularly psychosocial risks), together with EU-OSHA staff.

Data collection was primarily conducted through computer-assisted telephone interviewing (CATI) but to reduce non-response, a small number of computer-assisted web interviews (CAWIs) were conducted.

2.4 Methodology for the overview report

2.4.1 Bivariate analysis

As with previous ESENER reports, a key focus was to provide a bivariate analysis of the results, using key contextual characteristics, namely 'country', 'NACE sectors A to S' and 'establishment size'.[12] The rationale was to reveal how these contexts are linked to comparatively different approaches in managing the working environment, and to reveal how and if the situation in these contexts had changed since ESENER 2014.

2.4.2 Multivariate analysis

Multiple logistic regression was used to provide further insights into the relationships between the variables provided by the ESENER 2019 data set. The idea was to explore a series of questions on the factors likely to be associated with good OSH management in establishments. The results of the regression analysis are included in the Technical Annex and result particulars are indicated in the relevant chapters.

For each question, two versions of the models were tested. In Model 1, the idea was to learn firstly which OSH management practices likely 'predict' other OSH management outcomes. For example, if an establishment undergoes a visit from the labour inspectorate, it may be associated positively with the adoption of other OSH management practices as a result.

Model 2 introduced contextual control factors such as the country, sector and establishment size. This made it possible to detect what was more important in the association with the OSH management outcome of interest – OSH management practices or contextual factors. Through interpretation of the results, it was also possible to infer if OSH management practices 'work' in attaining the OSH management outcome of interest in all contexts[13]. The specific questions addressed by the regression analysis are described in **Table 2**.

11 See ESENER 2019 questionnaire: https://oshwiki.eu/images/d/d1/Master_questionnaire_2019.pdf

12 Using the enterprise size categories based on the staff headcount for micro (9 or fewer), small (10 to 49), medium (50 to 249) and large (250 or more) enterprises: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Enterprise_size

13 The findings are presented in a sequential order, Model 1 being followed by Model 2. It can happen that results that are significant under Model 1 are not so anymore under Model 2 –or even change the direction of the association. Therefore, conclusions of the regression analyses can only be taken after checking for the context (Model 2).

Table 2: Questions explored through regression modelling

No	Research question
1	What key OSH factors (independent variables) as well as organisational, geographical and industry factors are associated with heightened reporting of physical, ergonomic and chemical risks in establishments? (Q200)
2	What OSH factors (independent variables) as well as organisational, geographical and industry factors are associated with heightened reporting of psychosocial risks in establishments? (Q201)
3	What conditions are associated with the completion of risk assessments?
4	What conditions are associated with the coverage of homes in risk assessments?
5	What conditions are associated with also covering by risk assessments staff not on the payroll?
6	What conditions are associated with the involvement of employees in the design of measures following a risk assessment?
7	What conditions are associated with not conducting risk assessments for the reason that the risks are already known?
8	What conditions are associated with the regular discussion of health and safety issues at top management level?
9	What conditions are associated with the provision of training on how to manage health and safety in their teams for team leaders?
	Independent variables used in questions 1 to 9: 1. the presence of a health and safety representative; 2. a labour inspectorate visit; 3. a risk assessment conducted by external suppliers or internal staff; 4. a risk assessment documented in written form; 5. employees involved in the measures' implementation;[14] 6. used OSH services; 7. reasons for addressing health and safety.
10	How do OSH management practices and contextual factors are associated with various types of psychosocial risks identified in the establishment (each risk separately: time pressure, poor communication, job insecurity, difficult customers, and long or irregular working hours)?
11	What conditions are associated with the discussion of possible impacts of digital technologies within an establishment?
	Independent variables used in questions 10 to 11: 1. the presence of a health and safety representative; 2. supervisor-employee relationships evaluated in the risk assessment; 3. organisational aspects such as work schedules evaluated in the risk assessment; 4. the presence of an action plan to prevent work-related stress; 5. the presence of a procedure to deal with possible cases of bullying; 6. the presence of a procedure to deal with possible cases of threats, abuse and assault.
12	How are OSH and contextual factors related to the perception of legal obligations as a difficulty in addressing health and safety in the establishment?
13	How are OSH factors and context associated with fulfilling legal obligations as a major reason for addressing health and safety?
	Independent variables used in questions 12 to 13: 1. using employers' organisations as a source of information; 2. using trade unions as a source of information; 3. the presence of a health and safety representative; 4. the use of external OSH providers; 5. visits made by a labour inspectorate in the past 3 years; 6. the prevalence of use of OSH services.
14	Which OSH factors are related to the presence of a health and safety representative in the establishment?
15	How are OSH factors associated with the election of a health and safety representative by employees (and not the employer)?
	Independent variables used in questions 14 to 15: 1. 5 reasons for addressing health and safety (fulfilling legal obligations, meeting expectations from employees, increasing productivity, rganisation's reputation, and avoiding fines from the labour inspectorate); 2. regular discussion of health and safety issues between employee representatives and management; 3. regular discussion of health and safety issues in staff or team meetings.

14 This was not used as an independent variable for question 6.

2.4.3 Qualitative research

To support the research on employee participation and the role of legislation in OSH management, the study team also undertook a literature review. In addition, a legal mapping survey was conducted to gather information on key legal and policy features introduced nationally[15]. Moreover, 11 interviews were conducted with EU-OSHA focal points[16] to help interpret the results and shed light on the role of legislation as a driver of and barrier to compliance.

2.5 Results

2.5.1 Technical Annex

- The Technical Annex to the report provides regression analysis results, the legal mapping survey findings and methodological notes.

2.5.2 Data presentation

- The figures presented in the report provide the average for the EU-27.
- The figures presented in the text in brackets refer to the results for the previous two ESENER waves: ESENER 2014 and 2019. The ESENER 2014 result is presented first, followed by the ESENER 2019 result.
- If there is only one figure in the text, it refers to ESENER 2019.

15 Presented in the Technical Annex.

16 National focal points: https://osha.europa.eu/en/about-eu-osha/national-focal-points

3. OSH management

3.1 Introduction

Management of OSH requires employers and managers to anticipate, recognise, evaluate and control risks arising in or from the workplace that could impair the health and wellbeing of workers,[17] third parties and the wider community. However, employer responsibility extends beyond this, requiring knowledge of occupational risks and a commitment to ensuring that management processes guide decisions on working methods, safety measures and promotion of safety and health at work.[18]

To meet these objectives, the approach to effective OSH management is guided by the risk assessment procedure. This procedure recognises the changing nature of hazards in the working environment and supports the ongoing identification and assessment of risks as well as the implementation of adapted safety measures to mitigate those risks. The procedure further includes ongoing reporting and regular reviewing of the working environment, measures adopted and staff training. Ideally, employees should be involved in the OSH management process to evaluate and minimise risks and boost compliance efforts.[19]

It is hoped that over time, organisations will learn from their regulatory duties and adopt a safety culture. In this case, all persons involved in work apply 'OSH management thinking' to the planning and execution of their activities, enabling organisations to prevent occupational accidents and diseases.

Under EU law, employers are required to follow the Common Processes and Mechanisms (CPMs) as laid down by EU Directive 89/391/EC[20] and reflected by related individual directives. As abbreviated below from the Framework Directive, this includes employers' responsibility to:

- follow nine general principles of prevention that include, avoiding and evaluating risks, combating risks at source and adapting the working environment to individual needs (Article 6(2));
- conduct risk assessments to evaluate risks (Article 6(3a)) and possess an assessment of risks to safety and health at work, including those faced by groups of workers exposed to particular risks (Article 9(1)(a));
- designate one or more workers to carry out activities related to the protection and prevention of occupational risks, or where competent personnel is lacking, enlist the support of external services (Article 7);
- take measures so that workers and/or their representatives receive information on health and safety risks and protective and preventive measures (Article 10);
- ensure that all workers receive appropriate health and safety training (Article 12);
- consult workers and/or their representatives and allow them to take part in discussions on health and safety matters (Article 11).

Moreover, OSH management can be enhanced by the advisory activities of external bodies (such as specialist OSH institutes, OSH management consultants and insurance bodies), and by actions of national labour inspectorates that periodically conduct on-site inspections and provide tailored advice and guidance.

As mentioned in Section 2.3, ESENER is a large-scale Europe-wide survey of public and private establishments, conducted in three waves so far: 2009, 2014 and 2019. A key area of interest is to gather details on how OSH management is organised on a day-to-day basis in establishments. **Table 3** provides an overview of the main topics and specific questions addressed in this chapter (Chapter 3).

17 International Labour Organisation. (2011). OSH Management System: A tool for continual improvement. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_153930.pdf

18 International Labour Office. (2008). Fundamental principles of occupational health and safety. https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_093550.pdf

19 The concept for the risk assessment follows the 'plan-do-check-act' management cycle. When applied to OSH, 'plan' involves the introduction of plans, including the allocation of resources, provision of skills and organisation of the system, hazard identification and risk assessment. The 'do' step refers to the act itself of implementation and operation of the OSH programme. The 'check' step is devoted to measuring both the active and reactive performance of the programme. Finally, the 'act' step closes the cycle with a review of the system in the context of continual improvement and the priming of the system for the next cycle.
See OSH Management System: A tool for continual improvement: https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_153930.pdf

20 Framework Directive on Safety and Health at Work (Directive 89/391 EEC): https://osha.europa.eu/da/legislation/directives/the-osh-framework-directive/1

Table 3: ESENER 2019 questions examined in Chapter 3

OSH management topic area	Number	Abbreviated items from the ESENER 2019 questionnaire
Health and safety risks in European establishments	Q200	Whether establishments were able to identify physical, chemical and ergonomic risk factors in their establishments.
	Q201	Whether establishments were able to identify organisational, social or economic risk factors in their establishments.
Measures taken for OSH management	Q250	Regular conducting of workplace risk assessments.
	Q251	Conducting of risk assessments by internal staff or external service providers.
	Q252	Items routinely evaluated in workplace risk assessments.
	Q253	Whether risk assessments cover workplaces at home.
	Q254	Whether risk assessments cover (other workplaces) outside the premises of the establishment.
	Q255	If risk assessments cover only people on the payroll or other types of workers, too.
	Q257	Provision of risk assessments in written form.
	Q150	Whether medical examinations are used to monitor employee health.
	Q157	If measures are used for health promotion among employees.
	Q158	Record-keeping of employees' absences due to sickness.
	Q161	Use of a procedure to support employees returning to work after a long-term sickness absence.
	Q202	Introduction of measures to reduce OSH risks and foster sustainable working lives.
OSH commitment	Q155	Putting documents in place that explain responsibilities for or procedures on health and safety.
	Q156	Availability of an OSH responsibilities document to those working in the establishment.
	Q162	Discussions on OSH at the top level of management.
	Q163	Provision of training to team leaders and line managers on how to manage health and safety.
	Q164a	Whether respondents have received training.
	Q357	Discussion of OSH in staff or team meetings.
Sources of OSH advice	Q151	Types of health and safety services used, be it in-house or contracted externally, for example, occupational health doctors or health and safety generalists.
	Q152	If external OSH advisory services have been used in the past 3 years.
	Q153	Rating of the external OSH advisory services used.
	Q154	Whether visits have been made by the labour inspectorate in the past 3 years.
	Q358	Use of health and safety information from different types of organisations.

3.2 Summary

3.2.1 OSH risks in European establishments

The ESENER 2019 results for the EU-27 showed that the extent of risk identification has not changed dramatically in European establishments since it was last reported under ESENER 2014.

However, risk factors resulting in musculoskeletal disorders (MSDs) are now among the most frequently identified. This trend was accounted for across industry with growing recognition for risk factors such as 'repetitive hand or arm movements', 'prolonged sitting' and 'lifting or moving heavy loads'.

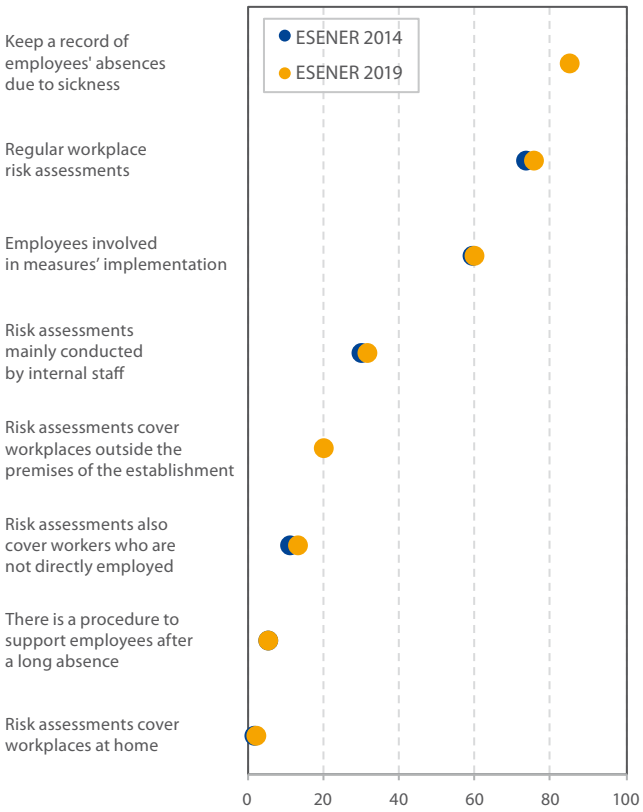
The psychosocial risk factor of 'having to deal with difficult customers, pupils or patients' persists as a common concern, particularly for human health and social work activities, public administration, education, financial and insurance services and real estate activities. However, other types of psychosocial risk factors were reported less extensively even though one might expect these to be quite common: examples are 'long or irregular working hours' and 'poor communication or cooperation within the organisation'.

Large organisations are more likely to report OSH risk factors compared to smaller organisations, especially micro establishments. Therefore, the results build on the findings of prior studies highlighting the challenges MSEs face, given their often limited resources and less well-structured allocation of responsibilities, among others.

3.2.2 Measures taken for OSH management

The EU-27 results on OSH management did not change greatly over the period from ESENER 2014 to ESENER 2019 (see **Figure 2**).

Figure 2: Comparison of EU-27 average scores on measures in the area of OSH management, % establishments (ESENER 2019 and ESENER 2014)[21] [22]



As mentioned, risk assessment provides the cornerstone for the identification and management of risks. Risk assessments should be conducted regularly and when changes to the working environment are made. This is to ensure that OSH management can account for the dynamic nature of the working environment.

21 Base: all establishments in the EU-27.

22 Please note that to ensure comparability, the results presented in Section 3.2. are based on the same denominator, that is, for the total sample. However, where relevant, the results presented elsewhere in the chapter use the denominator for the filtered samples. This is because establishments that undertake risk assessments with workers that work at home were 'filtered' and invited to ask the question about whether risk assessments cover workplaces at home.

It is encouraging (although there is room for improvement) that completion of regular risk assessments is reported to be conducted by three-quarters of establishments in Europe. There has been little change in this share over the past 5 years. However, the remaining quarter of employers surveyed in ESENER 2019 either do not complete their risk assessments regularly or do not have one in place, which suggests that they lack a complete overview of workplace risks.

The types of risks included in risk assessments are related to the risk profiles of different sectors: for example, heavy and manual industries are more likely to consider safety risks. However, establishments generally have a greater focus on safety risk management than on MSDs or psychosocial risks. It appears that these latter risks are not as well recognised or understood, particularly by MSEs.

The results for ESENER 2019 are similar to those of the previous wave, showing that around 40 % of risk assessments are completed by internal staff.[23] In some cases, smaller companies may seek external support; they are not required to appoint OSH employee representatives or have health and safety officers trained to undertake the task, as larger establishments usually are. However, using internal staff is also more common in the north and west of Europe. This suggests that use of external persons may be encouraged by some national practices, like the requirements of insurance organisations or the role of the private OSH services market. However, as identified by our **regression analyses,** establishments reap benefits if internal persons complete the risk assessments, as they are then more likely to adopt other good OSH management practices.

Relatively high levels of compliance were noted with respect to keeping a record of employee absence due to sickness, and about two-thirds of establishments employing at least 50 people introduced procedures to support the return to work of employees after long-term sickness absence. The situation is also improving over time as regards this latter measure.

A worrying finding since the onset of the COVID-19 pandemic is the reduced coverage of homes in risk assessments. Of course, the situation may have improved since ESENER 2019;[24] however, it seems that the overall approach was not 'future-proofed' for the rapid transformation of the working environment in 2020. How this is affecting the management of the post-2019 working environment merits further investigation.

Likewise, since ESENER 2014, in trends around freelancing, subcontracting and expansion of supply chains to include MSEs, there is concern that risk assessments have reduced their coverage of persons not directly employed by the organisation.

Across the EU-27, four-fifths of workplaces involve employees in the design and implementation of measures following a risk assessment. But the situation has remained largely unchanged since ESENER 2014, suggesting a need for renewed attention to encourage all types of organisations to take up the practice.

3.2.3 Commitment to the management of OSH in establishments

Going beyond the implementation of risk assessments, establishments should ideally conduct a range of further complementary activities that reinforce their commitment to the management of OSH (see **Figure 3**). Key aspects include preparing and making available to employees a document on health and safety responsibilities – the results show that these steps are followed by most establishments. However, to strengthen commitment, further progress is needed as regards the regularity of discussions on OSH in top management meetings.

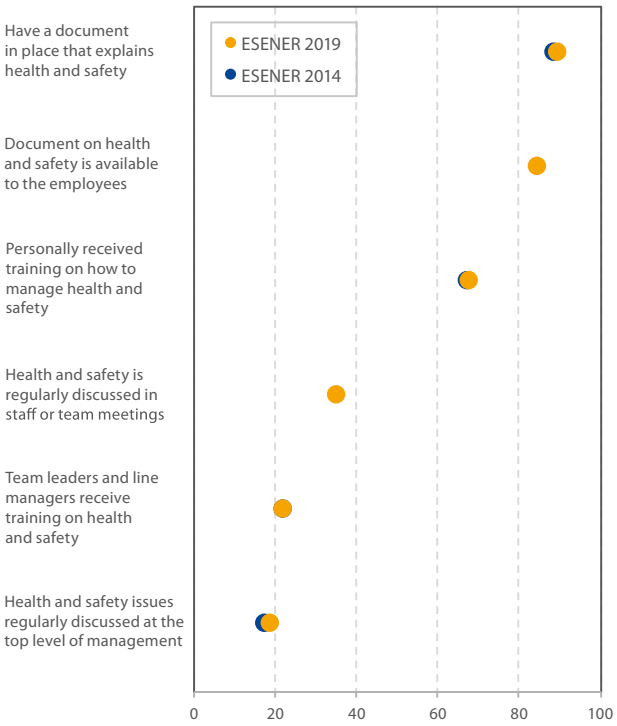
Similarly, OSH is discussed regularly in staff and team meetings in just over one-third of establishments, suggesting that there are missed opportunities to manage OSH proactively.[25]

23 This figure relates to the establishments that complete risk assessments. Please note that Figure 2. includes the total sample including establishments that do not complete risk assessments.

24 The ESENER 2019 fieldwork period was from April 2019 to August 2019.

25 Please note that while this topic was explored under ESENER 2014, the wording of the ESENER 2019 question changed, and therefore the results cannot be compared directly.

Figure 3: Comparison of EU-27 average scores on measures in areas of OSH commitment and advice, % establishments (ESENER 2019 and ESENER 2014)[26]



Slightly more than 20 % of team leaders and line managers (of all establishments) in the EU-27 receive training on OSH, although the trend has not advanced a great deal. Moreover, there are clear differences in the extent of this practice across countries, suggesting different levels of prioritisation in mandating training for persons with clear OSH responsibilities.

Unfortunately, the share of respondents to the ESENER 2019 survey that have undergone OSH training has declined. ESENER 2019 and ESENER 2014 were designed to collect information from the 'persons most knowledgeable about OSH in the establishment', so this suggests that increasingly, persons with key responsibilities are less formally qualified.

3.2.4 Sources of OSH advice

When seeking to obtain advice on how best to manage OSH, the most common source, especially in eastern and southern European countries, is 'contracted OSH experts'. This is followed by insurance providers, who in countries like Germany, form a core element of the OSH management organisational system.

Unfortunately, in most of the countries surveyed, the ESENER results show a decline in the number of visits made by the relevant inspectorate. OSH advice provided by institutes also declined, suggesting a wider withdrawal of advisory organisations (partly) funded by public sources.

However, as expected, large organisations benefited more from external advice on OSH as compared to smaller organisations. This likely boosts organisational learning on how best to comply with OSH requirements.

3.2.5 Results of regression analysis of ESENER 2019 data

A core element of the research has been to identify the factors that are associated with good OSH management. The idea is to highlight key 'pressure points', which based on previous studies, are associated with the improvement of the OSH management measures monitored by ESENER (see **Section 3.7**).

A key finding of the regression modelling is the important role of employee representatives' and workers' participation. It seems that they act as 'linchpins' in the OSH management environment by supporting the execution of tasks in several key areas. These include raising awareness of OSH risks (increased reporting), encouraging regular completion of risk assessments, ensuring uptake of advice from external organisations (including persons not on the payroll) in risk assessments, and enabling employee involvement in the design of follow-up measures.

The regression analysis found that other drivers also matter. Examples include regular discussions on OSH by top management (which result in the uptake of OSH training for middle managers), obtaining expert advice (which raises the reporting of risks in establishments), and the fear of fines (which encourages risk assessment completion).

Overall, the results show that reinforcement of the OSH management system in one area is related with better outcomes in others, thus spotlighting which areas to build on through further actions.

26 Base: all establishments in the EU-27.

3.3 Health and safety risks in European establishments

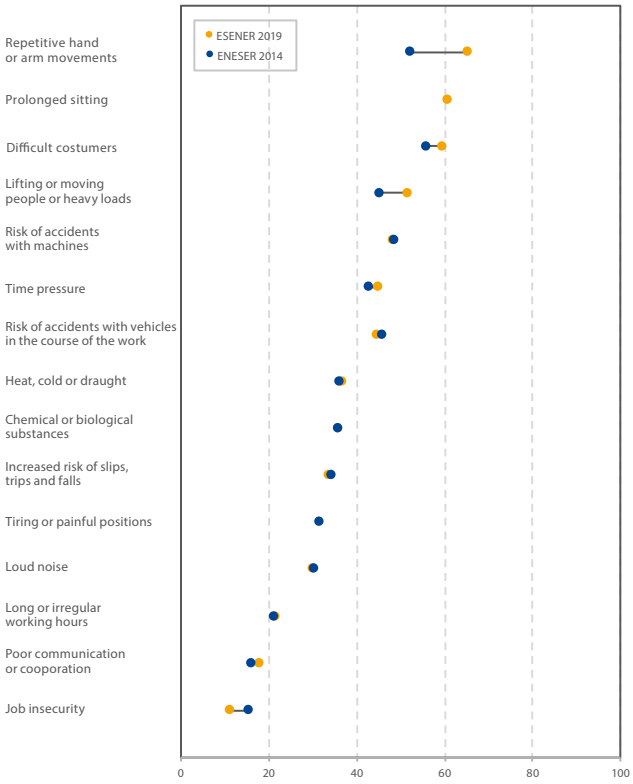
Establishments were asked to confirm the OSH risk factors that at least some employees face, regardless of whether the risks were under control or not.

As shown in **Figure 4**, in ESENER 2019 and in terms of average EU-27 scores, physical and ergonomic risks were the most frequently identified: these include 'repetitive hand or arm movements' (65 %), 'prolonged sitting' (61 %) and 'lifting or moving people or heavy loads' (52 %).

Albeit reported less than some of the top physical and ergonomic risks, two psychosocial risks were also widely recognised, namely 'having to deal with difficult customers, patients, pupils and so on.' (59 %), and 'time pressure' (45 %). But some other psychosocial risks were among the least reported: 'long or irregular working hours' (21 %) and 'poor communication or cooperation within the organisation' (18 %), for instance.

The EU-27 average scores indicated that the reported presence of risks has remained relatively stable since ESENER 2014. However, some notable shifts were identified with respect to the reporting of risks associated with MSDs, namely 'repetitive hand or arm movements' (from 52 % to 65 %)[27] and 'lifting or moving people or heavy loads' (from 45 % to 52 %). The increase in the presences of risk factors linked to MSDs was detected in most countries. Interestingly, MSDs were reported by Eurofound's Sixth European Working Conditions Survey (2015) as the main OSH concern of workers.[28] EU-OSHA has invested in raising awareness on the impact of MSDs through its Healthy Workplaces Campaign 2020-2022, 'Lighten the Load'.[29]

Figure 4: EU-27 reportings of risk factors in establishments, % establishments in EU-27 (ESENER 2019 and ESENER 2014) [30] [31]



Under ESENER 2019, stark differences were evident across countries on reporting of physical, chemical and ergonomic risks, giving an indication of the extent of the reported presence of these risk factors. For example, with respect to 'prolonged sitting', the extent of reporting by establishments in Slovenia (74 %) was much higher than in Ireland (41 %); similarly, reporting from Czechia (65 %) was higher than that of Greece (27 %), concerning the 'risk of accidents with vehicles in the course of work' (see **Table 4**).

27 Please note that the first result is for ESENER 2014 and the second for ESENER 2019. The same approach is used for all other scores presented in this way.

28 European Agency for Safety and Health at Work. (2019). Work-related musculoskeletal disorders: prevalence, costs and demographics in the EU. https://osha.europa.eu/en/publications/work-related-musculoskeletal-disorders-prevalence-costs-and-demographics-eu/view

29 Healthy Workplaces Campaign: https://healthy-workplaces.eu/en

30 Base: all establishments in the EU-27.

31 Please note that the ESENER 2014 question on whether establishments are exposed to 'Prolonged sitting or tiring or painful positions' has been separated into two new items under ESENER 2019, namely 'prolonged sitting' and 'tiring or painful positions'.

Table 4: Reporting of physical, ergonomic and chemical risks, % establishments by country (ESENER 2019)[32]

Country	Repetitive hand or arm movements	Prolonged sitting	Lifting or moving people or heavy loads	Risk of accidents with machines	Risk of accidents with vehicles in the course of work	Heat, cold or draught	Chemical or biological substances	Increased risk of slips, trips and falls	Tiring or painful positions	Loud noise
EU-27	65	61	52	48	44	37	36	34	31	30
AT	63	62	50	44	35	35	35	26	27	29
BE	62	69	56	49	50	37	35	32	32	29
BG	66	56	33	38	29	25	17	25	27	15
CH	62	52	48	48	38	37	37	35	28	32
CY	63	56	37	45	44	32	32	32	40	20
CZ	59	61	54	61	65	40	40	41	19	35
DE	70	62	54	51	45	39	44	29	30	38
DK	65	42	58	46	41	50	41	37	30	35
EE	63	60	60	60	53	41	46	34	40	33
EL	52	47	27	33	27	30	20	27	38	19
ES	73	70	58	51	48	33	36	42	56	26
FI	72	53	60	49	51	46	45	45	32	39
FR	67	64	57	51	53	44	34	41	38	31
HR	68	66	50	54	59	37	30	43	44	17
HU	57	71	50	57	52	37	39	27	21	27
IE	60	41	63	36	28	23	36	36	15	20
IS	60	44	48	44	32	38	39	36	31	34
IT	55	55	47	43	40	29	31	30	19	22
LT	57	57	43	49	53	35	35	35	27	27
LU	70	63	52	51	51	42	33	39	32	30
LV	63	68	55	53	50	46	41	44	35	30
MK	54	48	32	36	44	21	10	19	30	10
MT	51	62	46	28	37	23	27	24	26	17
NL	67	57	49	46	38	38	31	29	31	28
NO	72	47	58	44	44	44	41	34	34	49
PL	71	64	37	41	34	35	28	33	23	34
PT	69	63	53	50	42	32	35	36	31	23
RO	57	55	46	48	42	35	28	39	40	22
RS	61	63	35	43	49	25	21	30	32	17
SE	55	46	59	48	49	42	46	37	36	39
SI	77	74	59	55	58	40	32	42	41	25
SK	59	63	44	39	45	33	29	32	10	25
UK	64	51	68	44	35	30	48	45	21	27

Similarly, again under ESENER 2019, differences in the level of risk identification of psychosocial risk factors were quite distinct across countries, as **Table 5** shows. On the measure of 'having to deal with difficult customers, patients or pupils', establishments were more likely to identify such risks in Portugal (75 %) than in Italy (37 %). Interestingly, Nordic countries were more likely to report 'time pressure' (Finland (74 %), Sweden (74 %), Denmark (73 %), Norway (68 %) and Iceland (65 %) when compared to countries such as Italy (19 %).

32 Base: all establishments.

Table 5: Reporting of psychosocial risks, % establishments by country (ESENER 2019)[33]

Country	Difficult customers	Time pressure	Long or irregular working hours	Poor communication or cooperation	Job insecurity
EU-27	59	45	21	18	11
AT	59	55	23	14	7
BE	67	60	26	30	16
BG	47	35	12	5	8
CH	63	61	29	20	12
CY	71	50	29	10	14
CZ	51	38	23	16	9
DE	65	61	26	21	8
DK	68	73	45	37	23
EE	66	51	23	20	17
EL	63	42	18	12	16
ES	60	32	16	18	14
FI	51	74	33	28	17
FR	67	40	25	23	13
HR	56	38	12	14	13
HU	53	41	18	10	8
IE	64	38	22	16	8
IS	62	65	34	8	11
IT	37	19	9	8	9
LT	50	21	10	4	11
LU	67	52	24	26	17
LV	61	46	25	12	20
MK	55	36	13	6	9
MT	75	51	28	15	6
NL	59	64	24	28	9
NO	58	68	34	27	10
PL	64	40	14	8	10
PT	75	42	21	13	11
RO	63	41	40	14	16
RS	51	24	16	7	15
SE	66	74	33	41	16
SI	63	44	20	17	9
SK	38	25	15	8	11
UK	68	40	30	20	13

Using regression analysis, we determined that heightened levels of risk reporting are positively associated with the completion of risk assessments. However, while the reported presence of physical, ergonomic and chemical risks is positively associated with the completion of risk assessments in all countries, this is not the case for psychosocial risks. This suggests that in some countries, a connection is not made between fulfilling risk assessments and psychosocial risk management, despite an existing awareness of those risks (see **Section 3.7**). Of course, in some countries, there may not be rules in place to mandate inclusion of psychosocial risks in risk assessments.

The positive trends between ESENER 2014 and ESENER 2019 in risk identification were also noted in sectors with respect to both 'repetitive hand and arm movements' and 'lifting or moving heavy loads'. For example, for 'repetitive hand and arm movements', some of the largest increases over the period from ESENER 2014 to ESENER 2019 were seen in wholesale and retail trade (from 45 % to 63 %), other service activities (from 49 % to 66 %) and public administration (from 55 % to 71 %). The results appear to indicate that all parts of industry can respond positively to efforts to strengthen awareness of risks that lead to MSDs.

As expected, acknowledgement of exposure to key safety risk factors is more common in industries involving manual labour: 'risk of accidents with machines', for example, is more common in mining (89 %), construction (81 %),water supply, sewerage and waste management activities (80 %) and agriculture, forestry and fishing (76%) and likewise another item, 'risk of accidents with vehicles in the course of work', scores high in mining (90 %), water supply, sewerage and waste management activities (86 %),

33 Base: all establishments.

transportation and storage (73%) and agriculture, forestry and fishing (73%).

With respect to ergonomic risks, prolonged sitting was acknowledged mainly in financial services (92 %), information and communication activities (92 %) and public administration (89 %), as one may expect. 'Lifting or moving people or heavy loads', on the other hand, was noted as widespread in the mining (79 %), construction (77 %) and agriculture (70 %) sectors.

Sectoral differences were also detected in terms of the observation of psychosocial risks in the workplace. 'Having to deal with difficult customers, patients and pupils' was reported extensively by human health and social work activities (81 %). This is likely due to several factors inherent in dealing with patients or disadvantaged persons, such as ongoing communication difficulties with elderly people, or the possibilities of intimidation, violence or sexual harassment, in combination with a challenging working environment, for example lack of control over how care or support is provided, intense workload and irregular working hour arrangements.

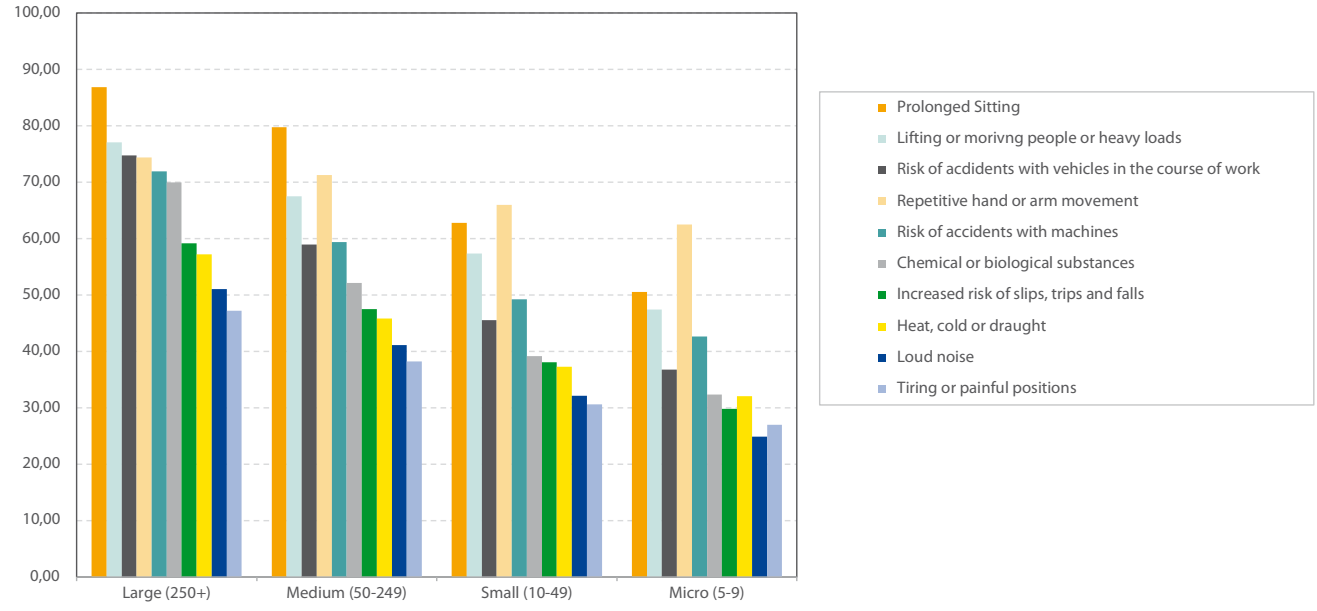
Risk factors such as 'time pressure' and 'poor communication or cooperation within the organisation', were recognised more extensively by professional, scientific and technical activities (58 %) and gas and electricity supply activities (30 %). As expected, accommodation and food services were noted as being more exposed to the challenge of 'long or irregular working hours' (39 %).

The positive changes since ESENER 2014 regarding identification of some of the MSD-related risks were also reported by different establishment sizes. For example, with respect to 'repetitive hand or arm movements', the largest increase was noted for micro enterprises (from 45 % to 62 %), although large firms (from 70 % to 74 %) also increased their reporting of this risk factor.

This suggests that even the smallest enterprises can be impacted positively by coordinated efforts to support better management of MSDs. One such initiative is Istituto Nazionale Assicurazione Infortuni sul Lavoro (INAIL)[34], which provides an incentive scheme to fund projects to reduce MSDs in construction firms, along with advice and awareness-raising.[35] Similarly, the Swedish Work Environment Authority has provided employers with in-depth MSD management guidelines which are associated with positive evaluation findings.[36]

As mentioned by prior ESENER overview reports, the reported presence of safety, ergonomic and chemical risk factors continues to increase with establishment size (see **Figure 5**). While some underestimation of the extent of exposure to risks is to be expected overall, the stark differences in the degree of risk awareness between size classes suggests there are shortcomings in fully recognising their presence. For example, large establishments (87 %) were more likely than micro enterprises (51 %) to recognise 'prolonged sitting'.

Figure 5: Reporting of physical, ergonomic and chemical risks, % establishments by establishment size (ESENER 2019)[37]



34 Istituto Nazionale Assicurazione Infortuni sul Lavoro (INAIL) is a public non-profit organisation whose aim is the protection of workers against physical injuries and occupational diseases: https://www.inail.it/cs/internet/home.html

35 European Agency for Safety and Health at Work. 2020. Preventing musculoskeletal disorders in the construction sector: examples from INAIL incentive schemes. https://osha.europa.eu/sites/default/files/Discussion_paper_INAIL_MSDs_construction_sector.pdf

36 European Agency for Safety and Health at Work. 2019. Provisions and general recommendations for the prevention of musculoskeletal disorders (Sweden). https://osha.europa.eu/sites/default/files/Sweden_recomendations_MSDs.pdf

37 Base: all establishments in the EU-27.

Similarly, under ESENER 2019, reporting of the presence of psychosocial risk factors increases with establishment size. For example, large organisations were much more likely to report time pressure (67 %) as compared to micro enterprises (39 %).

Again, the results might suggest underreporting of the true level of such risks, which is a concern, considering the share of employment accounted for by micro, small and medium-sized enterprises (MSMEs). Moreover, it is generally recognised that employees of small and micro firms are exposed to greater OSH risks, owing to the less structured allocation of responsibilities, less clearly defined roles, lack of resources and unpredictable workloads.

3.4 Measures taken for OSH management

Following on from asking establishments about their understanding of the presence of OSH-related risks, the ESENER 2019 survey explored whether concerted actions had been taken to manage OSH.

3.4.1 Measures taken for good implementation of risk assessments

To begin, a series of questions were put forward on the use and methods surrounding risk assessments. Under EU Framework Directive 89/391/EC, there are general obligations for employers to take necessary measures to detect and mitigate occupational risks, along with specific requirements to conduct risk assessments regularly. In effect, the risk assessment procedure is the cornerstone for the European prevention approach to OSH management.

In OSH management, risk assessments follow a cyclic process, guided by the plan-do-check-act methodology. This provides a systematic process for examining all risks in the work environment, including the workplace, equipment, machinery, work methods, materials and practices. It also includes the risk assessment of organisational aspects such as employee-manager relationships. By regularly undertaking new or updating existing assessments, organisations should benefit from continual OSH management improvements. Risk assessments should identify what can go wrong, how and for whom, and identify the corresponding preventive safety measures to inform employees of the possible risks and upfront solutions.

The ESENER 2019 conversation on risk assessments began with learning in the first instance if establishments conducted these regularly.

While a good level of commitment for the practice was notable over the EU-27 average (74 %), major improvements have not been made in the main since ESENER 2014 (see **Figure 6**).

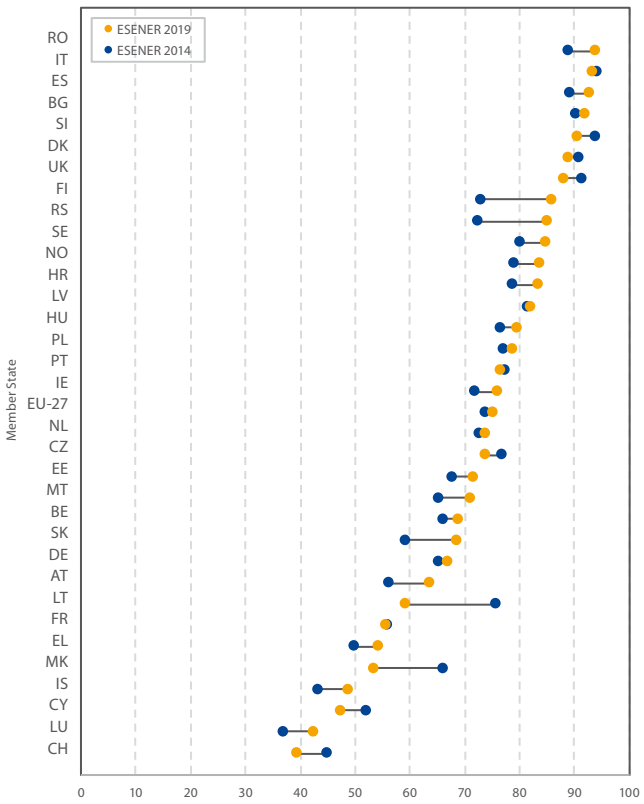
In addition, marked differences across Europe were evident. In the EU-27, conducting risk assessments regularly was estimated at a high of 94 % of establishments in Romania and a low of 42 % in Luxembourg.[38] However, it should be remembered that while organisations may have conducted a risk assessment to comply with legal obligations, these assessments may not be conducted **regularly** – which is the focus of this question.

However, this item did see improvements to some extent in the national percentage scores, some of which were relatively large: Finland (from 73 % to 86 %), Slovakia (from 59 % to 69 %) and Serbia (from 72 % to 85 %). A sharp decrease was also detected in several countries such as Lithuania (from 76 % to 59 %), North Macedonia (from 66 % to 53 %), and to a lesser extent, Cyprus (from 52 % to 47 %).

According to our regression analysis, the differences in completing risk assessments are due partly to the level of risk reporting (or awareness) and frequency of inspections. Therefore, countries with stronger inspection regimes and higher reporting of safety, ergonomic and chemical risks are likely to have a higher proportion of establishments completing risk assessments (see **Section 3.7**).

38 The ESENER results should not be viewed as equivalent to a full legal compliance check, nor do they provide evidence of the extent of legal compliance or if legal compliance has improved over the reporting period since ESENER 2014.

Figure 6: Workplace risk assessments carried out regularly, % establishments by country (ESENER 2019 and ESENER 2014)[39]



The interview feedback with EU-OSHA focal points helped to clarify the results:

- In Austria, there have been significant efforts to encourage regular completion of risk assessments, especially among micro and small firms, with fines issued when necessary. Although Austria sits below the EU-27 average, it was felt that the way to increase compliance was through inspections, given that companies may not provide accurate information through online procedures.
- Feedback from Denmark suggested that there is a high degree of trust in the system and that companies can be expected to complete risk assessments to a good standard, without the extensive involvement of inspectorates.
- The Finnish representative suggested that the national workbook on risk assessment has helped many establishments: this workbook is the reference source used most for completion of risk assessments and provides updated guidance.
- Italy has introduced simplified risk assessment forms for micro and small firms to be used in cases where there are no major OSH risks – these have been supported through a legislative decree laid down in 2012.
- In Lithuania, the decrease in regular completion of risk assessments could not be explained. However, it is recognised that risk assessments are considered burdensome by some establishments, and it is hoped that the electronic submission system for risk assessment completion will make the process easier.

Similarly, differences across sectors were also noted, as shown in **Figure 7**. These differences are worrying, considering that there will likely be some mismatches between establishments' reported presence of OSH risk factors and efforts made to respond to them (see **Section 3.2**).

The results illustrate that sectors facing significant safety risks were more likely to report conducting of risk assessments regularly: examples are the electricity and gas (94 %), mining and quarrying (93 %), and water supply, sewerage and waste management (93 %) sectors. This can be accounted for by several factors, for instance the way OSH management is embedded in their organisational cultures, the tangible risks in their work environments, the bigger share of large organisations in these sectors, and the existence of sector-specific regulations, insurance requirements and exposure to on-site inspections.

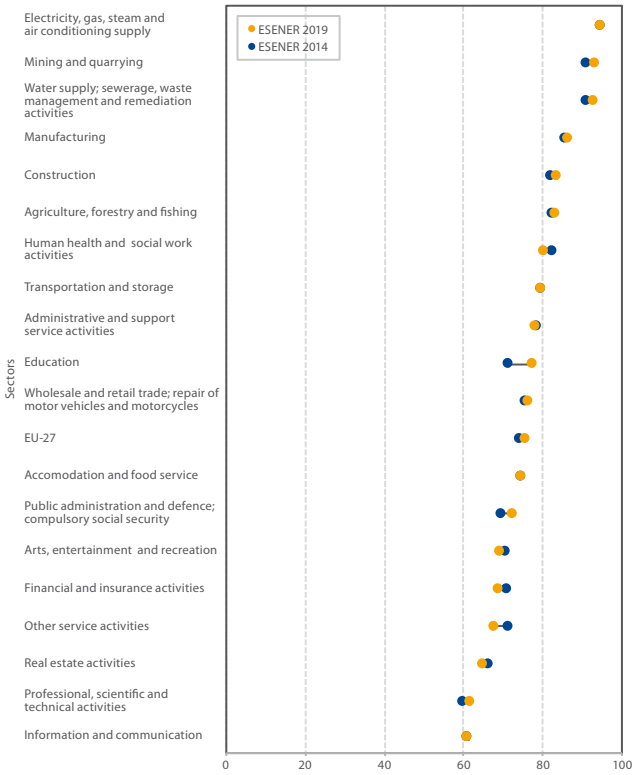
Conversely, private professional service industries that tend to be represented by MSMEs and face fewer severe safety risks were less represented in this measure: examples are the information and communication (61 %), professional, scientific and technical activities (61 %) and real estate (65 %) sectors.

Regarding the overall sectoral patterns over time, results showed that the regular carrying out of risk assessments has not improved dramatically (see **Figure 7**). Since the most recent ESENER wave was last completed in 2019, this result may be concerning, bearing in mind the dramatic changes to the working environment brought about by the COVID-19 pandemic – clearly, such transformations require appraisal through a risk assessment.

However, a notable gain was made by the education sector (from 71 % to 77 %), and to a lesser degree, public administration (from 69 % to 72 %), suggesting that public services responded to further calls to strengthen OSH practices. While ranking below some of the manual or heavy industries, public sector activities obtained better scores than non-manual private sector service activities. A comparison of these latter groups suggests that OSH management is better integrated in organisations providing public services, which is probably accounted for by their better organisation, access to support provided by specialist counterparts in public administration, higher levels of trade union membership and focus on ensuring compliance. Yet slight declines over the period were reported in human health and social work (from 82 % to 80 %), other service activities (from 71 % to 67 %) and financial services (from 71 % to 69 %).

39 Base: all establishments in the EU-27.

Figure 7: Workplace risk assessments carried out regularly, % establishments by sector (ESENER 2019 and ESENER 2014)[40]



As reported under ESENER 2014, while most establishments comply with the need to conduct risk assessments regularly, the frequency of doing so is linked to establishment size, among other things. Most large establishments (95 %) reported conducting risk assessments regularly. This is likely due to their resources, focus on improving productivity, exposure to inspectorates, fear of reputational damage and so on.

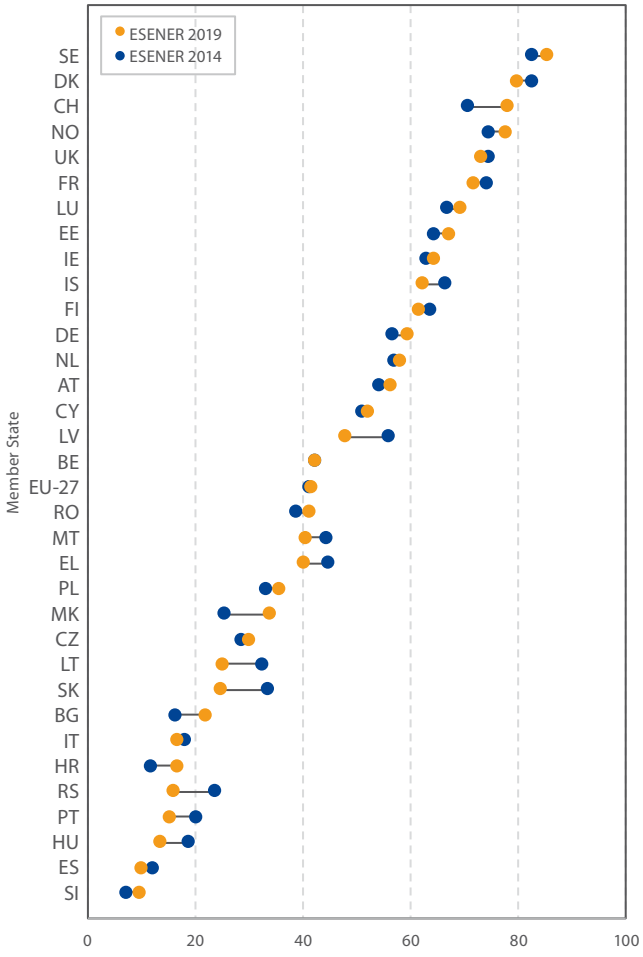
However, while most micro (70 %), small (79 %) and medium-sized (91 %) establishments also reported carrying out risk assessments, they did not perform as well in fulfilling their obligations when compared to large companies. This may be due to a lower level of awareness, less-established safety cultures, and fewer resources or less expertise in following legal requirements. As the regression analyses showed, the appointment of OSH representatives is positively associated with the completion of risk assessments (see **Section 3.7**).

Having identified those establishments that conduct risk assessments regularly, respondents were asked who had conducted them. Interestingly, when compared to ESENER 2014, the overall proportional breakdown of responses has not changed dramatically. Under ESENER 2019, less than half of risk assessments were conducted by external providers (47 %), with a similar number performed by internal staff (42 %).

However, stark differences across countries were observed in the involvement of internal staff in conducting risk assessments, as seen in scores for Sweden (85 %) compared to Slovenia (10 %). Over time, the picture remained relatively stable, although advances were made by some countries like Switzerland (from 71 % to 78 %), and the trend retracted in other countries such as Latvia (from 56 % to 48 %) (see **Figure 8**).

As mentioned, this can be partly explained by national rules that sometimes mandate the appointment of OSH employee representatives above certain employee number thresholds, as well as the presence of a health and safety officer. These designated internal persons will likely receive training and undertake to carry out the risk assessment, reducing the need for external services. Companies with fewer employees may not need to appoint such persons, and thus may seek external support to fulfil their OSH duties. Moreover, it seems that countries in the north and west of Europe are more likely to involve internal staff in the preparation of risk assessments, compared to countries overall in the south and east. While appropriate competencies are needed to conduct a risk assessment, it is wrong to assume that the availability of such staff is limited to some countries only. However, there may be country differences in the requirements and role of insurance organisations and the extent of the provision of OSH consultancy services that may present obstacles to involving staff.

Figure 8: Workplace risk assessments mainly conducted by internal staff, % establishments by country (ESENER 2019 and ESENER 2014)[41]



40 Base: all establishments in the EU-27.

41 Base: establishments carrying out workplace risk assessments.

The results to this question may be partly explained by the interview feedback received from authorities:

- In the top-ranking countries, Denmark and Sweden, OSH employee representatives must be appointed and involved in the risk assessment process – this is a legal requirement for most companies. For example, Swedish legislation requires companies with five or more employees to appoint a safety representative who can access training, and often, trade union support. While managers can seek external services if needed, the focus is on ensuring that the internal safety representatives can carry out their duties without obstacles.
- In Switzerland, while it is common to receive advice from industry associations, there are legal requirements to involve internal staff in risk assessments. Employees need to be consulted whenever risk assessments are conducted.
- In Estonia, risk assessments can be completed online, and the process is becoming more popular. The intention is to enable internal staff to complete these easily with the aid of online guidance. In addition, companies can call the labour inspectorate for advice if they are unsure about anything. This service is increasingly being taken up.
- In the Netherlands, companies with more than 25 employees are required to appoint an OSH representative responsible for preparing risk assessments. For smaller companies, managers may prepare the risk assessment themselves or hire external services.
- In Austria, high-quality training has been provided to internal staff, to ensure that each company has the necessary OSH knowledge in-house. This should lead to more regular completion of risk assessments, since that companies will not have to hire external OSH experts.
- In Germany, it is common among larger companies to rely on internal staff. It may be expected that the trend will increase further, due to efforts to provide the necessary OSH training.

In terms of the sector developments over time, the situation as reported under ESENER 2019 was very similar to that for ESENER 2014. Interestingly, the differences were less distinct: for example, when comparing the results of human health and social work (60 % of establishments reporting that risk assessments were mainly conducted by internal staff) to the electricity and gas supply sector (37 %).

There are likely to be multiple reasons for this difference; however, it seems that industries facing less severe safety risks are more likely to involve internal staff. So, although this explanation cannot account completely for the difference, it is likely that additional rules or insurance conditions apply to working environments with more severe safety risks, thus demanding risk assessment by external persons, as in the manufacturing sector, for instance.

A further positive finding was that the provision of risk assessments in written form is well implemented nationally, with 20 of 33 countries reporting shares above 90 % of surveyed establishments. There were some marked differences across countries, however, as seen in Slovenia (98 %) and Luxembourg (71 %), for instance. While the situation was mostly stable over the reporting period, some countries gained ground (such as Malta – from 77 % to 85 %), while others experienced setbacks (such as Luxembourg – from 79 % to 71 %).

Establishments were asked to report the aspects most routinely evaluated in workplace risk assessments. In terms of EU-27 averages, risks likely to cause sudden accidents and illnesses were more frequently reported, namely 'the safety of machines, equipment and installations' (83 %).

Table 6: Aspects routinely evaluated in workplace risk assessments, % establishments by sector (ESENER 2019 and ESENER 2014)[42]

Sectors	Dangerous chemical or biological substances[43]	Safety of machines	Work postures, physical working demands	Organisational aspects such as work schedules	Exposure to noise, vibrations, heat or cold	Supervisor-employee relationships
EU-27	86	83	75	66	62	55
Accommodation and food service activities	91	87	67	76	54	63
Administrative and support service activities	86	77	81	74	62	61
Agriculture, forestry and fishing	94	95	77	68	81	56
Arts, entertainment and recreation	93	77	72	77	53	63
Construction	81	93	77	66	83	57
Education	89	72	62	68	53	58
Electricity, gas, steam and air conditioning supply	89	87	76	73	73	52
Financial and insurance activities	56	65	77	58	44	56
Human health and social work activities	90	73	77	79	47	70
Information and communication	86	66	74	63	41	57
Manufacturing	89	95	76	65	80	51
Mining and quarrying	91	98	77	64	89	47
Other service activities	83	73	75	69	52	62
Professional, scientific and technical activities	83	69	77	61	44	55
Public administration and defence; compulsory social security	86	80	79	58	63	57
Real estate activities	70	64	71	63	44	50
Transportation and storage	82	86	78	74	62	60
Water supply; sewerage, waste management and remediation activities	94	90	79	67	78	55
Wholesale and retail trade; repair of motor vehicles and motorcycles	87	84	72	66	56	55

Establishments that confirmed use of 'dangerous chemical, biological substances' were asked separately whether they cover such risks in risk assessments. The results were largely positive on this measure – 86 % – albeit still concerning, given the large minority of 14% indicating that their risk assessments are incomplete.

An estimated three-quarters of risk assessments include risks that can result in MSDs, namely those related to 'work postures, physical working demands and repetitive movements' (75 %) and to a lesser extent, 'exposure to noise, vibrations, heat or cold' (62 %). This last item, of course, could also be considered to be partly related to the category of risks that may result in sudden accidents.

Finally, despite seeing an increase since ESENER 2014, psychosocial risks were evaluated to a lesser extent than most safety risks, including 'organisational aspects such as work schedules, breaks or work shifts' (from 64% to 66 %) and 'supervisor-employee relationships' (from 51% to 55 %). This seems to be at odds with the high prevalence of confirmed risks acknowledged to be present in the workplace, such as time pressure and difficult customers (see **Section 3.3**).

While there are sectoral working environment biases to this prioritisation, it may also reflect the overall hierarchy of concerns assumed to be relevant for inclusion in risk assessments. For example, safety and chemical risks are well-known risk factors typically considered pertinent to OSH management, whereas 'new and emerging risks' such as MSDs and psychosocial risks are dimensions not as well established, despite their high prevalence.

Therefore, these latter risk factors warrant stronger promotion to encourage their better understanding and evaluation.

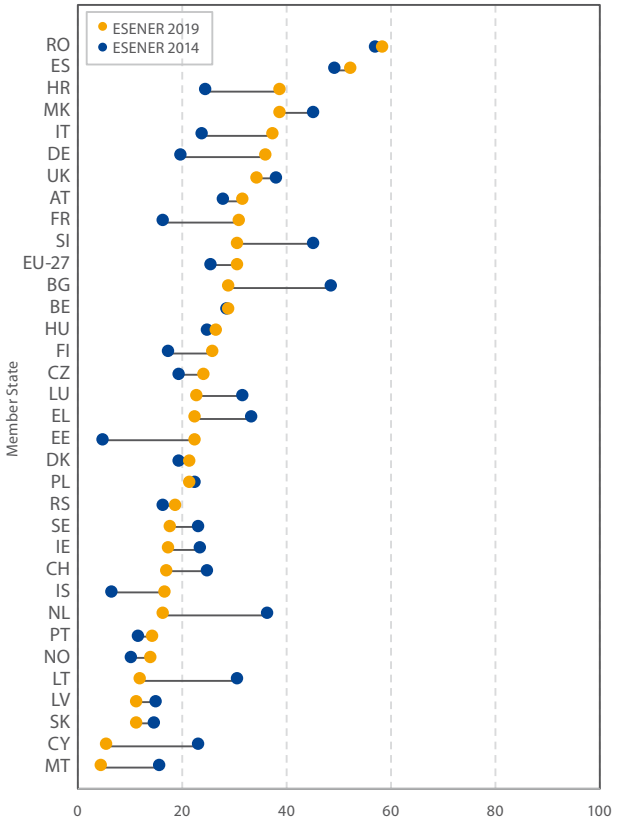
42 Base: establishments in the EU-27 carrying out workplace risk assessments.

43 Base: establishments in the EU-27 that identified the risk of chemical or biological substances in the form of liquids, fumes or dust.

Establishments with workers at home were asked to confirm whether risk assessments covered home premises. The EU-27 average results provided to this question under ESENER 2019 (31 %) suggested some improvement since ESENER 2014 (26%), although the practice does not appear to be well established (see **Figure 9**).

Indeed, it was observed that in most countries (31 in total), fewer than 40% of surveyed establishments included homes in risk assessments, with results ranging from 58% (Romania) to 5 % (Malta). Moreover, results by country indicated that the development since 2014 has been quite irregular and diverse, both in advances and reversals of the trend: major increases were reported in countries like France (from 17% to 31 %) and Estonia (from 5 % to 22 %), while sharp reductions were seen in Bulgaria (from 49 % to 29 %) and the Netherlands (from 36% to 17 %).

Figure 9: Coverage of homes in risk assessments, % establishments by country (ESENER 2019 and ESENER 2014)[44]



However, since the significant transition to home working following on from the lockdown measures, it is likely that some organisations have adapted their OSH management practices with respect to home working; therefore, the results should be treated with caution. At the same time, the position in 2019 suggests that it was not 'future-proofed' for the COVID-19 pandemic context, considering that tele and remote working are not integrated fully into risk assessment procedures and bearing in mind also how these factors affect groups differently, depending on their specific home-life and work-environment situations. Clearly, the onset of the COVID-19 pandemic makes this item highly relevant for further research, and if needed, introduction of possible follow-on OSH actions to reduce risks.

This same issue revealed clear differences by sector, with overall increases since ESENER 2014, particularly for mining and quarrying (from 35 % to 65 %) and water supply, sewerage and waste management (from 15 % to 34 %) – although there was a decline in the practice for education (from 20 % to 16 %).

This is likely to be partly explained by the shift in home working that many industries are now experiencing, even if for some employees only, largely due to the introduction of new technologies, the need to recruit persons with niche skills, the changing business models and the focus on strengthening service experience generally across industry.[45] [46] [47] However, the score for the education sector is concerning, given that education professionals are widely known to manage their workload by performing part of their duties at home, and also considering the transition to homeworking since COVID-19.

Interestingly, the regression analysis revealed that if staff are involved in the design of measures following a risk assessment, and if internal staff are used to complete risk assessments, the likelihood of including persons working at home in risk assessment increases. In some cases, inspections also ensure better coverage of persons working at home (see **Section 3.7**). These related aspects suggest possible avenues for strengthening OSH management in the (post-)COVID-19 period.

Under ESENER 2019, a new question was put to respondents on whether risk assessments cover work premises outside the establishment. Interestingly, some differences were detected across countries, with the highest score estimated for Serbia (80 %) and the lowest for Denmark (42%) (see **Figure 10**).

While variations in national sectoral distributions likely account in part for these differences, there could be an uneven interpretation of the scope of the risk assessment procedure across countries.

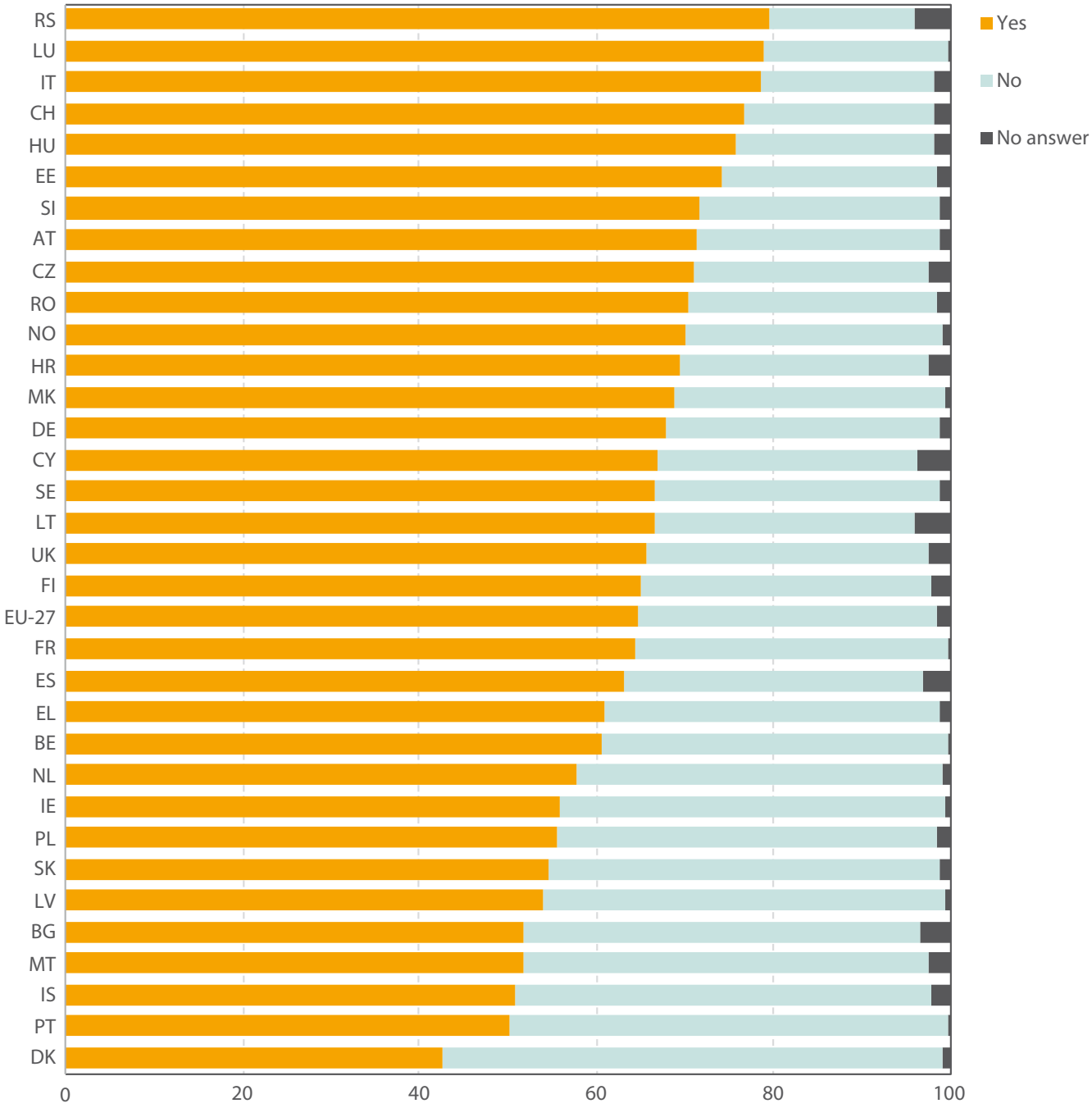
44 Base: establishments in the EU-27 conducting risk assessments with staff working at home.

45 Heavy industry's new customer focus: https://www.dhl.com/global-en/home/about-us/delivered-magazine/articles/2020/issue-1-2020/heavy-industrys-new-customer-focus.html

46 Deloitte. (2021). The future of work in manufacturing. https://www2.deloitte.com/content/dam/insights/us/articles/4747_Manufacturing-personas/4747_Manufacturing-personas-Interactive.pdf

47 Office for National Statistics. (2020). Which jobs can be done from home?. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichjobscanbedonefromhome/2020-07-21

Figure 10: Use of risk assessments to cover other workplaces outside the establishment, % establishments by country (ESENER 2019)[48]



More significantly, and as suggested above, the results showed that the differences in frequency of coverage in risk assessments of workplaces outside the establishment was due to differences in the sectoral working environment. As expected, construction (90%) was ranked first, with accommodation and food service activities (42%) the least likely to include such premises or sites.

The ESENER 2019 findings on risk assesments were especially relevant for establishments that hire additional persons like subcontractors, temporary agency workers or volunteers. In this instance, the question posed was whether risk assessments included only people on the payroll or other types of workers, too (see **Figure 11**).

The purpose of this question is to learn if all persons exposed to risks in the workplace have been considered properly, even if they are not direct employees. However, it is important to note that the possible answers to this question changed partly under

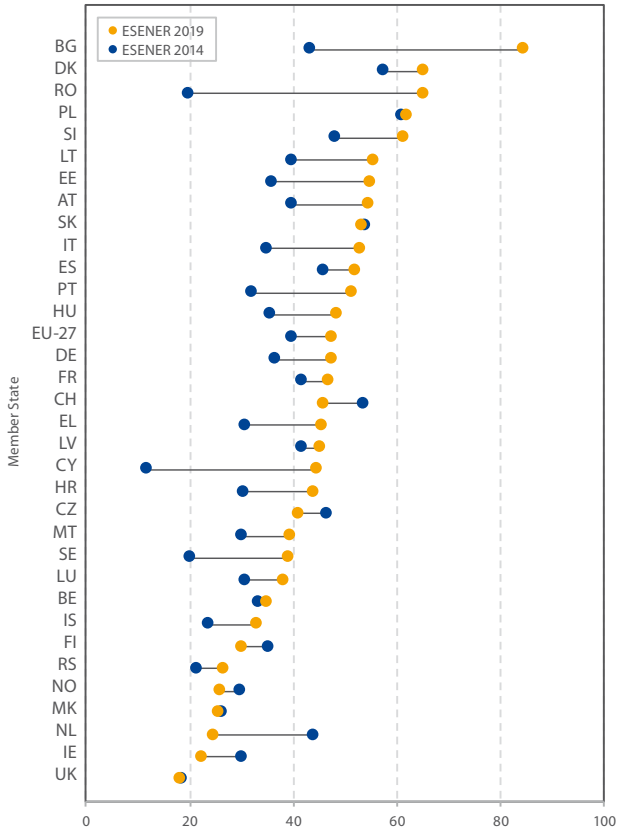
48 Base: establishments in the EU-27 conducting risk assessments with workplaces outside the establishment.

ESENER 2019, making it difficult to directly compare some of the results with those of ESENER 2014.[49]

With respect to the results for the EU-27 (from 42% to 47%), it is concerning that establishments have become more likely to cover 'persons on the payroll only', since ESENER 2014. Evidently, this trend does not seem to match the ongoing growth of flexible employment methods and subcontracting that firms are increasingly taking advantage of.

The results by country appeared quite volatile in places; this may be partly explained by the changes in possible answers to this question. At the same time, the trends suggest a worsening of the situation, as seen, for example, in Bulgaria (from 43% to 84%) and Romania (from 19% to 65%). Some positive results were identified, however: the Netherlands (from 44% to 24%) and Ireland (from 30% to 22%) are examples.

Figure 11: Use of risk assessments to cover persons on the payroll only, % establishments by country (ESENER 2019 and ESENER 2014)[50]



The results by sector followed a similar pattern to those by country, revealing that coverage of persons on the payroll in risk assessments increased, although not greatly. This trend was most pronounced in the electricity and gas sector (from 21% to 53%) and other service activities (from 24% to 46%). Interestingly, the situation did not change much in the construction sector (very slightly up from 35% to 36%), despite the extensive use of subcontracting and suppliers needed to provide onsite services and materials. By establishment size, large establishments were the least likely to consider those on the payroll only (from 24to 29%), while micro establishments were the most likely to do so (from 41% to 46%).

The regression analysis results identified several internal establishment factors being positively associated with the coverage for persons not on the payroll. These include using internal staff to conduct risk assessments, appointment of OSH representatives, involving staff in the design of measures following an impact assessment, and providing risk assessment results in written form. It appears that staff involvement and transparency around OSH management lead to better identification and coverage of all persons exposed to risks (see **Section 3.7**).

3.4.2 Measures taken for the ongoing management of employee health

With respect to measures taken for OSH management, ESENER 2019 also covered the management of employee health. Such measures are important: they allow for good monitoring of the health situation after implementation of the OSH management approach set out in risk assessments, support development of responsive preventive cultures that help avoid negative OSH outcomes upfront, and may lead to improved staff wellbeing and organisational productivity.

The first question in this field related to ESENER 2019 only and explored whether establishments keep records of absence due to sickness.[51] As with other measures, there was some divergence across countries, with results ranging from 99 % in Norway to 61 % in France. However, most countries (26 in total) obtained scores greater than 80 %, indicating that the practice is well established, on the whole.

Moreover, the issue of keeping records of sickness absence was explored using regression analysis. It was found that appointment of OSH representatives and inspectorate visits are positively related with the likelihood of establishments following this

49 Under ESENER 2019, the possible responses to this question included 'On the payroll', 'Other types of workers are also covered, and 'No answer'. ESENER 2014 offered the responses 'Only directly employed people are covered', 'Other types of workers are also covered', 'Only some types of other workers are covered' and 'No answer'. Analyses revealed that the results were not comparable as regards persons not on the payroll, suggesting that the items measured slightly different phenomena.

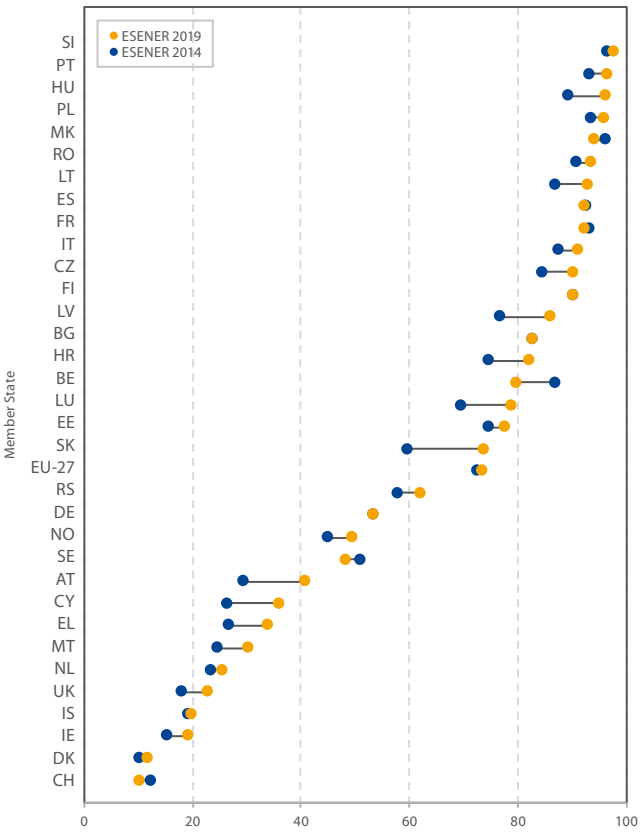
50 Base: establishments in the EU-27 conducting risk assessments that also use additional workers not on the payroll.

51 Under ESENER 2014, a similar question was asked, namely 'Are sickness absences routinely analysed with a view to improving the working conditions?' This question was worded differently in ESENER 2019, and the results for both waves were quite different. Therefore, these results cannot be compared directly, as the answers appear to measure slightly different phenomena.

practice, whether to meet legal obligations or to strengthen the safety culture at establishments (see **Section 3.7**).

Again, with respect to health monitoring, a further item was considered: whether regular medical examinations were used to monitor employee health (see **Figure 12**). The EU-27 average over time (from 73 % to 74 %) showed limited movement from ESENER 2014 to ESENER 2019. Yet the results were distinct between countries, likely reflecting, among other things, differences in national legal obligations. For example, organisations were mostly compliant in Slovenia (98 %), whereas in Denmark (12 %), employers do not have a duty to provide medical examinations. However, several countries reported improvements since ESENER 2014, including Austria (from 29 % to 41 %), Latvia (from 76 % to 86 %) and Slovakia (from 60 % to 74 %).

Figure 12: Arrangement of regular medical examinations to monitor employee health, % establishments by country (ESENER 2019 and ESENER 2014)[52]



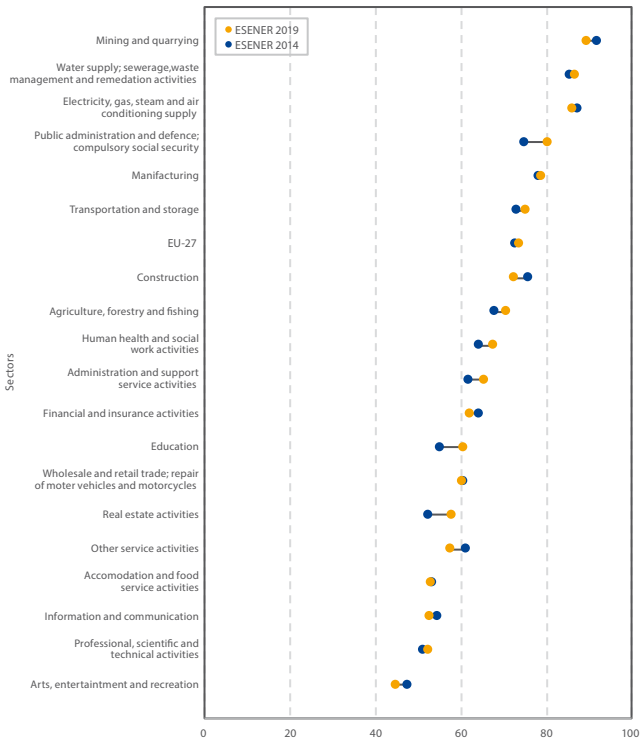
Interview feedback used to help clarify these results indicated that:

- In the Netherlands, there are requirements in place for regular medical examinations, but the legal text is somewhat too general, lacks clarity and is sometimes poorly interpreted; moreover, compliance is costly.
- In Austria, OSH provisions are used to reduce risks in the working environment and protect employees generally. Therefore, the legal focus is not on treatment, but rather prevention in the first instance. However, if a significant health risk is identified during an inspection (for instance, due to poorly managed chemicals), employers will be asked to carry out medical examinations of staff.

Similarly, differences in legal obligations, among others, likely impact the sectoral responses; by and large, sectors associated with dangerous and manual working environments were more likely to arrange medical examinations, although public administration was reported as committed to the practice, too.

Over the reporting period, the situation was largely stable, with some sectors reporting modest increases, like public administration (from 75 % to 80 %) and education (from 55 % to 61 %), although minor declines were also noted, for example in mining and quarrying (from 92 % to 90 %) and construction (from 76 % to 72 %) (see **Figure 13**).

Figure 13: Arrangement of regular medical examinations to monitor employee health, % establishments by sector (ESENER 2019 and ESENER 2014)[53]



As in other cases, the practice of arranging medical examinations for employees was observed to be related to establishment size, with little change in the results from ESENER 2014. The highest score was obtained by large establishments (stable at 88 %) and the lowest by micro firms (from 58 % to 60 %).

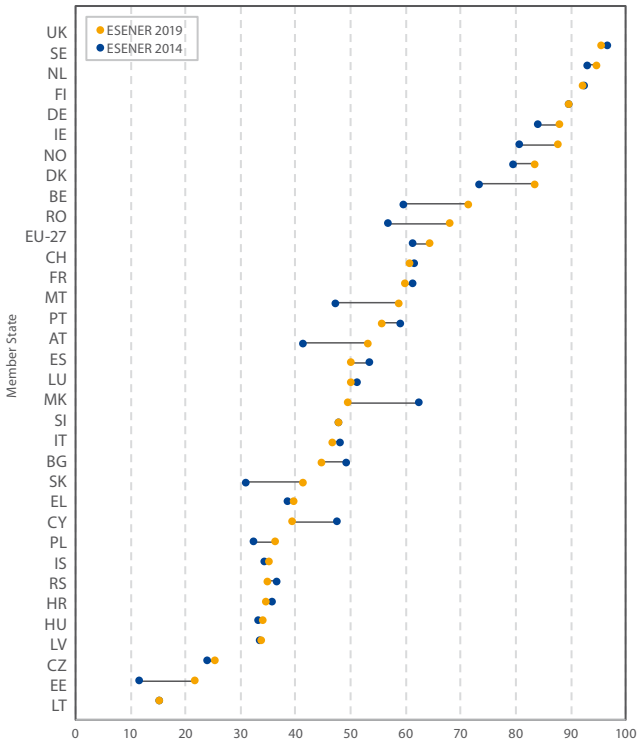
52 Base: all establishments.

53 Base: all establishments in the EU-27.

Again, on the topic of staff health monitoring, medium and large-sized establishments were asked to confirm if they had introduced procedures to support employees returning to work after long-term sickness absence. The details of the procedures to reduce obstacles for those returning to work and safeguard employee health were not discussed, but may well include methods such as a phased return to work, employee-manager discussions on whether staff are in a good position to return to work as normal, modifications to the staff role and tasks to minimise risks.

The range of scores on this item was remarkably broad, with countries reporting shares from 95 % (Sweden) to 14 % (Lithuania), and with only 13 countries reporting 60 % of establishments or more. Over the reporting period, the EU-27 result improved modestly (from 61 % to 64 %), although some countries improved sharply, like Austria (from 42 % to 53 %) and Malta (from 47 % to 59 %), while others retracted, such as North Macedonia (from 62 % to 50 %) and Cyprus (from 48 % to 39 %) (see **Figure 14**).

Figure 14: Procedure to support employees returning to work after long-term sickness absence, % establishments by country (ESENER 2019 and ESENER 2014) [54]



Since ESENER 2014, the results for ESENER 2019 by sector have showed mainly positive movement, with notable increases in the information and communication sector (from 61 % to 71 %) and the agriculture, forestry and fishing sector (from 45 % to 61 %). At the same time, a small minority of sectors were noted as less likely to introduce such procedures to support employees returning to work: real estate (from 72 % to 50 %) and arts, entertainment and recreation (from 69 % to 61 %). Still, the use of such procedures varied greatly, with estimates for ESENER 2019 ranging from 83 % for the mining and quarry sector to 51 % for real estate activities. As one would expect, large firms obtained the highest score (from 77 % to 79 %) followed by medium-sized firms (from 63 % to 68 %). While the results are positive on the whole, there remains some room for improvement in ensuring better management of employees returning to work.

Organisations were also asked whether they used workplace health promotion measures to promote good health among employees. The main rationale for promoting such measures is to provide complementary support to address occupational diseases and risks such as MSDs, depression and other (chronic) illnesses, with the benefit of boosting productivity and quality of working life. Areas typically prioritised include healthy eating, physical exercise and stretching, awareness-raising around alcohol and drug addiction, smoking at work, stress management, healthy sleeping and rest.

While only a minority of firms reported such practices, EU-27 trends have improved slightly since ESENER 2014 with respect to 'raising awareness on the prevention of addiction' (from 35 % to 36 %), 'raising awareness of healthy nutrition' (from 28 % to 32 %), 'promotion of sport activities outside working hours' (from 28 % to 30 %), and 'promotion of back exercise, stretching and other physical activity at work' (from 25 % to 27 %).

By country, Slovenia was most active for the measure of 'raising awareness of healthy nutrition' (from 42 % to 58 %) and least active was Czechia (with no change from 2014, at 21 %). Finland reported the most activity across several measures, representing a leading example in workplace health promotion. This was with respect to 'raising awareness on the prevention of addiction' (from 59 % to 58 %), 'promotion of sporting activities outside working hours' (from 78 % to 75 %) and 'promotion of back exercise, stretching and other physical activity at work' (from 50 % to 54 %). For these items, the lowest reported activity was from Estonia (from 19 % to 21 %) on prevention of addiction, Italy (from 11 % to 13 %) on sports activities, and Cyprus (from 6 % to 8 %) on the promotion of back exercises at work (see **Table 7**).

54 Base: all establishments with more than 49 employees.

Table 7: Use of measures targeted for health promotion, % establishments by country (ESENER 2019)[55]

Country	Prevention of addiction	Healthy nutrition	Sports activities outside working hours	Back exercises at work
EU-27	36	32	30	27
AT	33	34	31	25
BE	45	40	28	26
BG	33	33	36	33
CH	33	32	31	17
CY	33	26	13	8
CZ	23	21	37	24
DE	26	29	33	27
DK	42	33	46	33
EE	21	28	55	45
EL	49	45	23	11
ES	40	39	27	45
FI	58	47	75	54
FR	36	27	19	25
HR	38	31	41	37
HU	46	26	32	17
IE	29	41	34	32
IS	32	53	63	39
IT	50	30	13	14
LT	37	25	37	31
LU	36	31	25	20
LV	29	32	50	57
MK	48	39	36	23
MT	36	44	37	25
NL	31	39	35	21
NO	33	39	50	46
PL	26	24	32	22
PT	41	42	26	25
RO	52	48	35	39
RS	41	31	45	29
SE	38	37	83	42
SI	47	54	63	43
SK	29	32	40	15
UK	38	41	31	32

55 Base: all establishments.

There were some differences in the implementation of such measures by sector. The measure of 'raising awareness of healthy nutrition' was promoted most by educational sector organisations (from 49 % to 53 %) and least by construction sector organisations (from 20 % to 22 %); 'raising awareness on the prevention of addiction' was reported mainly by mining and quarrying (no change at 52%) and to a much lesser extent, by real estate activities (from 24 % to 22 %).

On the whole, the promotion of health using employee-targeted measures most likely benefits staff working in larger organisations most and micro firms least, and these results have remained relatively stable since ESENER 2014. Comparing results from these two sizes of organisations on the measure 'raising awareness of healthy nutrition' showed that large organisations promoted it most (from 66 % to 68 %) and micro-organisations least (from 29 % to 31 %). Similar percentage scores were noted for the other items.

Finally, establishments were asked a series of questions on whether they had taken up OSH management measures to promote 'sustainable working lives'. This policy focus looks at how employment practices can be adapted to the needs of an ageing population to ensure people can maintain an extended working life by mitigating work-related risk factors upfront. In this case, the focus of the questions under ESENER 2019 corresponded to measures for reduction of the likelihood of MSDs.

Results for the EU-27 were slightly worrying, considering that establishments were less likely to introduce measures to manage risks on MSDs in comparison to the results of ESENER 2014. The following declines over the reporting period were noted:

- from 85 % to 77 % on the measure of 'provision of equipment to help with the lifting or moving of loads or other physical heavy work';[56]
- from 73 % to 67 % concerning 'provision of ergonomic equipment such as specific chairs or desks';
- from 66 % to 60 % regarding 'encouraging regular breaks for people in uncomfortable or static postures including prolonged sitting';
- 54 % with respect to a new question for ESENER 2019 on 'the possibility for people with health problems to reduce working hours';
- from 53 % to 48 % for 'rotation of tasks to reduce repetitive movements or physical strain'.[57]

Clearly, these results do not meet the needs of an ageing population increasingly exposed to working later in life. Moreover, while establishments had become more aware of the need to manage risks that could result in MSDs (see **Section 3.3**), it appeared that managerial willingness to introduce measures to mitigate possible negative outcomes had not kept pace (see **Table 8**).

By country, some clear differences were discernible on the issue of the uptake of measures to support sustainable working lives, with the general decline in activities since ESENER 2014 also evident.

With respect to 'provision of equipment to help with the lifting or moving of loads or other physical heavy work', a modest change was noted for Austria, which was at the top of the range for ESENER 2019 (from 89 % to 84 %), although the country at the bottom of the range, Slovakia, declined quite sharply (from 71 % to 59 %) (see **Table 8**). Regarding the 'rotation of tasks to reduce repetitive movements or physical strain', the highest share under ESENER 2019 was reported in Romania (from 60 % to 66 %) and the lowest in Slovakia (from 29 % to 25 %).

In terms of 'provision of ergonomic equipment such as specific chairs or desks', Estonia was the strongest under ESENER 2019 (from 80 % to 82 %), whereas the response from Slovakia was less prominent (from 51 % to 44 %).

On the item of 'encouraging regular breaks for people in uncomfortable or static postures including prolonged sitting', Estonia reported the most activity (from 90 % to 83 %), and Slovakia the least (from 53 % to 44 %). Finally, feedback on the measure of 'the possibility for people with health problems to reduce working hours' resulted in a solid response from Iceland (79 %), with a much lower score registered for Croatia (34 %).

56 Base: all establishments in the EU-27 that undertake lifting or moving people or heavy loads.

57 Base: all establishments in the EU-27 undertaking repetitive hand or arm movements.

Table 8: Uptake of OSH management measures to support 'sustainable working lives', % establishments by country (ESENER 2019)[58]

Country	Provision of equipment to help with the lifting or moving	Provision of ergonomic equipment	Encouraging regular breaks for people in uncomfortable working positions	The possibility for people with health problems to reduce working hours	Rotation of tasks to reduce repetitive movements
EU-27	77	67	60	54	48
AT	84	71	64	57	41
BE	80	77	57	66	51
BG	80	47	64	36	37
CH	78	62	54	64	41
CY	71	63	68	47	41
CZ	68	53	51	46	58
DE	84	70	61	65	43
DK	63	68	53	68	52
EE	66	70	83	43	43
EL	61	62	53	48	40
ES	78	75	67	43	56
FI	79	73	75	62	58
FR	77	71	60	55	50
HR	74	57	68	34	57
HU	82	58	60	45	63
IE	72	58	66	63	56
IS	84	68	57	79	52
IT	72	63	55	44	47
LT	73	44	61	50	44
LU	82	65	59	50	38
LV	82	59	64	44	39
MK	72	45	63	47	53
MT	72	71	67	47	58
NL	75	72	58	69	61
NO	72	73	69	76	56
PL	64	67	49	46	32
PT	69	56	56	40	52
RO	82	57	75	56	66
RS	75	63	64	33	38
SE	80	81	67	72	54
SI	65	61	63	43	37
SK	59	47	44	40	26
UK	66	60	72	67	61

The results by sector shed light on the fact that responses to the measures were often linked to working conditions. Heavy and manual industries were more likely to 'provide equipment to help with the lifting or moving of loads or other physical heavy work'. On this measure, mining and quarrying was the most active under ESENER 2019 (from 95 % to 90 %) and education the least (from 62 % to 46 %).

Similarly, heavy and manual industries were more likely to 'rotate tasks to reduce repetitive movements or physical strain', as seen in the agriculture, forestry and fishing sector (from 72 % to 64 %), while information and communication (from 31 % to 25 %) was the industry least likely to do so.

58 Base: all establishments except those filtered concerning heavy loads and repetitive movements (see previous footnotes).

Professional services such as financial services were more often likely to 'provide ergonomic equipment' (from 88 % to 84 %), and accommodation and food activities the least likely (from 44 % to 36 %). The 'encouraging of regular breaks for people in uncomfortable or static postures' was found to be prevalent in different types of industries, although administrative and support services were most likely to do so (from 73 % to 69 %), while the education sector was the least likely (from 62 % to 53 %). This latter result seems disproportionate to the extensive reports of MSDs in the sector.

The 'possibility for people with health problems to reduce working hours' was most frequently mentioned by human health and social work (73 %) and least frequently recorded in construction (48 %). Again, the latter result does not seem to correspond to the comparatively severe health risks associated with the sector: working with asbestos, noisy conditions, dust and airborne fibres, and repetitive movements.

Typically, large organisations reported implementation of OSH management measures to reduce MSDs. By way of example, 'provision of equipment to help with the lifting or moving of loads or other physical heavy work' was confirmed mainly by large organisations (from 92 % to 90 %), and to a lesser extent, by micro companies (from 81 % to 69 %).

3.5 OSH commitment

European establishments are expected to undertake the necessary steps to manage risks appropriately using mandated risk assessment procedures to identify and evaluate risks, and by designing and introducing measures, to mitigate and build awareness around the risks identified upfront. Full compliance with these requirements clearly involves a high level of commitment to OSH to ensure that the approach is sufficiently comprehensive and well implemented.

However, establishments may demonstrate further types of OSH commitment that go beyond risk identification, assessment and introduction of corresponding measures. This section (Section 3.5), explores such further actions that may have been taken to ensure better management of OSH.There is a clear overlap between OSH commitment and the concept of a safety culture: the shared attitudes, values and perceptions towards safety held by an organisation. Safety culture comprises the allocation of safety roles, responsibilities and activities, as well as the behavioural and psychological characteristics of staff in managing risks.[59] Safety climate is a related term referring to the perceived value placed on safety in an organisation at a given point in time.[60]

To some degree, one must acknowledge that the results should be interpreted carefully, considering that commitment to OSH can be expressed in a variety of ways. For example, national regulation can function as the key driver in ensuring that establishments take steps to secure a safer working environment. Such rules, however, may vary by establishment size and sector, ultimately influencing the reporting of the level of commitment, for example, towards large firms or relatively 'hazardous' sectors, as they may be exposed to more extensive OSH obligations.

At the same time, measurement of OSH commitment is likely to yield responses from companies that have acted voluntarily, based on their commitment to proactively manage OSH, going beyond minimum legal requirements, in some cases. The drivers here may be management's concerns around employee safety, wellbeing and productivity; the actions of employees; recommendations from external bodies; and the need to demonstrate OSH commitment to suppliers, non-governmental organisations (NGOs) and consumers as part of corporate social responsibility (CSR) efforts.

Depending on the national context, an indicator of regulatory, and possibly in some cases, voluntary commitment, is the provision of documents to explain OSH responsibilities or procedures. Country feedback on the question of whether such documents have been provided illustrated relatively high levels of commitment in the main, with 27 countries obtaining a score of 80 % or more. The overall situation appears to have remained stable since ESENER 2014 for the EU-27 (89 % in both 2014 and 2019). Some countries reported substantial increases, like Portugal (from 84 % to 95 %) and Malta (from 50 % to 68 %), while others declined slightly, like Switzerland (from 71 % to 65 %) and Luxembourg (from 67 % to 63 %).

Those responding affirmatively to this question were asked, for the first time under ESENER 2019, whether the documents explaining OSH procedures and responsibilities were made available to persons working in the establishment. The EU-27 reported score was highly positive (94 %) and the country range relatively narrow, from 99 % (United Kingdom) to 84 % (Iceland).

A further demonstration of commitment is linked to discussions on OSH at the top level of management. Clearly, this is a measure of voluntary commitment, even though such discussions are necessary for planning how OSH-related duties can be fulfilled consistently as well as for the development of an organisational preventive culture.

In this case, the positive scores partly demonstrated that most establishments appear to aim to go beyond treating OSH as a non-essential activity and to integrate OSH management thinking into the planning of their regular, day-to-day business activities.[61]

59 Tear, M. J., Reader, T. W., Shorrock, S., & Kirwan, B. (2020). Safety culture and power: Interactions between perceptions of safety culture, organisational hierarchy, and national culture. Safety Science, 121, 550–561. https://doi.org/10.1016/j.ssci.2018.10.014

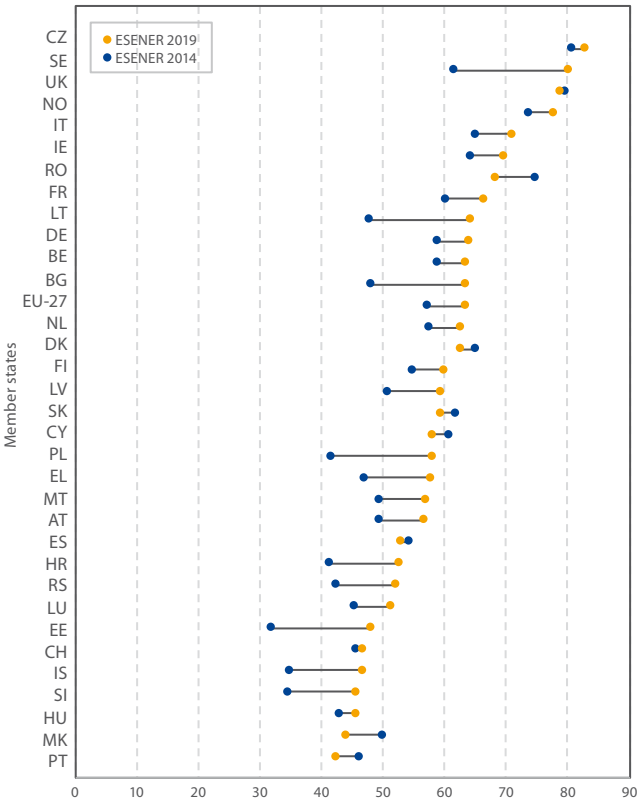
60 State of Queensland. (2021). Safety culture, climate and leadership. https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0013/20803/safety-culture-climate-leadership.pdf

61 This question was asked to establishments with 20 or more employees.

While the reported EU-27 trends in this area remained relatively stable, the practice experienced a modest upswing over the reporting period from ESENER 2014 (57 %) to ESENER 2019 (63 %) in terms of discussing OSH regularly. This upswing was largely accounted for by the drop (from 35 % to 29 %) in discussing OSH at top management meetings only occasionally.

The results by country showed clear differences in the practice across countries, with Czechia at the top of the range (from 81 % to 83 %) and Portugal at the bottom (from 46 % to 42 %). Since ESENER 2014, the situation has remained mostly stable for this measure, although some countries saw significant positive movement, like Sweden (from 61 % to 80 %) and Lithuania (from 48 % to 64 %), while others declined, like Romania (from 75 % to 68 %) and North Macedonia (from 50 % to 44 %) (see **Figure 15**).

Figure 15: Discussion of OSH at top levels of management, % establishments by country (ESENER 2019 and ESENER 2014)[62]



The variation by sector regarding regular OSH-focused discussions among top management was also relatively marked with mining and quarry activities at the top of the range (from 71 % to 90 %) and real estate at the bottom (from 45 % to 50 %). Notably, heavy and manual industries featured at the top of the rankings, suggesting these industries are accustomed to discussing OSH practices as part of their typical business activities. In the main, sectors increased the frequency of their OSH managerial discussions over the period, as seen in construction (from 62 % to 75 %) and information and communication (from 45 % to 55 %).

Generally, across the European Union, it seems there is a relatively good level of consideration of OSH issues by top management, suggesting that many establishments are reflecting on their responsibilities; it is incongruous, though, that this is not being converted into an increase in related follow-on actions (see, for example, **Table 8** on OSH management measures to support 'sustainable working lives').

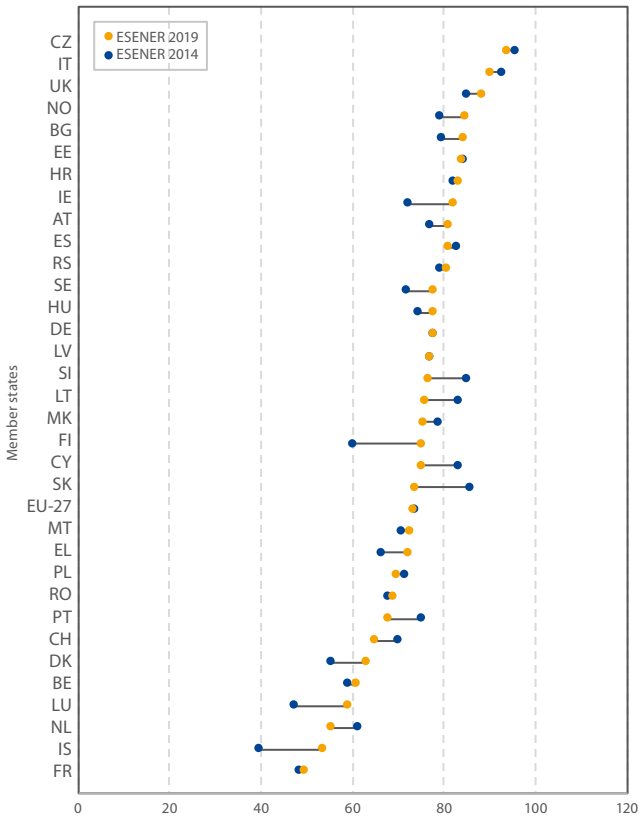
Interestingly, the regression analysis showed that discussion on OSH by top management is strongly associated with the completion of regular risk assessments and appointment of OSH representatives (see **Section 3.7**). One could assume that when the key foundations for OSH management are introduced, their functioning naturally requires top management to reflect on the risks highlighted.

Another aspect central to good commitment to OSH management is the provision of OSH training to line managers and team leaders. As well as demonstrating that establishments are committed to building up OSH competence, training can support stronger organisational planning and flexibility around OSH management. Ultimately, this can enable persons with mid-level responsibilities to identify emerging risks corresponding to their specific area of management, and support them in meeting minimum requirements and goals to raise standards.

This question on training was asked of establishments with 20 or more employees. The results showed distinct levels of commitment across countries, with the strongest performer being Czechia (from 96 % to 94 %), especially when compared to France (from 47 % to 49 %). The EU-27 average did not change over the period, indicating relative stability overall, although some countries made headway, such as Finland (from 60 % to 75 %), while others invested less in this area, such as Slovakia (from 85 % to 74 %) (see **Figure 16**).

62 Base: all establishments with 20 or more employees.

Figure 16: Provision of OSH training to team leaders and line managers, % establishments by country (ESENER 2019 and ESENER 2014)[63]



Interviews with national authorities helped to clarify some of the responses to this question:

- Italian legislation mandates OSH training for all workers, including managers and supervisors.
- In Denmark, many of the OSH responsibilities are legally designated to OSH representatives who must undergo extensive training. The same rules do not apply to team leaders and line managers; however, training for this group is encouraged in some sectors (such as construction) through social partner agreements.
- In Lithuania, all employers are required to undergo OSH training from a specialist organisation approved by the state. The drop in numbers in recent years could not be explained easily, since there is a policy focus on encouraging the uptake of OSH training.
- In the Netherlands, training of team leaders or line managers is not a legal obligation, and the feeling was that many establishments consider that further training is not necessary, since the appointed OSH representatives, or the managers responsible for OSH in companies with fewer than 25 employees, already have dedicated responsibilities.

The disparities between sectors, albeit not as extensive as those seen by country, also explained the variations in the provision of OSH training to line managers and team leaders. Again, industries that are exposed to more dangerous work environments like mining and quarrying were more likely to report undertaking of training activities on this measure (94% both in ESENER 2014 and 2019 when compared to other industries such as financial and insurance activities (from 58 % to 60 %).

Our regression analysis showed that the uptake of training for team leaders and line managers is strongly related with 'top down' and 'bottom-up' organisational factors, namely regular discussions on OSH by top management, and appointment of OSH representatives (see **Section 3.7**).

A further aspect of OSH commitment subject to measurement was whether the ESENER survey respondents had themselves received training. This dimension is an important reflection of commitment, considering that the 'the person with most knowledge on OSH matters at the establishment' should respond to the ESENER interview.

Overall, limited change was reported, although EU-27 trends experienced a slight decrease (from 71 % to 65 %) over the past 5 years. While some countries did report positive trends, such as Romania (from 56 % to 73 %), some larger countries like Germany indicated sharp declines (from 70 % to 50 %). This is a concern, bearing in mind the complexity of challenges that must be considered to manage OSH effectively, including new and emerging risks.

A further element of OSH commitment concerns the regular discussion of OSH in team meetings, which is an essential building-block for continual proactive OSH management and the dynamic development of measures to mitigate emerging risks.[64]

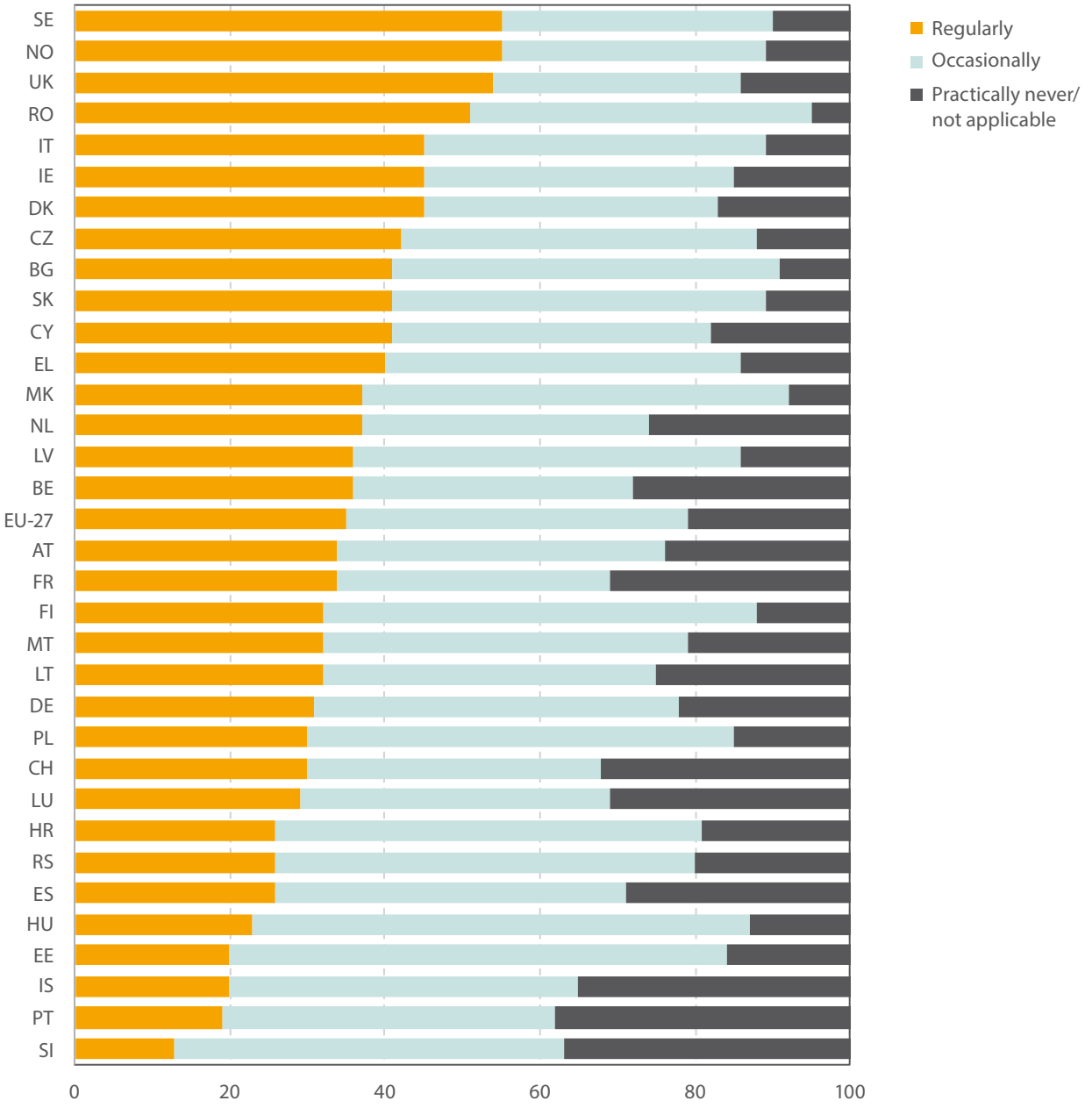
Unfortunately, for the EU-27, regular discussions in staff or team meetings were not reported extensively (35 %). Some of the countries with strong traditions of employee participation, like Sweden (55 %) and Norway (54 %), obtained the highest scores, while lower results were reported in Slovenia (13 %) and Portugal (19 %) (see **Figure 17**).

Clearly, the results suggest that many establishments are not in an optimal position to manage risks proactively or in a highly tailored manner, considering that OSH-related risks are not reviewed in 'day-to-day' management contexts. Moreover, the extent of involvement of employees in OSH management is not exploited fully.

63 Base: all establishments with 20 or more employees.

64 This question was also asked under ESENER 2014; however, the possible answers to this question were slightly different. When examined against the answers for ESENER 2019, the results were not found to be comparable. Therefore, the answers to this question were considered for ESENER 2019 only.

Figure 17: Regular discussion of health and safety issues in staff or team meetings, % establishments by country (ESENER 2019)[65]



Similarly, the differences by sector were rather acute. Again, the safety risk profile of the sectors is a key factor determining the results, considering the findings reported for mining and quarrying (63 %) and water supply and waste management (59 %). On the other hand, sectors such as real estate activities (27%) and information and communication (22%) were recorded as undertaking regular discussions in staff or team meetings less frequently.

The results suggest that sectors not undertaking staff discussions on OSH regularly are also not as engaged in other OSH management activities. For example, consider the comparatively weaker results of real estate (65 %) or information and communication (61 %) on other measures such as completion of risk assessments (see **Subsection 3.4.1**).

The results also indicated that there are differences by establishment size on regular OSH discussions in staff or team meetings, as seen when comparing large organisations (67 %) to smaller organisations such as micro establishments (31 %).

This shows the potential for greater OSH-related risks for staff in smaller organisations, given their reduced possibilities to discuss such matters. At the same time, informal OSH management methods, sometimes used by small organisations, are not visible

65 Base: all establishments.

in the results. Examples are informal spoken communication and 'on the job' allocation of tasks.[66]

3.6 Sources of OSH advice

Given the responsibilities designated to employers regarding OSH management, they may need to solicit external advice to fulfil their duties effectively if the internal expertise is deemed insufficient for tasks like identifying risks, completing risk assessments, designing and implementing measures and assessing the ongoing situation.

Moreover, expertise may be needed should employees wish to obtain further advice, or if an establishment wishes to enhance their approach to meeting OSH objectives, for example, for a combination of workplace health and safety and reputational reasons. In addition, establishments are periodically selected for official investigations, resulting in identification of gaps and shortcomings requiring attention in order to achieve compliance with minimum standards.

One of the key questions about sources of OSH advice was to learn of the types of OSH services used by establishments, whether in-house or contracted externally.

The findings showed that for the EU-27, there was continuity on the whole from ESENER 2014 to ESENER 2019, with the services chiefly used including 'occupational health doctors' (from 75 % to 76 %), 'generalists on health and safety' (from 62 % to 61 %), and 'experts for accident prevention' (52% in both survey waves), whereas 'ergonomic experts' (from 34 % to 35 %) and psychologists (from 17 % to 19 %) were called upon less frequently.

The differences in the types of services used are revealing, given the extent to which certain causes of MSDs and psychosocial risks were among the top OSH risks identified in establishments: 'repetitive hand or arm movements' (65 %) and 'having to deal with difficult customers, patients, pupils and so on ' (59 %) (see **Subsection 3.3**).

The differences by country suggest that the national context is a key determining factor in the uptake of these services. For example, the most acute reported differences concern the use of 'occupational health doctors', with Slovenia (from 95 % to 98 %) at the top end of the scale and Denmark (from 7 % to 11 %) at the bottom.

This result echoed the score Denmark obtained with respect to the comparable measure of 'monitoring of employee health' (from 10 % to 12 %), further confirming that establishments do not perform such functions in Denmark. However, in Germany (from 54 % to 56 %), where by law all companies should appoint a company doctor, whether internal or external, the ESENER results suggest that this is not always the case. More generally, national legislation likely plays a key role in determining the use of an occupational health doctor, for example, with rules applying to companies above certain employee size thresholds, and in cases of severe exposure to dangerous risks, for example chemical and biological factors.

With respect to the use of psychologists, the EU-27 average over the ESENER 2014-to-2019 period was relatively low (from 17 % to 19 %), but in Finland the practice was indicated as widespread (from 60 % to 71 %). The law in Finland allows employers to select the type of medical services to be offered to employees, placing a strong voluntary emphasis on managing mental health issues, in comparison to other countries (see **Table 9**).[67]

66 EU-OSHA. (2018). Safety and health in micro and small enterprises in the EU: the view from the workplace: https://osha.europa.eu/en/publications/safety-and-health-micro-and-small-enterprises-eu-view-workplace/view

67 Details of Finnish OSH law concerning the provision of medical services: https://www.infofinland.fi/en/work-and-enterprise/employees-rights-and-obligations/occupational-health-care

Table 9: Types of health and safety services used, whether in-house or externally contracted, for example occupational health doctors or health and safety generalists, % establishments by country (ESENER 2019)[68]

Country	Occupational health doctor	Generalist on health and safety	Expert on accident prevention	Expert on ergonomic design	Psychologist
EU-27	76	61	52	35	19
AT	68	64	54	52	18
BE	88	71	67	60	47
BG	91	64	41	15	10
CH	14	34	34	26	12
CY	14	76	54	25	4
CZ	84	84	56	7	7
DE	56	62	52	42	10
DK	11	62	44	39	46
EE	75	23	17	15	4
EL	25	79	54	40	5
ES	78	71	78	59	33
FI	97	58	62	80	71
FR	95	18	24	27	17
HR	83	80	55	13	31
HU	96	72	60	16	6
IE	27	57	47	26	10
IS	25	27	26	17	16
IT	91	77	73	27	10
LT	32	26	21	15	6
LU	77	35	34	18	9
LV	67	81	33	31	9
MK	66	61	47	31	23
MT	42	61	48	36	11
NL	85	50	45	44	28
NO	50	53	39	54	32
PL	98	87	34	9	24
PT	96	59	53	40	12
RO	95	83	71	26	38
RS	57	79	59	13	39
SE	66	29	21	64	57
SI	98	91	70	26	30
SK	42	79	84	7	8
UK	30	65	48	23	12

Again, the prevalence of different types of sectoral risks likely accounts for the use of the different types of OSH services.

Heavy industries such as mining and quarrying were among those most likely to use 'occupational health doctors' (from 80 % to 88 %), although there was a good level of commitment from public administration (from 76 % to 83 %), probably reflecting the quality of OSH and employee representation structures in this sector. Arts, entertainment and recreation activities, on the other hand, were much less likely to engage in this practice (from 50 % to 51 %), partly reflecting more informal working relationships such as temporary contracts and seasonal work.

68 Base: all establishments.

With respect to the use of 'ergonomic experts', the differences, albeit less acute, were revealing of some of the challenges that certain sectors face. Sectors typically associated with MSD risks, including financial and insurance activities (from 47 % to 48 %) and human health and social work (from 45 % to 47 %) were the most likely to use this type of expertise. Accommodation and food services (from 26 % to 28 %) were the least likely to recruit ergonomic expertise, which seems somewhat at odds with the risks associated with housekeeping and food preparation activities.

Sectors that report significant psychosocial risks, and take psychosocial risk management seriously, in particular public services, were the most likely to report use of psychologists, including human health and social work activities (from 35 % to 37 %) and education (from 33 % to 34 %). And not entirely unsurprisingly, the sector that reported the least use of psychologists was agriculture, forestry and fishing (from 8 % to 13 %). However, this industry is associated with several psychosocial risk factors such as long hours, isolation, financial uncertainty, planning difficulties, and extensive regulatory and administrative demands.

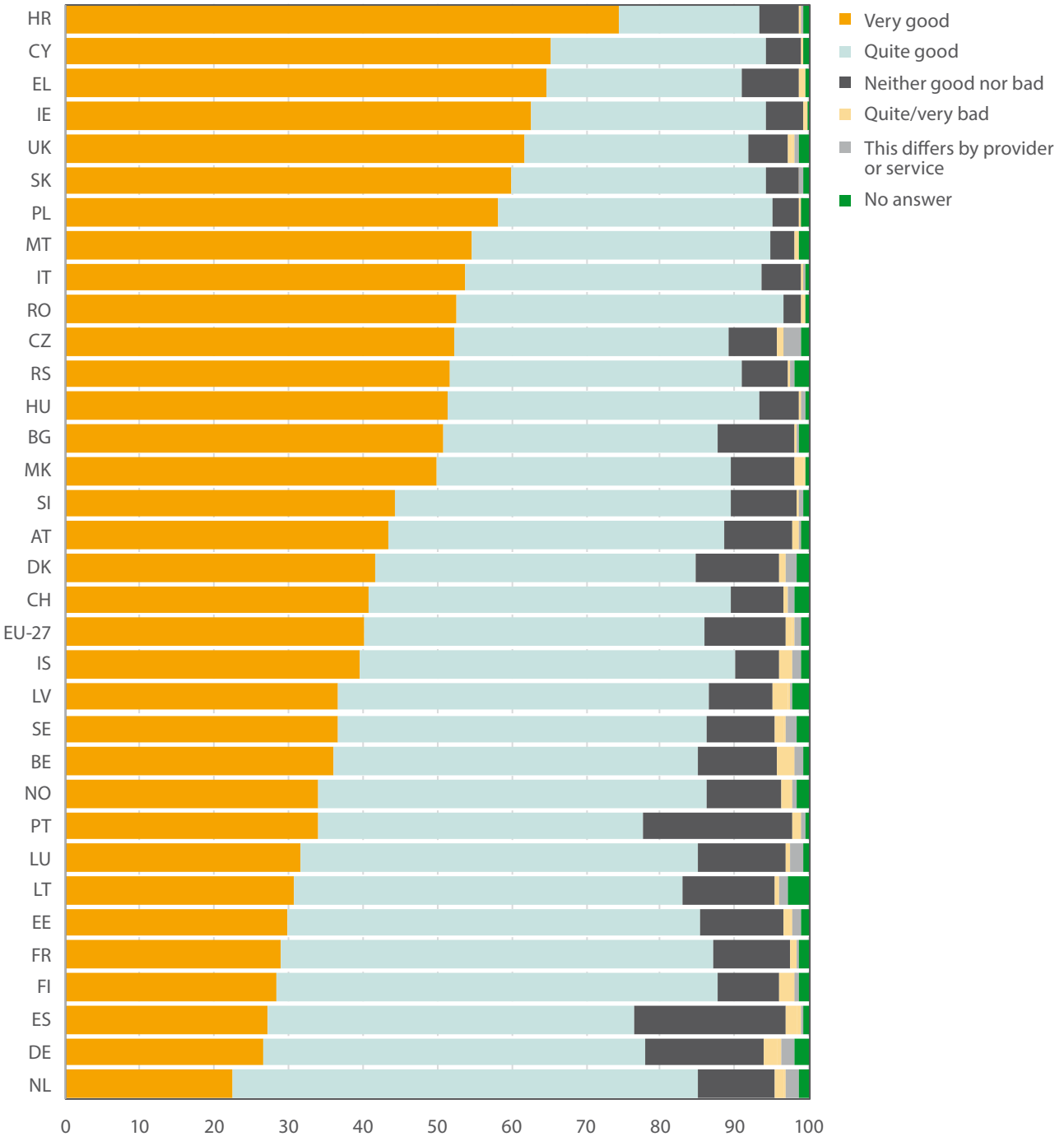
On the whole, large establishments, having resources and in some cases, a stronger association with sectors with higher risk profiles and technical skills, reported greater use of OSH services generally, as seen for 'occupational health doctor' (from 93 % to 92 %) and 'expert on accident prevention' (from 66 % to 68 %). This is also explained by the existing national legal requirements on the use of certain OSH services above a given number of workers. The largest gap in comparison with smaller enterprises concerned services associated with reducing new and emerging risks, such as 'psychologists' and 'ergonomic experts', with microenterprises reporting from 11 % to 12 % and from 27 % to 26 % respectively, over the period.

Under ESENER 2019, a new question was put to respondents on whether external OSH services have been used for health and safety tasks in the past 3 years. The EU-27 average score suggested that this was the case for 62 % of establishments, and 27 countries obtained a score of at least 50 %. Yet the responses to this answer varied widely: consider, for instance how the results for Slovenia (86 %) contrast with those of Cyprus (31 %).

By identifying the establishments that confirmed use of external services for OSH tasks, a subsequent new question was asked about the perceived quality of external OSH advisory services received.

The EU-27 average score indicated that 86 % of establishments found the services received either 'very good' or 'quite good', with 30 countries obtaining a score of 80 % or more for the sum of these two responses. However, perceptions of the external services as 'very good' were more common in some countries compared to others, for example, when considering Croatia (74 %) as compared to the Netherlands (22 %) (see **Figure 18**).

Figure 18: Rating of the external OSH advisory services used, % establishments by country (ESENER 2019)[69]



Perceptions of the quality of external OSH services received were much less divergent by sector, suggesting that country dynamics played a bigger role in determining the results. For example, for the response of 'very good', results ranged from 49 % to 39 % for accommodation and food services and public administration, respectively.

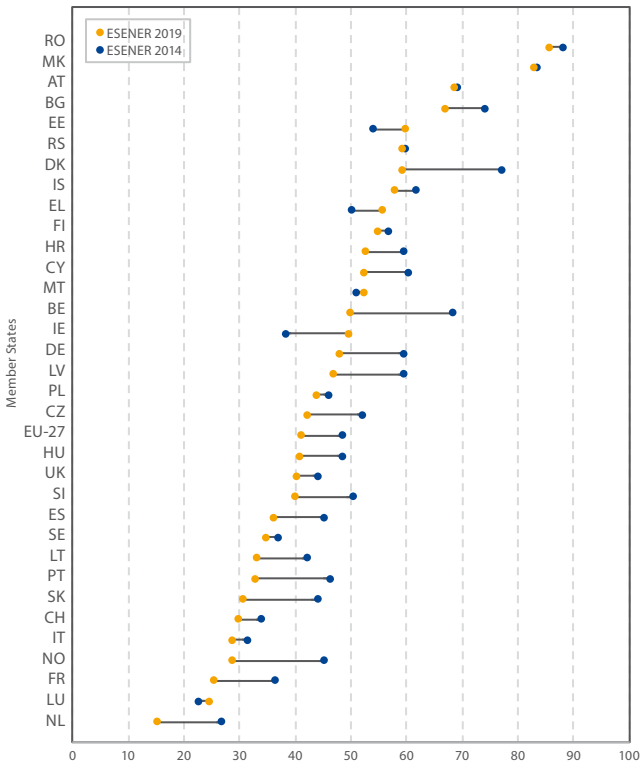
ESENER 2019 picked up on a worrying downward trend for the likelihood of establishments to undergo inspections, which seems to be diminishing generally. This is likely associated with reductions in the number of OSH inspectors, which has been well documented over the past decade in countries such as the United Kingdom. In this case, the policy has been refocused to ensure that proactive inspections take place in sectors that have the most serious risks, and has been associated with OSH and

69 Base: all establishments confirming use of external OSH services.

local authority cutbacks.[70] [71] In the case of Greece, the National Labour Inspectorate's 'Annual Report'[72] shows a general decline in the number of OSH labour inspectors between 2007 and 2017 (291 inspectors in 2007, 255 in 2014 and 245 in 2017). In a separate survey of EU focal points, respondents were asked to confirm if the number of OSH inspectors had changed in the past 5 years. Several countries, including Bulgaria, Estonia, France, Croatia, Cyprus, Lithuania, Hungary and Finland, confirmed that the number had decreased (see **Section 6.2**).

Indeed, the EU-27 average score (from 49 % to 41 %) contracted over the period, and some major declines were noted for Belgium (from 68 % to 50 %) and Denmark (from 77 % to 59 %). In addition, the differences between countries were stark, with a large majority of establishments in Romania (from 88 % to 86 %) undergoing inspections, and a minority in the Netherlands (from 27 % to 15 %). Yet the picture is slightly more complex: a small number of countries like Ireland (from 38 % to 50 %) and Estonia (from 54 % to 60 %) expanded their inspection regimes.

Figure 19: Whether establishments have been visited by inspectorates in the past 3 years, % establishments by country (ESENER 2019 and ESENER 2014)[73]



Interview feedback from national authorities clarified these results:

- In Denmark, the drop was mainly due to a change in policy whereby widespread inspections are perceived to be inefficient. Previously, the goal had been to inspect all companies (see the result for 2014) but that is no longer the case. Now companies are visited based on their position in a risk index.
- In Estonia, the increase was due to pressure from the government to inspect more businesses each year. One factor that supported this was the information gathered through the online risk assessment process.
- In Germany, the Joint German Occupational Safety and Health Strategy (GDA) has since 2014 made efforts to improve the prevention of psychosocial risks, including making them an integral part of inspections. In addition, emphasis has been put on making inspections more thorough. As a result, inspections have become longer and more complex, and the number of companies inspected has decreased. However, there is existing legislation mandating that a good proportion of companies be covered in inspections. Therefore, in 2026, a new measure will be introduced to increase the number of inspections and promote coverage.
- In Lithuania, there has been a reduction in inspections in recent years, combined with greater profiling of companies that may be non-compliant. Moreover, the new online national system for completion of risk assessments allows the inspectorate to identify companies that have not completed risk assessments.
- In the Netherlands, a cultural approach is followed of allowing employers and employees to cooperate and solve OSH-related problems. Therefore, there has not traditionally been a robust approach to inspections, although there has been a recent budget increase to increase the number of inspections.
- Feedback from Norway suggests that the sharp decrease between 2014 and 2019 was due to a more risk-based approach and greater trust between social partners and authorities. Visits are not believed to necessarily improve OSH.

The decline in the exposure of establishments to inspections was felt generally across sectors. As one would expect, some of the heavy and manual industries were prioritised by the inspections, as reported by mining and quarrying (from 78 % to 63 %).

Although accommodation and food service activities (from 65 % to 59 %) was the second most inspected sector, on other measures, such as the 'regular conducting of risk assessments' (from 74 % to 74 %), its performance was weaker when compared to other sectors. The results suggest that these activities require further inspection and advisory support to catch up with other industries.

70 Health and Safety Executive. (2020). How we inspect. Our role as a regulator. https://www.hse.gov.uk/enforce/how-we-inspect.htm

71 Unite the Union. (2021). Urgent government action needed to allow safety inspections of key COVID-19 workplaces. https://www.unitetheunion.org/news-events/news/2020/may/urgent-government-action-needed-to-allow-safety-inspections-of-key-covid-19-workplaces/

72 https://www.sepe.gov.gr/organismos/ektheseis-pepragmenon/

73 Base: all establishments.

Sectors exposed to fewer safety or chemical risks underwent fewer inspections, as with the professional, scientific and technical activities (from 26 % to 21 %). However, as shown throughout this chapter, sectors falling into this category sometimes appear to be less proactive in meeting their obligations. For example, professional, scientific and technical activities were one of the least likely industries to complete risk assessments (from 61 % to 60 %).

The results by establishment size indicated that inspectorates targeted a higher proportion of the large company category (from 70 % to 66 %) and micro establishment (from 45 % to 37 %) to a lesser extent. Yet, as indicated throughout this chapter, micro establishments face challenges in fulfilling OSH procedures or practices and may be at most risk if they do not otherwise use less formal methods.

Provision of high-quality information is essential in assisting establishments to improve their compliance efforts and to go beyond minimum standards. Per country, there are a range of sources offering such support, with certain types of external information providers closer to some sectors and establishments than others.

The situation across the EU-27 remained relatively stable, with advisory support mainly obtained from 'contracted health and safety experts' (64 %)[74] and to a lesser extent, insurance providers (from 48 % to 45 %). It seems that establishments have the greatest level of proximity to these sources, likely due to the obligations to acquire insurance services, the specific role that social insurance plays with respect to OSH in some countries such as Germany, and the need to obtain specialist professional information from OSH consultants to ensure compliance with insurance, contractual and OSH requirements (see **Table 10**).

As expected, considering the above-mentioned results on the reduced level of OSH inspections since ESENER 2014, the receipt of advice from inspectorates (from 44 % to 37 %) declined over the period. The implications of this should be considered in light of the fact that inspections are likely to benefit establishments through the provision of advice and by strengthening their safety culture.

Other sources played a significant albeit lesser role in the provision of OSH advice, including employer organisations (from 30 % to 28 %) and trade unions (from 19 % to 18 %). However, advice provided by official OSH institutes (from 41 % to 28 %) declined clearly. It appears that as with the provision of advice from OSH inspectorates, this is another area of (partly) publicly financed OSH support that is undergoing restructuring.

74 This is a new measure under ESENER 2019.

Table 10: Use of health and safety information from different types of organisations, % establishments by country (ESENER 2019)[75]

Country	Contracted health and safety experts	Insurance providers	Labour inspectorate	Employers' organisations	Official institutes for health and safety at work	Trade unions
EU-27	64	45	37	28	28	18
AT	57	38	68	40	34	22
BE	74	45	56	37	40	20
BG	45	38	61	16	27	9
CH	37	58	30	34	26	13
CY	40	42	46	12	21	9
CZ	85	19	29	5	18	7
DE	56	84	28	35	25	18
DK	47	19	60	37	16	41
EE	41	14	66	11	36	3
EL	42	24	34	14	25	9
ES	84	75	29	21	21	17
FI	47	49	56	45	65	38
FR	38	20	36	18	35	19
HR	86	39	50	20	31	11
HU	69	19	25	16	13	5
IE	65	55	67	38	38	14
IS	39	20	57	18	25	33
IT	82	9	12	28	18	12
LT	63	58	76	40	55	15
LU	39	29	45	27	34	22
LV	63	38	57	25	34	11
MK	46	40	68	27	30	12
MT	55	49	42	24	27	11
NL	54	38	32	41	36	21
NO	54	17	41	43	26	36
PL	79	40	56	20	34	11
PT	79	42	42	16	22	6
RO	84	38	81	32	36	18
RS	76	29	43	19	32	9
SE	59	23	72	51	31	62
SI	90	37	49	61	37	17
SK	78	29	29	10	17	12
UK	58	47	57	34	32	16

The differences in accessing OSH advice from different types of organisations is clearly observed when examining the country results. With respect to contracted OSH experts, this trend was reported most extensively in some of the south and east European countries such as Slovenia (90 %) and Spain (84 %), and much less in other parts of Europe such as France (38 %) and Switzerland (37 %) (see **Table 10**).

With respect to insurance providers, as one may expect, given the role of social insurance in OSH, results were reported most extensively in Germany (from 88 % to 84 %), Spain (from 82 % to 75 %) and Switzerland (from 70 % to 58 %), while the labour inspectorate is the main source of advice in Romania (from 82 % to 81 %), Lithuania (from 79 % to 76 %), and Sweden (from 65 % to 72 %).

The results showed that official OSH institutes tend to play a significant role in countries such as Finland (from 80 % to 65 %) and Lithuania (from 62 % to 55 %), while several Nordic countries confirmed the significant role of social partners in providing OSH advice. For example, advice from trade unions was called upon extensively in Sweden (from 51 % to 62 %), Denmark (from 38 % to 41 %) and Finland (from 41 % to 38 %), while employer organisations were more predominant in Slovenia (36 % to 61 %) Sweden (from 40 % to 51 %) and Finland (from 48 % to 45 %).

With respect to the advice received from OSH inspectorates, declines were seen across 30 countries, in particular the United Kingdom (from 76 % to 57 %) and Norway (from 59 % to 41 %). The uptake of advice was also rather distinct, as shown by the differences between Romania (from 82 % to 81 %) and Italy (from 24 % to 12 %).

75 Base: all establishments.

The main function of inspectorates is to assess compliance against requirements, although their seemingly reduced role over the period likely impacts their consulting activities and ability to promote a health and safety culture. However, in response to the COVID-19 pandemic, OSH labour inspectorates invested in communication and inspection activities to ensure compliance with COVID-19-specific rules and guidelines, which included reminding establishments of the need to undertake risk assessments. This likely had benefits for OSH and public health and safety.

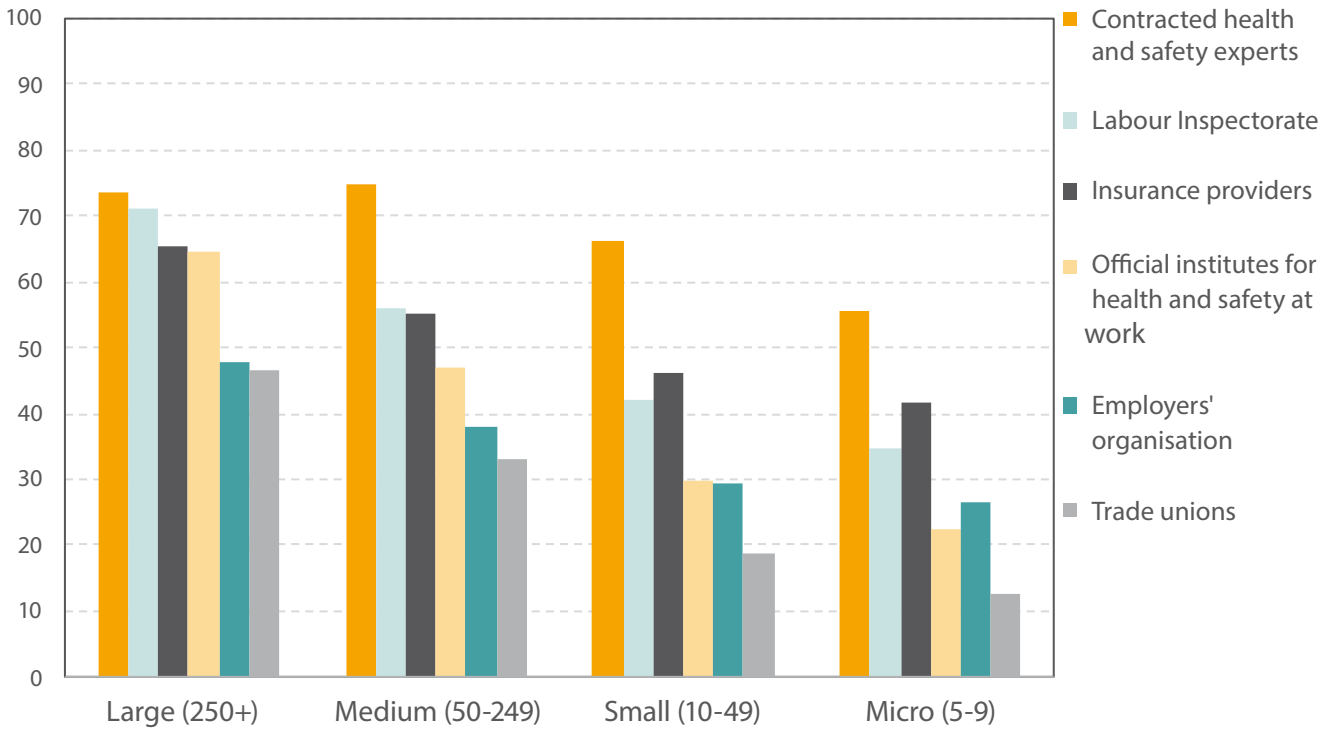
The results reported by sector were less distinct than by country, although the differences were evident in some areas, for example, in obtaining advice from 'contracted health and safety experts'. It was more notable in heavy and manual industries such as water supply and waste management (78 %) and mining and quarrying (77 %), when compared to non-manual and professional sectors such as arts, entertainment and recreation (54 %), and professional, scientific and technical activities (51 %).

In terms of obtaining advice from social partners, heavy and manual industries such as mining and quarrying (from 57 % to 44 %), electricity and gas supply (from 36 % to 37 %) and construction (from 40 % to 36 %) were more likely to engage employer organisations, whereas trade unions were called upon mainly by establishments providing public services like public administration (from 31 % to 30 %), education (from 33 % to 33 %) and human health and social work (from 40 % to 29 %). However, the results with respect to 'insurance provision' were not as distinct between sectors, with the national context probably being the most important driver in this particular case.

Regarding the uptake of advice from OSH inspectorates by sector, while the variation was relatively less extensive, the drop in inspections since ESENER 2014 affected most industries. These included accommodation and food service activities (from 56 % to 48 %), human health and social work (from 55 % to 37 %) and arts, entertainment and recreation (from 50 % to 38 %).

Unsurprisingly, large establishments were more exposed to organisations providing OSH advice, including official organisations such as OSH institutes (from 74 % to 65 %), trade unions (from 47 % to 33 %) and employer organisations (from 45 % to 38 %). Interestingly, however, the point estimate for receiving advice from health and safety experts for medium-sized organisations (75 %) was slightly higher than for large organisations (74 %), despite the results being comparable (see **Figure 20**).

Figure 20: Use of health and safety information from different types of organisations, % establishments by establishment size (2019)[76]



Overall, it seems that large organisations are more exposed to OSH advice, and this is likely to be a contributing factor in positively impacting their performance on other measures, as mentioned throughout this chapter. Moreover, it is evident that larger establishments are easily identifiable to and better networked with other organisations such as inspectorates and institutes. Reputational benefits should also be considered, in the sense that large establishments would not wish to be seen to fall foul of the law and would therefore be more open to external advice. At the same time, it shows that while small and micro enterprises lack the resources to manage OSH as effectively as

76 Base: all establishments in the EU-27.

large organisations, they do not make use of information provided by labour inspectorates.

Our regression analysis showed that the uptake of advice is positively associated with several OSH-related factors. With respect to obtaining advice from employer organisations, the level of reporting of safety, ergonomic and chemical risks, and the appointment of OSH representatives is related with the likelihood of obtaining advice, and for some countries, this also includes the level of reporting of psychosocial risks. Regarding the uptake of advice from trade unions, appointment of OSH representatives was found to be a key factor (see **Section 3.7**).

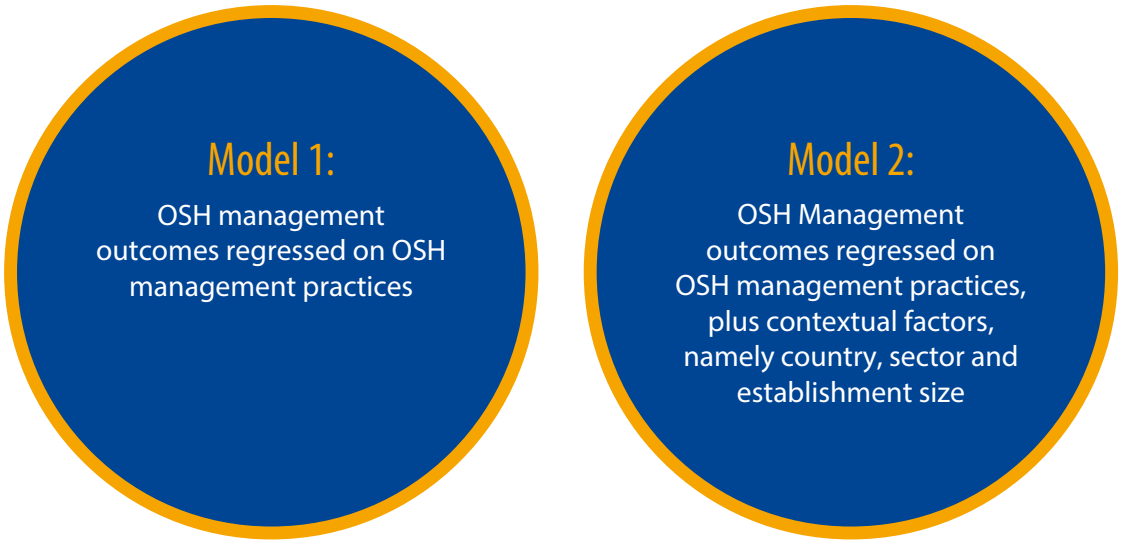
3.7 Regression analyses

With respondent-level data (that is, approximately 45,000 responses), the report explored a series of research questions using regression methods. The idea was to identify what factors are associated with good OSH management in establishments. The results of the regression analysis are included in the Technical Annex; the study questions are indicated in **Table 2** and a summary of the results is described in this section.

For each of the study questions explored, the approach to statistical modelling was to learn firstly which 'OSH management practices' areeassociated with other OSH management outcomes (Model 1).

Secondly, further contextual control factors such as country, sector and establishment size context were included in the models (Model 2) to assess if these also had an impact on the quality of the approach to OSH management. Model 2 therefore provides an additional layer of interpretation, considering that in some cases, for example, the 'country influence' may account for some of the effects accounted for on the outcome variable. Put simply, it may not be solely the OSH management practices selected that are related with good compliance, but a range of other factors that are represented in a context measure, such as country features. In practical terms, if the effect of the OSH management factors became insignificant after adding the contextual factors in Model 2, it means that the context is more important in determining the answers to the research questions. However, if OSH management factors remain significant in Model 2, it signifies that they are crucial determinants in answering the research question and have explanatory power, regardless of context. Clearly, the question that follows is whether OSH management approaches or contextual factors are more critical in determining OSH management outcomes.

Figure 21: Modelling strategy for testing the OSH management and contextual variables, per study question



In this section, we examine how OSH factors (independent variables) influence several crucial OSH management outcomes (dependent variables), that is:

1. summary of safety, ergonomic and chemical risks (from 0 to 10);
2. summary of psychosocial risks (from 0 to 5);
3. regular completion of risk assessment;
4. covering workplaces at home by risk assessment;
5. risk assessment also covering employees not on a payroll;
6. employees involved in the design of health and safety measures following risk assessment;
7. risk assessment not carried out, because risks are known;
8. keeping record of employees' absence due to sickness;
9. health and safety issues at the top management level discussed regularly or occasionally;
10. team leaders and line managers receive training on how to manage health and safety in their teams;
11. using health and safety information taken from employers' organisations;
12. using health and safety information taken from trade unions.

Independent variables, whose association with the above-mentioned outcomes was tested, included:

- the presence of a health and safety representative;
- labour inspectorate visit;
- risk assessment conducted by external suppliers or internal staff;
- risk assessment documented in written form;
- employees involved in measures' implementation (excluding outcome number 6);
- used OSH services;
- reasons for addressing health and safety.

Additionally, we assessed the influence of some 'outcome variables' on other outcome variables, when it seemed plausible that some of these would lead to further positive outcomes.

3.7.1 OSH factors

The analysis of the relationship between OSH factors (independent variables) and OSH management outcome (dependent variable) follows a two-step approach: the first step concentrates on the influence of OSH factors in general (in any context), and the second step adds contextual factors. This approach is applied for all OSH outcomes. We start with the analysis of the number of risks in the establishment.

OSH factors show different associations with the number of risks as an OSH outcome, whether related to safety or psychosocial risks. In the case of **safety, ergonomic and chemical risks,** all factors have a positive association, that is, used OSH services, the presence of a health and safety representative as well as fulfilling legal obligations as a reason for addressing health and safety are connected with a higher number of safety, ergonomic and chemical risks identified. However, in the case of **psychosocial** risks, only three factors are connected with the identification of a higher number of risks: an expert dealing with ergonomic design, a health and safety representative, and fulfilling legal obligations as a reason to address health and safety. The two factors of using the services of an occupational health doctor, and of an expert for accident prevention are connected with the reporting of a higher number of safety, ergonomic and chemical risks, but a lower number of psychosocial risks.

For regular risk assessments, all OSH factors examined in this model had a significant association with the probability of risk assessments being carried out regularly. The biggest influence was the presence of health and safety representatives (the chances of carrying out risk assessments were 203 % higher than when no health and safety representatives were in the establishment).

The most important factor positively associated with the covering of workplaces at home by regular risk assessment is when employees are involved in OSH measures' implementation. Other positively related factors are when the risk assessment is documented in written form, when the establishment is visited by the labour inspectorate, and when this risk assessment is conducted equally by external providers and internal staff. The presence of a health and safety representative, however, had nonconnection with covering homes as workplaces by risk assessment.

The probability of risk assessments also covering workers who are not on a payroll is mostly related with who conducts the risk assessment. When it is equally external providers and internal staff or mainly internal staff (hence, not external providers exclusively), employees not on a payroll are included in the risk assessment. Other OSH factors, except a labour inspectorate visit, have also a positive albeit smaller influence.

Employees being involved in the design of health and safety measures following risk assessments also depends on OSH factors, with the strongest influence being the conducting of risk assessments by internal staff, and having a health and safety representative. The only factor which has no association with thn involvement of employees is the presence of a works council in the establishment.

Not carrying out risk assessments on account of the risks being already known is linked to more types of safety, ergonomic and chemical risks, but with fewer psychosocial risks. It means that the more safety, ergonomic and chemical risks that are identified in the establishment, the higher the probability of not carrying out risk assessments due to risks considered to be already known. The same effect is observed when fewer psychosocial risks are identified in the establishment, meaning that the chances are higher that risk assessments are not carried out, due to the belief that the risks are already known. The probability of recording sick absence is related to all OSH factors, with the strongest effect being the presence of a health and safety representative.

Finally, regular discussion of health and safety issues at the top management level, as well as training received by team leaders and line managers on how to manage health and safety in their teams are also positively related to OSH factors: regular risk assessments and the presence of a health and safety representative.

3.7.2 Accounting for context

It is worth noting that while model performance was improved only slightly, or in a few cases moderately, by the introduction of the context variables, the OSH management variables typically remained significant with notable effect sizes. This means that even in a more complex modelling scenario that considers a wide range of contextual factors, the OSH management variables retain their general explanatory power as related to the OSH outcomes. Therefore, continuing the policy approach of supporting the development of OSH management practices is likely to further reinforce positive OSH outcomes across Europe.

A cross-cutting finding to the analysis is that employee involvement in OSH management matters. Employee representatives notably help to strengthen the reportings of OSH risks an, are positively associated with the regular conducting of risk assessments, the

inclusion of persons not on the payroll in risk assessments, the likelihood of employee involvement in the design of follow-up measures, the recording of sickness absences andnthe gathering advice from employee organisations and trade unions.

Overall, it seems that employee representatives are an important 'linchpin' in the OSH management environment, and can be assumed to help nudge companies towards the development of proactive OSH management cultures.

Another interesting finding relates to the development and impact of risk awareness in establishments. As one may expect, the use of occupational health doctors builds awareness of safety, chemical and ergonomic risks, while ergonomic experts seem to strengthen the awareness of psychosocial risks[77]. Our interpretation of this latter point is that cognitive ergonomic advice provides an avenue to strengthening awareness of psychosocial risks. This is an interesting finding, considering the growing evidence base suggesting that there are causal links between psychosocial risks and MSDs, for example, with respect to low job satisfaction and body pain. In addition, awareness of safety, chemical and ergonomic risks is likely to strengthen the uptake of advice from employers' organisations.

Moreover, visits made by labour inspectorates are likely to strengthen OSH management practices in supporting the conducting of risk assessments regularly, and in the recording of employee absences. The fear of fines and the perceived need to fulfil legal obligations also encourage companies to conduct risk assessments regularly. Regulators and inspectors therefore can be encouraged by their positive impacts of altering establishments through their regulatory duties and the consequences of non-compliance, and by positively shaping establishment behaviour following physical visits. In addition, it can be assumed that repeat visits combined with the provision of advice supports management teams in strengthening the safety culture of establishments, for example, through the development of collaborative employee activities that aim to manage risks proactively.

Evidently, as shown by the Model 2 results, the country, sector and establishment size environments also matter in shaping the conducting of OSH management activities. Clearly, these contexts indicate that a range of cultural, legal, and policy dynamics influence how different types of organisations think about their responsibilities towards OSH and how they act upon them.

77 It must be noted that these results could also be interpreted that those workplaces reporting more psychosocial risk factors are precisely the ones looking for ergonomic advice.

4. Psychosocial and digitalisation risks and management

4.1 Introduction

Over the past few decades, evidence has pointed to risk factors in the working environment that can result in poor psychosocial outcomes for employees. This has negative consequences not only for the workers themselves but also for productivity, as well as leading to absenteeism and presenteeism.[78] On a societal level, the costs of psychosocial risks in areas such as health care, disability and early retirement are estimated to amount to billions of euros.[79]

Consequently, efforts have been made to raise awareness around work-related psychosocial risks. There are links between psychosocial risks and the way work is designed, organised and managed, as well as the economic and social context of work.[80] Though some degree of pressure may be part of every job, establishments are encouraged to provide monitoring and support to reduce negative health outcomes while promoting productivity.

At country level, EU-27 Member States have implemented different approaches to prevent psychosocial risks. Some have adopted specific legal obligations for employers to conduct workplace risk assessments and introduced policy measures to help prevent these risk. Yet addressing psychosocial risks substantively remains a significant challenge when compared to traditional risk factors, with many establishments viewing these as more difficult to manage. Please see **Section 5.3** for more details on the barriers to psychosocial risk management.

In addition, the growth of digital technologies has exposed workers to risks that can result in poor psychosocial outcomes as well as intensify MSD risks, for example, repetitive movements or prolonged sitting.

To explore OSH management trends in these areas, this chapter provides an overview of the results from ESENER 2019 relating to how establishments manage psychosocial and digitalisation risks. **Table 11** sets out the specific questions explored.

Table 11: ESENER 2019 questions examined in Chapter 4

Risk management topic	Number	Abbreviated specific items from the ESENER 2019 questionnaire
Psychosocial risks	Q300	Does your establishment have an action plan to prevent work-related stress?
	Q301	Is there a procedure in place to deal with possible cases of bullying or harassment? Bullying or harassment occurs when employees or managers are abused, humiliated or assaulted by colleagues or superiors.
	Q302	And is there a procedure to deal with possible cases of threats, abuse and assault by clients, patients, pupils or other external persons?
	Q304	In the past 3 years, has your establishment used any of the following measures to prevent psychosocial risks?
	Q305	Were the measures taken triggered by concrete problems with stress, bullying, harassment or violence in the establishment?
	Q307	Considering the situation in your establishment, are psychosocial risks easier or more difficult to address than other risks, or is there no big difference?
	Q309	You pointed out that your establishment carries out risk assessments. Do you have sufficient information on how to include psychosocial risks in risk assessments?
Digitalisation risks	Q310	We now have a few questions on potential health hazards related to digitalisation. Does your establishment use any of the following digital technologies for work?
	Q311	Have the possible impacts of the use of such technologies on the health and safety of employees been discussed in your establishment?
	Q312	Which of the following possible impacts have been discussed in this context?

Finally, a series of regression analyses were undertaken to assess if establishment-level psychosocial risk management could be predicted, considering establishment-level characteristics and other contextual factors. The results are presented in **Section 4.5**.

78 Workers coming to work despite not feeling well and/or not functioning properly and being unproductive.

79 European Agency for Safety and Health at Work. (2014). Calculating the costs of work-related stress and psychosocial risks. https://osha.europa.eu/sites/default/files/cost-of-work-related-stress.pdf

80 European Agency for Safety and Health at Work. 2000. Research on work-related stress. https://osha.europa.eu/sites/default/files/TE2800882ENC_-_Research_on_Work-Related_Stress.pdf

4.2 Summary

Across several key measures, the EU-27 results showed that the use of measures to address psychosocial risks in establishments increased very slightly between 2014 and 2019. Examples relate to the use of action plans to prevent work-related stress, systematic procedures to deal with cases of bullying or harassment, or cases of threats, abuse and assault by external persons.

The data also suggested that where these measures were implemented, establishments tended to find addressing psychosocial risks more difficult compared to addressing other risks. This is true at sectoral as well as establishment level. Micro firms, for instance, tend to have fewer measures in place, and more often said they did not have sufficient information to include psychosocial risks in risk assessments, yet reported that addressing these risks was easier than addressing others in higher shares than other business size classes.

Other measures that establishments in the EU-27 reported across sectors were directed at allowing employees to take more decisions on how to do their jobs or aimed at reorganising work. In the majority of cases, these measures were not implemented in response to concrete problems, though this was more the case in larger companies.

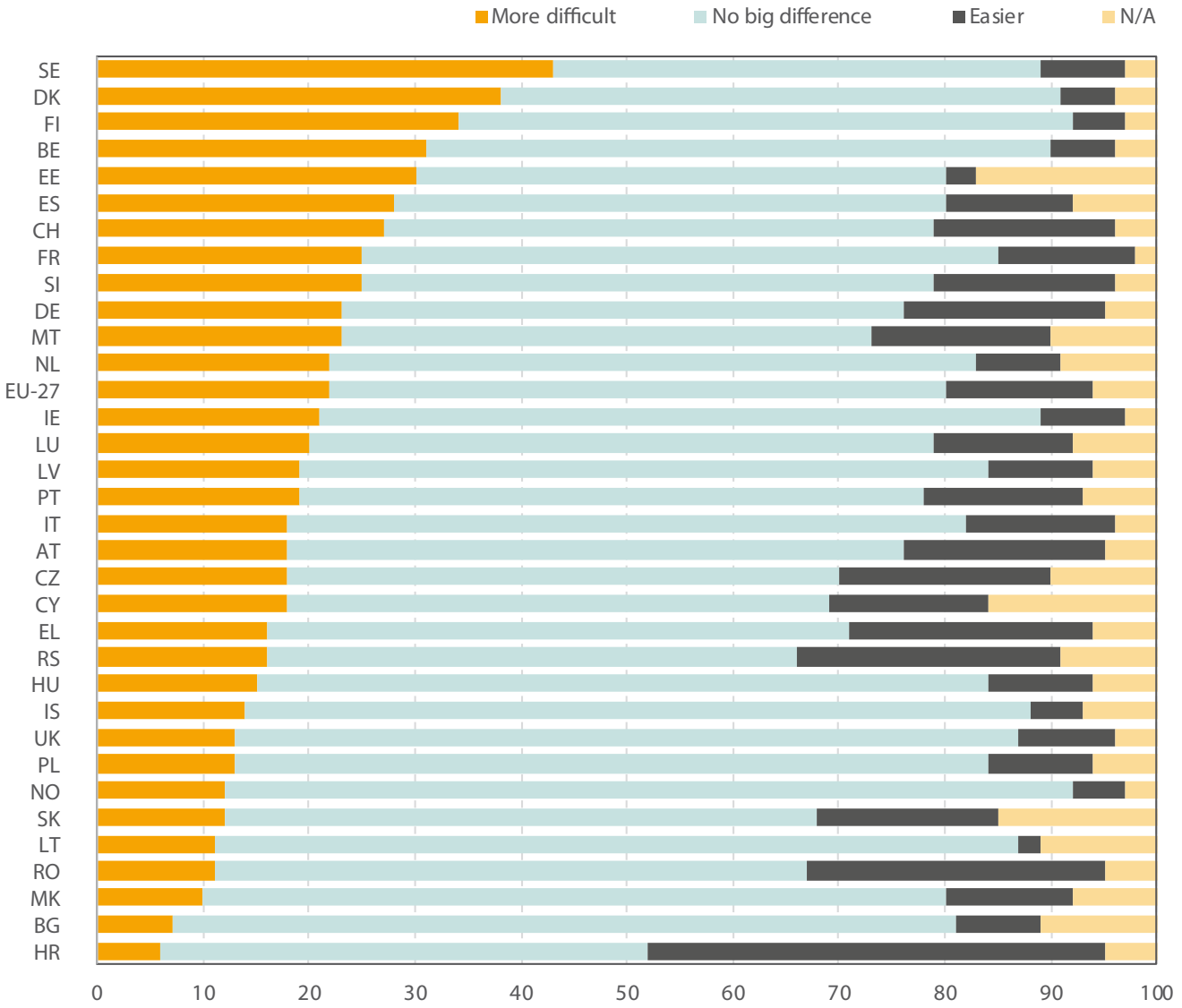
The use of some digital technologies, such as personal computers at fixed workplaces, was very common in 2019. Other technologies, such as robots or wearable devices, were less common. However, only 24 % of establishments discussed the possible impacts of using digital technologies in the workplace, especially not micro firms. In cases where possible implications were discussed, the conversation often included the need for continuous training to keep skills updated, or issues associated with prolonged sitting.

4.3 Psychosocial risk management

4.3.1 Psychosocial risk assessment

Establishments that reported the presence of at least one psychosocial risk were asked whether they find it easier to address those risks than other health and safety risks.

Figure 22: Whether psychosocial risks are easier to address than other risks, % establishments by country (ESENER 2019)[81]



Across the EU-27, 58 % of surveyed establishments responded that addressing psychosocial risks was just as easy or difficult as addressing any other risk; 22 % said it was more difficult and 14 % said it was easier (see **Figure 22**).

The countries that found addressing psychosocial risks particularly easy relative to other risks were Croatia (43 %), Romania (28 %) and Serbia (25 %).

The highest proportion of establishments that found addressing psychosocial risks to be more difficult compared to other risks was in Sweden (43 %), Denmark (38 %) and Finland (34 %).

Across most sectors, only between 10 % and 20 % of establishments thought addressing psychosocial risks was easier. The result from enterprises in quarrying and mining therefore stands out: 40 % said it was easier, even though they are also among the least likely to introduce action plans to manage work-related stress or cases of abuse and assault. Conversely, establishments in sectors where many measures dealing with psychosocial risks were frequently reported said that they found addressing psychosocial risks more difficult (32 % of firms in education and 31 % of firms in human health and social work).

The data also show a sizeable difference between company size categories: 47 % of large companies found it more difficult to address psychosocial risks, which was only the case for 16 % of micro firms.

At national, sectoral and firm size levels, the results therefore suggest that establishments investing more time and effort in the management of psychosocial risks (for example, by implementing measures, adopting action plans or training staff) find it harder to address psychosocial risks. This likely comes with a greater understanding of the challenges associated with psychosocial risks and their implications, for instance concerning productivity

81 Base: all establishments that confirmed the presence of at least one psychosocial risk.

and staff retention. Whether measures dealing with psychosocial risks are effective also depends on whether the organisation has sufficient knowledge on how to best incorporate and address these risks. The next question explored this aspect in more detail.

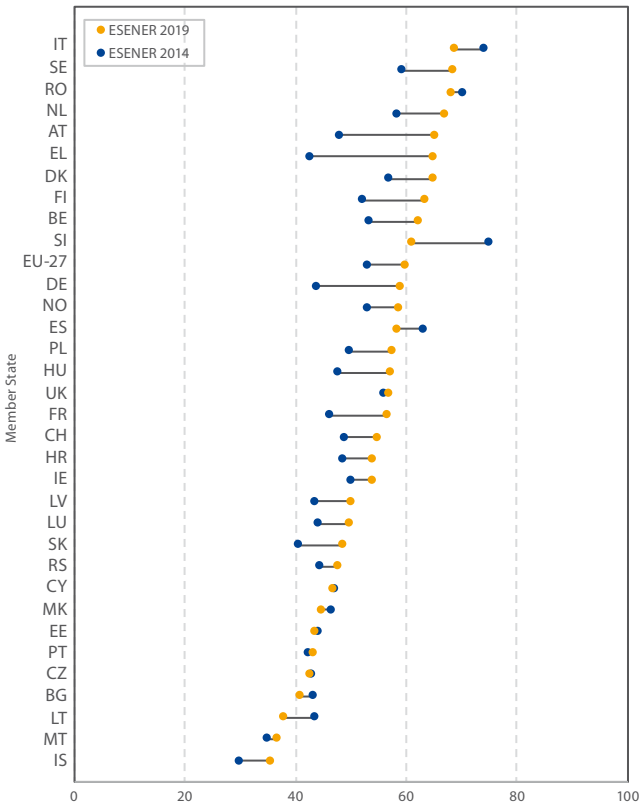
Those establishments that stated they regularly carry out risk assessments were asked whether they had sufficient information on how they can include psychosocial risks in their assessments.

At country level, there were rather large differences. In 2019, 69 % of Italian and only 37 % of Maltese establishments reported that they had enough information to appropriately include psychosocial risks in risk assessments. In most cases, access to information has improved between 2014 and 2019, although in a small number of countries, the challenges seem to have grown, such as in Slovenia (from 75 % to 61 %) and Spain (from 63 % to 58 %) (see **Figure 23**).

At sectoral level, the variation was much smaller. Across all sectors, more than half of establishments said they had enough information (60 %). The proportion was highest in health and social work activities (71 %) and lowest in electricity, gas, steam and air conditioning supply (53 %). It is interesting that in the latter group, access to sufficient information on how to include psychosocial risks in risk assessments seems to be relatively difficult, despite this being the sector where health and safety representatives are most common (73 %) and where 78 % of cases reported receiving training during work time. However, safety risks might be more prevalent in training in this sector due to workers' high exposure to 'traditional' OSH risk factors.

The data also show that whether establishments have sufficient information is driven by company size. In 2019, 74 % of large firms and 57 % of micro firms stated they had enough information, compared to 68 % and 51 %, respectively, in 2014.

Figure 23: Whether establishments have sufficient information on how to include psychosocial risks in risk assessments, % establishments by country (ESENER 2019 and ESENER 2014)[82]



4.3.2 Procedures to deal with psychosocial risks[83]

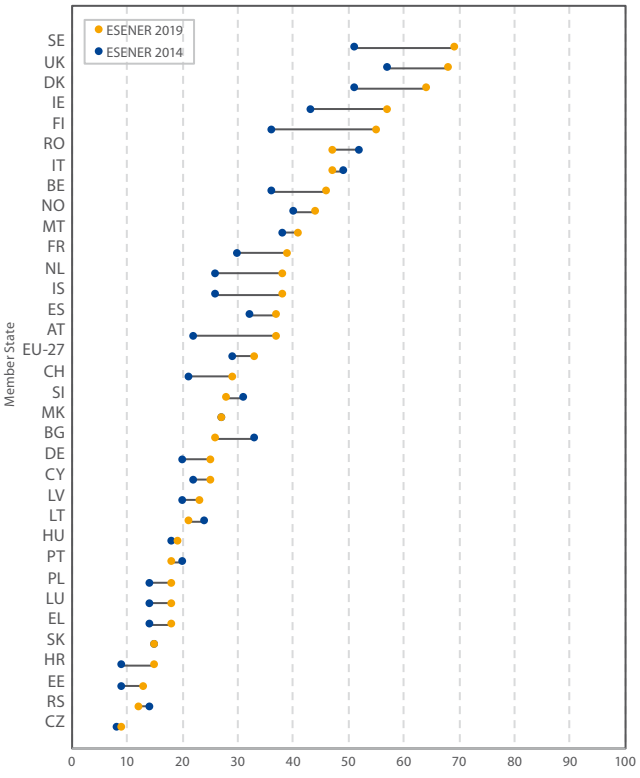
Several questions were asked to identify if establishments had introduced formalised approaches to managing psychosocial risks. These questions were asked to establishments with 20 or more employees, since it is unlikely for requirements to apply to smaller organisations.

82 Base: all establishments that carry out risk assessments.

83 This section presents the findings for the filtered base for each of the questions.

To begin, the use of 'action plans to manage work-related stress' was explored (see **Figure 24**). Since 2014, a minor increase for the EU-27 (from 29 % to 33 %) was noted, with the practice being relatively common in Sweden (from 51 % to 69 %) and the United Kingdom (from 57 % to 68 %), and much less so in Czechia (from 8 % to 9 %) and Serbia (from 14 % to 12 %).

Figure 24: Introduction of action plans to reduce work-related stress, % establishments by country (ESENER 2019 and ESENER 2014)[84]



The in-depth interviews with focal points shed some light on the changes observed between 2014 and 2019:

- In Lithuania (from 23 % to 21 %), the rules on psychosocial risk management are brief and provided in general terms, with no specific measures mandated. Therefore, action plans to manage stress are produced by some establishments only, although a checklist to evaluate work-related stress was issued in 2019 by the national inspectorate.
- In Estonia (from 8 % to 14 %), the number of establishments that have action plans in place to manage work-related stress is generally low, due to cultural reasons. Mental health is not something people typically talk about openly.
- In Sweden (from 51 % to 69 %), the use of action plans to reduce work-related stress increased between 2014 and 2019, mainly due to new legal provisions introduced in 2015. Since then, the government has invested in research on psychosocial risks and consulted with relevant players on how to improve workplace environments.
- In Austria (from 22 % to 37 %), the use of action plans to manage work-related stress increased between 2014 and 2019, which according to the Austrian source, is probably due to a change in legislation in 2013 that obliged enterprises to include psychosocial risk factors in their risk assessments.
- In Italy (from 49 % to 47 %), around half of the companies reported use of action plans, which is a comparatively strong result. The Italian authority noted that this is likely to due to the adoption of the Legislative Decree no 81 of 9 April 2008, which laid down the mandatory assessment and management of psychosocial risks for all companies.

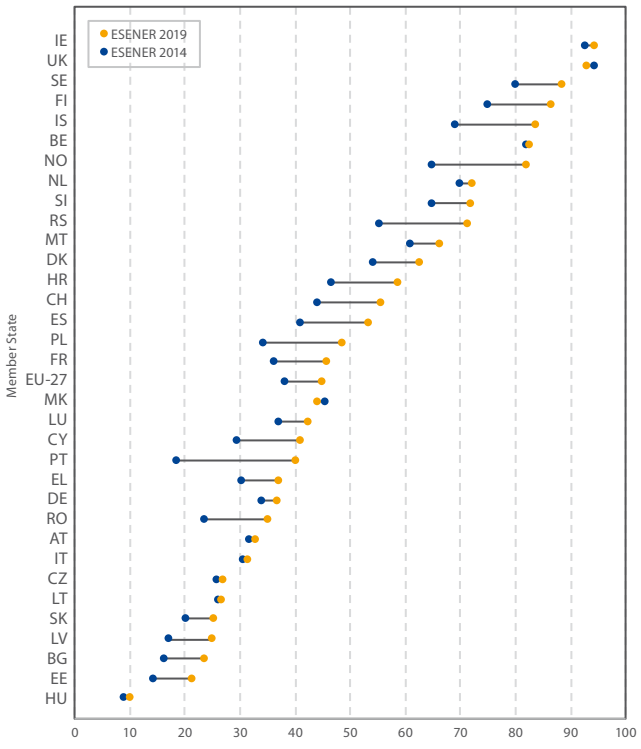
By sector, the differences were less stark although still quite telling of the level of attention given to formalised approaches to psychosocial risk management. Interestingly, public sector and service industries were more active on this measure, such as human health and social work (56 %) and financial and insurance activities (47 %). While industries exposed to safety risks, like mining and quarrying (from 39 % to 22 %) and agriculture (from 28 % to 24 %), were less likely to introduce action plans, this was also the case with real estate activities (from 37 % to 23 %). For both mining and quarrying, and real estate activities, the decrease since ESENER 2014 is significant and hopefully does not represent a longer-term trend.

The differences between establishment sizes were also quite distinct, considering the results for large (from 50 % to 57 %) and small (from 30 % to 35 %) organisations, although all sizes of establishments experienced positive upward trends.

Interestingly, the regression modelling showed that when establishments introduced action plans to prevent work-related stress, they were more likely to identify psychosocial risk factors such as time pressure, poor communication and long or irregular working hours. However, it was shown that this outcome is dependent on the country context, suggesting that the quality of implementation of such action plans differs across Europe (see **Section 4.5** for more details).

84 Base: all establishments with 20 or more employees.

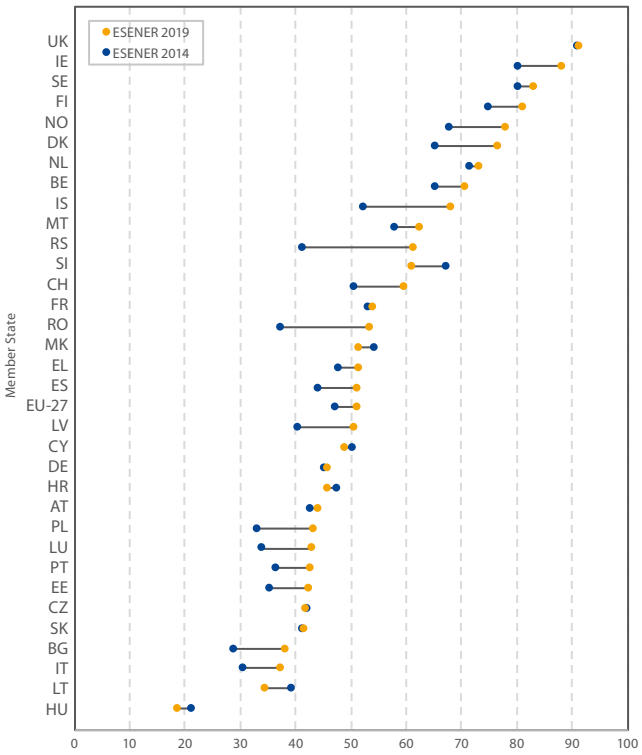
Figure 25: Introduction of procedures to deal with possible cases of bullying or harassment, % establishments by sector, by country (ESENER 2019 and ESENER 2014)[85]



As seen in **Figure 25**, for 2019, the proportion of establishments that reported the use of procedures dealing with cases of bullying and harassment range from 10 % in Hungary to 94 % in Ireland. In several countries, the use of procedures increased slightly between 2014 and 2019. On a sectoral level, this variation is much smaller. The largest proportion was reported in human health and social work activities (69 %), education (67 %) and financial and insurance activities (63 %). However, across all sectors, more than a third of establishments reported that they are using these procedures. Furthermore, data suggest that it is more common among large companies to use procedures. In 2019, 74 % of large companies stated that they had procedures in place, compared to 49 % of small firms.

Moreover, the regression modelling showed that when establishments introduced procedures to deal with possible cases of bullying or harassment, they were more likely to identify the risk factor of poor communication (see **Section 4.5** for more details).

Figure 26: Introduction of procedures to deal with possible cases, abuse or assaults by external persons, % establishments by sector, by country (ESENER 2019 and ESENER 2014)[86]



Considering that 'having to deal with difficult customers' is the most frequently identified psychosocial risk (see **Section 3.3**), targeted measures such as procedures to deal with possible cases of threats, abuse and assault by external persons, may be particularly impactful and rewarding. However, their use is quite distinct nationally, as seen in the results for the United Kingdom (91 % for both years) and Hungary (from 21 % to 19 %) (see **Figure 26**).

The reported differences were smaller across sectors than across countries. The sector that reported the use of procedures to deal with possible cases, abuse or assaults by external persons most often in 2014 and 2019 was human health and social work activities (63 %), with the lowest proportion reported among establishments in the mining and quarrying sector (14 %). This difference seems reflective of the extent to which these sectors deal with external persons such as patients or customers. However, in all other sectors, more than a third reported use of such procedures, which generally seems quite low.

It was predominantly large firms (75 % in 2019, 72 % in 2014) that reported the use of procedures addressing abuse or assault. Among small firms, 55 % reported use of such procedures in 2019 (51 % in 2014).

85 Base: all establishments with 20 or more employees.

86 Base: all establishments with 20 or more employees where with the risk of difficult customers, pupils, patients was identified.

4.3.3 Measures to prevent psychosocial risks

As shown in Table 12, establishments in the EU-27 in 2019 reported the use of different measures to manage psychosocial risks. The most common measure is to allow employees to take more decisions on how to do their jobs (68 %); however, the differences are marked when considering the results of Finland (91 %) and Italy (49 %). Measures to reorganise work were the second most used measure (43 %), with the range being less dispersed when comparing the scores of Denmark (58 %) and Czechia (24 %). The least used measure is intervention if excessively long or irregular hours are worked (29 %), with the practice being most common in Germany (49 %) and least common in Slovakia (10 %).

These results are also reflected at sectoral level. In most sectors, about two-thirds reported the use of measures allowing workers more autonomy. When it comes to implementing measures addressing psychosocial risks like training on conflict resolution and confidential counselling, sectors such as the education and human health and social work services seem to be more open to this option than sectors typically dealing more with safety risks, such as mining and quarrying.

When comparing the results by establishment size, the use of measures to prevent psychosocial risks has generally increased between 2014 and 2019.

Yet in 2019, for example, the provision of confidential counselling for employees was most prominently reported among large companies (71 %), compared to 35 % of micro firms. Conversely, 70 % of micro firms said that they had adopted measures to allow employees to take more decisions on how to do their job, compared to 60 % of large companies. In this context, it is interesting to understand the motivation behind the adoption of certain measures, for example if the decision was triggered by a specific incident or otherwise, as discussed below.

Table 12: Measures taken by establishments in the past 3 years to prevent psychosocial risks, % establishments by country (ESENER 2019)[87]

Country	Allowing employees to take more decisions on how to do their job	Reorganisation of work	Confidential counselling for employees	Training on conflict resolution	Intervention if excessively long or irregular hours are worked
EU-27	68	43	42	34	29
AT	68	50	49	36	41
BE	77	48	52	39	19
BG	76	34	18	19	14
CH	65	43	49	37	37
CY	70	38	47	40	20
CZ	54	24	18	27	20
DE	68	52	53	34	47
DK	78	58	57	42	42
EE	69	41	46	24	18
EL	76	49	52	47	26
ES	75	43	36	39	24
FI	91	58	74	28	41
FR	68	35	57	30	16
HR	60	48	29	23	24
HU	65	48	50	36	19
IE	80	52	34	46	45
IS	81	51	43	40	40
IT	49	41	21	26	24
LT	74	31	43	30	16
LU	73	42	58	31	28
LV	76	36	37	32	31
MK	67	41	26	24	21
MT	85	57	45	45	42
NL	75	36	39	30	19
NO	80	40	31	35	33
PL	67	26	22	36	12
PT	74	46	27	38	22
RO	74	56	48	62	42
RS	75	43	42	33	27
SE	82	51	46	34	40
SI	64	29	25	37	14
SK	56	26	19	26	10
UK	76	48	38	45	39

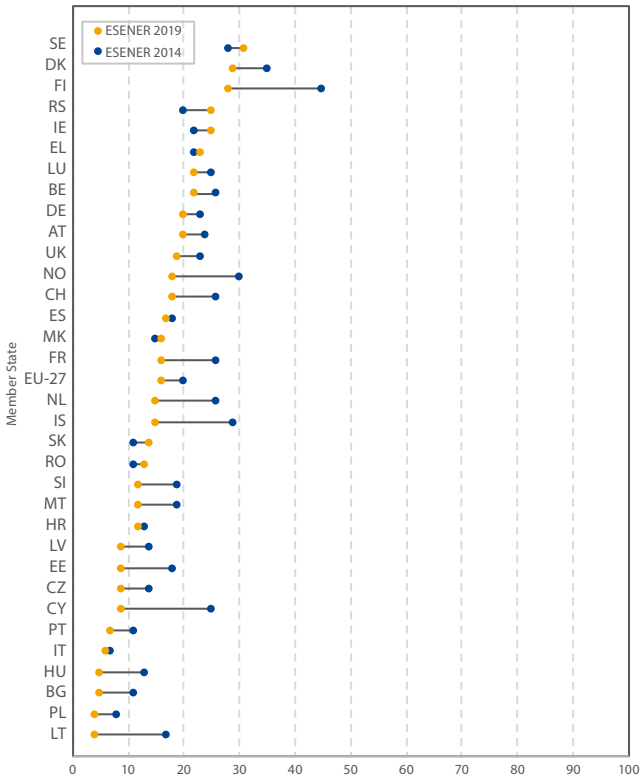
87 Base: all establishments.

Overall, 82 % of establishments in the EU-27 said that the measures implemented had not been triggered by any concrete problems in 2019 (77 % in 2014). As depicted in **Figure 27**, in most Member States, the proportion of establishments that reported having implemented measures in response to a specific incident decreased significantly between 2014 and 2019. By country, the differences were less stark than for some other measures, as seen when comparing the results for Sweden (31 %) and Poland (4 %). Possibly, this could be viewed as a positive sign, assuming that measures were introduced before problems emerged, that is, in a preventive fashion.

By sector, establishments in human health and social work reported that they implemented measures due to concrete issues most often (from 29 % to 28 %), with this picture remaining largely unchanged. This is interesting considering other results showing that establishments in this sector are particularly proactive in detecting and managing psychosocial risks. By comparison in 2019, 8 % of companies in mining and quarrying and 10 % in construction said that measures were triggered by concrete problems. These were also the sectors that reported using fewer measures to manage psychosocial risks overall.

At establishment level, it is more common for large companies (34 %) to implement measures in reaction to concrete problems, compared to micro firms (13 %).

Figure 27: Whether measures taken were due to concrete problems with stress, bullying, harassment or violence, % establishments by country (ESENER 2019 and ESENER 2014)[88]



4.4 Digitalisation

Digitalisation is a key trend that continues to rapidly change the work environment. ESENER 2019 sought to identify the main technologies in use and whether the OSH-related impact had been considered.

As one would expect, in almost all sectors, the use of personal computers at fixed workplaces was reported most frequently (see **Table 13**). While 94% of water supply, sewerage, waste management and remediation activities used personal computers at fixed stations, only 63 % of enterprises in accommodation and food service activities did so. Similarly, as expected, niche technologies such as wearable devices and robots that interact with workers were only reported by a small proportion of companies (< 10 %), for example, 9 % of the manufacturing sector reported adoption of robots engaging with workers, and 9 % of the information and communication sector confirmed use of wearable devices.

Since digital technologies have the potential to change work environments drastically, it is worth knowing whether possible risks, including psychosocial risks, associated with these technologies are being discussed.

88 Base: all establishments that answered 'yes' to confirm that they had introduced measures to prevent psychosocial risks.

Table 13: Use of digital technologies, % establishments by sector (ESENER 2019)[89]

Sectors	Personal computers at fixed workplaces	Laptops, tablets, smartphones or other mobile computer devices	Machines, systems or computers determining the content or pace of work	Machines, systems or computers monitoring workers' performance	Wearable devices such as smart watches, data glasses or other	Robots that interact with workers
EU-27	86	77	12	8	5	4
Accommodation and food service activities	63	58	13	8	4	3
Administrative and support service activities	88	83	13	11	5	2
Agriculture, forestry and fishing	81	72	19	9	6	7
Arts, entertainment and recreation	89	80	11	9	4	1
Construction	86	82	9	5	5	3
Education	87	85	5	4	3	3
Electricity, gas, steam and air conditioning supply	92	83	17	13	8	3
Financial and insurance activities	93	82	12	17	5	3
Human health and social work activities	86	79	11	8	4	3
Information and communication	92	95	12	11	9	3
Manufacturing	86	72	24	12	4	9
Mining and quarrying	89	86	18	13	7	6
Other service activities	83	78	9	8	5	2
Professional, scientific and technical activities	90	85	10	7	6	3
Public administration and defence; compulsory social security	92	78	7	5	4	1
Real estate activities	93	87	8	7	6	2
Transportation and storage	86	82	16	18	8	3
Water supply; sewerage, waste management and remediation activities	94	88	15	13	4	6
Wholesale and retail trade; repair of motor vehicles and motorcycles	84	74	12	12	5	3

While ESENER 2019 provides some good insights into the 2019 context,one would expect the use of digital technologies to have increased since 2020, given the transition to home working during the COVID-19 pandemic, for example with monitoring software.

Across the EU-27 in 2019, only 24 % of establishments reporting the use of at least one of the digital technologies considered stated that the possible impacts on OSH of using digital technologies in the workplace had been discussed. As seen in **Figure 28**, the country differences are considerable, as seen in the results for Hungary (58 %) compared to those of Lithuania (12%).

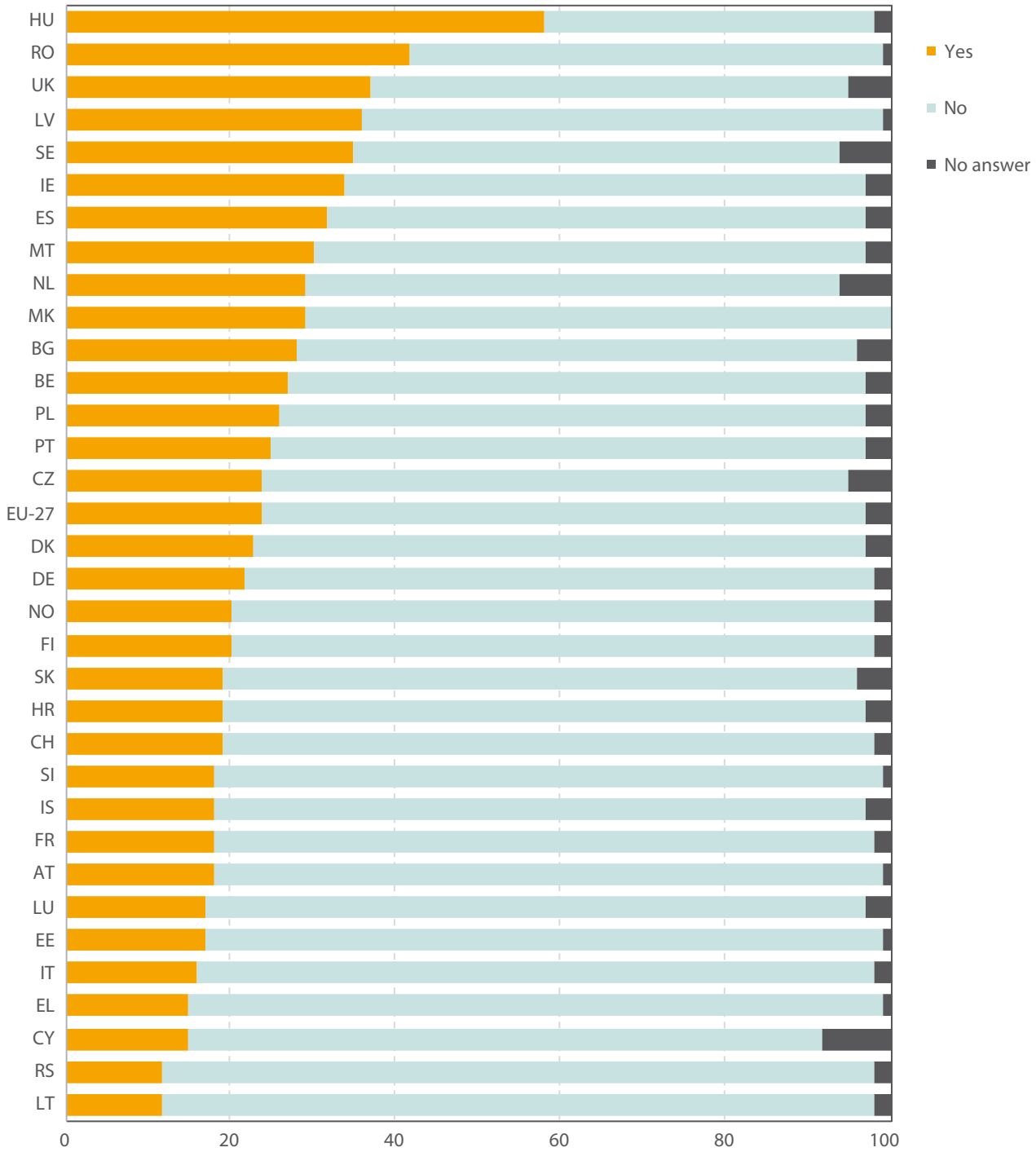
However, at sectoral level, the differences are much smaller. In accommodation and food service activities, 20 % of enterprises said that they had discussions, compared to 28% in professional, scientific and technical activities and also transportation and storage. Accommodation and food services also reported less use of digital technologies overall; however, this sector was the least likely to use personal computers (63 %) and laptops (58 %), for example.

The data have also shown some differences among enterprise sizes. Among micro firms, discussions were less often reported (22 %) than among large firms (41 %). Large firms also reported having more regular discussions about health and safety issues

89 Base: all establishments in the EU-27.

in staff or team meetings (67 %) compared to micro firms (31 %); of course, such discussions may facilitate conversations about digital technologies and their impacts on the health and safety of workers.

Figure 28: Whether establishments have discussed the possible impact of such technologies, % establishments by country (ESENER 2019)[90]



Targeted interviews with national OSH experts shed some light on the reasons for the variation between countries. In Lithuania, assessment and management of OSH risks connected to digital technologies was considered a new area that has not received much attention, but this will likely change.

In Germany, the COVID-19 pandemic has forced many enterprises to become more familiar with digital technologies and the related OSH risks. Although in 2019, 22 % reported that they had discussions about the potential OSH impacts of using digital technologies, national experts assume that this number is likely to be higher after the pandemic. Furthermore, it was mentioned that at an institutional level, digital technologies had long been

90 Base: all establishments that reported using at least one of the digital technologies considered.

discussed as a possibility to improve OSH. For instance, artificial intelligence (AI) could be used in the identification of OSH risks[91].

The feedback from Estonia, where 17 % of surveyed establishments reported discussions, revealed that this is not a topic that is addressed frequently in companies or public institutions; the focus is more on traditional risks. However, it was indicated in the interview that bigger companies might be more aware of the connection between OSH and new digital technologies.

In Italy, it was mentioned that until 2019, the impact of digital technologies on psychosocial risks had not been considered a priority. However, this changed with the COVID-19 pandemic, when working from home became the new normal. Since then, unions and other social partners have concentrated more on the issue. Currently, the topic of workers' 'right to disconnect' is being discussed.

Establishments that said they did have discussions were also asked which possible impacts of digital technologies they discussed specifically. Across the EU-27, the need for continuous training to keep skills updated was discussed most often (77 %), followed by the issue of prolonged sitting (65 %). Only in 21 % of establishments was the fear of job loss associated with the digitalisation under discussion.

Although the country-level differences are not great, there are some outliers. For example, only 40 % of establishments in Bulgaria discussed the need for continuous training, while in nearly all other countries this was discussed by more than two-thirds of companies. And in Romania, establishments seem to be specifically concerned with job loss: this subject was discussed by 48 %, which is more than double the EU-27 average.

There were no considerable differences at sectoral level. The biggest difference was between enterprises in water supply, sewerage and waste management discussing the need for continuous training in 90 % of cases, compared to 66 % of establishments in electricity, gas, steam and air conditioning supply.

Moreover, the frequency with which impacts were discussed appears to be driven by company size. For example, the need for continuous training was discussed in 86 % and the fear of job loss in 30 % of large companies; by comparison, continuous training was discussed in 77 % and the fear of job loss in 22 % of micro companies.

4.5 Regression analyses

4.5.1 Introduction

In this section, we examine how OSH management practice variables influence the reporting of various types of psychosocial risks separately (that is, time pressure, poor communication, job insecurity, difficult customers and long or irregular working hours). Six independent variables were tested:

- the presence of a health and safety representative;
- supervisor-employee relationships evaluated in risk assessments;
- organisational aspects such as work schedules evaluated in risk assessments;
- the presence of an action plan to prevent work-related stress;
- the presence of a procedure to deal with possible cases of bullying;
- the presence of a procedure to deal with possible cases of threats, abuse and assault.

Additionally, we assessed the relationship between digitalisation and factors encouraging discussion of the OSH-related impacts.

4.5.2 OSH factors

The analysis of the 'pure' effect of key OSH management practices reveals that a majority of them increases the probability of the reporting of various psychosocial risks by the surveyed establishments (see **Table 14**). This cannot be understood as a causal effect, though. It only shows that there is a positive relationship between OSH management practices such as procedures to deal with cases of bullying, threats or abuse and the reporting of psychosocial risks. On the one hand, OSH factors can influence the occurrence of a psychosocial risk; on the other hand, the existence of a psychosocial risk can trigger the development of a procedure. In this analysis, we are not able to determine the direction of the influence; we can point to the significant association or lack thereof.

Regarding each OSH management practice, the most important is a procedure to deal with possible cases of bullying, positively related to the reporting of all five types of psychosocial risks (that is, time pressure, poor communication, job insecurity, difficult customers and long or irregular working hours). The strongest effects are observed for time pressure and difficult customers – increasing the probability for each of them by ~ 50 %, and much weaker effects are observed for job insecurity and long or irregular working hours.

The next OSH variable is the action plan to prevent work-related stress, positively related to the identification of four psychosocial risks; in all cases the effect is moderate, around 10%. On the other hand, the presence of a procedure to deal with possible cases of threats, abuse and assault shows a positive relationship with the reporting of only one risk – long or irregular working hours – with quite a strong effect of 24 %.

The OSH practice presenting both a positive and negative relation is organisational aspects such as work schedules evaluated in risk

91 https://osha.europa.eu/en/publications/impact-artificial-intelligence-occupational-safety-and-health

assessments. It is positively related to the identification of difficult customers and long or irregular working hours, but negatively to time pressure and poor communications. This means that in those two cases, when the risk assessment includes organisational aspects, the probability of reporting time pressure and poor communication as a risk factor is lower. This may suggest that organisational aspects, when routinely evaluated, can lower time pressure and poor communication.

The presence of a health and safety representative has a moderate effect on the reporting of time pressure, poor communication and long or irregular working hours. Supervisor-employee relationships evaluated in risk assessments have a low-to-moderate effect on difficult customers, time pressure and job insecurity.

Table 14: Probability of identification of psychosocial risks for various OSH management practices

OSH management factor	Time pressure	Poor communication	Job insecurity	Difficult customers	Long or irregular working hours
Presence of a health and safety representative	+20%	+12%	n.s.*	n.s.	+13%
Supervisor-employee relationships evaluated in risk assessment	+16%	n.s.	+11%	+25%	n.s.
Organisational aspects such as work schedules evaluated in risk assessment	-8%	-12%	n.s.	+15%	+23%
Presence of a plan to prevent work-related stress	+10%	+12%	+10%	n.s.	+14%
Presence of a procedure to deal with possible cases of bullying	+53%	+29%	+11%	+50%	+13%
Presence of a procedure to deal with possible cases of threats, abuse or assault	n.s.	n.s.	n.s.	n.s.	+24%

*n.s. – not significant

Additionally, we analysed how the discussion of possible impacts of digital technologies is related to OSH factors. The OSH factors include the use of different digital technologies (laptops, smartphones or other mobile device; robots interacting with workers; machines, systems or computers determining the content of the work; machines, systems or computers monitoring workers' performance; wearable devices such as smartwatches and data glasses), the presence of a health and safety representative, and whether there are employees working from home in the establishment.

All eight OSH factors included in the models prove to be significant for the impacts being discussed. The direction of the influence of all of the factors is positive, that is, they increase the chances of the impacts being discussed. The most important digital technology is wearable devices – if they are used, the chances of discussing the impacts increase by 166 %. Other technologies also increase this probability, albeit to a lesser extent: laptops, smartphones or other mobile devices by 66 %; machines, systems or computers monitoring workers' performance by 54 %; robots interacting with workers by 45 %; machines, systems or computers determining the content of the work by 43 %; and personal fixed computers by 35 %. Additionally, the presence of a health and safety representative also increases the chances by 53 %, and when employees are working from home, the chances for discussing the impacts of digital technologies are higher by 19 %.

4.5.3 Accounting for the context

With the introduction of the context variables, the significance of OSH management variables diminished, and in most cases, only one or two variables maintained their significance. This shows that contextual factors are more important for the reporting of the presence of various psychosocial risks. The country is the strongest analysed factor: the probability of indicating particular risks may vary from – 85 % (Latvia, time pressure) to + 480 % (Denmark, job insecurity). The second contextual factor is enterprise size, with big enterprises showing higher probability of reporting all psychosocial risks than small ones. Sectors are less diversified than the above-mentioned factors in terms of this probability. However, the results were more nuanced, with different factors related to the identification of different psychosocial risks. For example, there was great heterogeneity (great variation in the probability) between various contextual factors for the reporting of job insecurity and poor communication. The situation was much more homogeneous for the identification of difficult customers as a risk, showing small differences between countries or sectors in the probability of this risk occurring. This means that each risk should be approached individually.

For the reporting of time pressure, the two significant factors after accounting for contextual factors were a plan to deal with possible cases of bullying, which is related to the higher probability of reporting time pressure as a risk factor, and a procedure to deal with possible cases of threats, abuse and assault, which decreases

the probability of reporting time pressure. Those two factors are significant regardless of the context.

In the case of poor communication, the two significant factors were action plans to prevent work-related stress and procedures to deal with possible cases of threats, abuse and assault – both decreasing the probability of reporting poor communication as a risk factor. Interestingly, the plan to prevent work-related stress was insignificant in Model 1, which means that without context, this factor is related to higher risk of poor communication, but existing in the context of country, sector or size, it is negative for this risk. In other words, those two factors can reduce poor communication only in selected contexts, but not overall.

For job insecurity, only one factor remained significant – routinely evaluated supervisor-employee relationships – increasing the probability of reporting job insecurity. It means that the factor increases the chances for the presence of job insecurity, regardless of the context. Therefore, Model 2 shows that concerning other OSH factors, context is more important for the presence of job insecurity as a psychosocial risk.

For long or irregular working hours, only two OSH factors remained significant: organisational aspects, such as work schedules included in the risk assessment, increasing the chances for long or irregular working hours, and a plan to prevent work-related stress, decreasing the probability of reporting this risk.

Finally, the risk of having to deal with difficult customers shows different trends than other psychosocial risks. After the introduction of contextual factors (country, sector and size), **all OSH factors remained significant,** showing that they are important for the reporting of dealing with difficult customers as a psychosocial risk, even accounting for the context. Almost all factors have positive effect, except a plan to prevent work-related stress, which decreases the chances for the reporting of this risk. This again may suggest that having to deal with difficult customers triggers OSH activities undertaken by the establishment.

A cross-cutting finding to the analysis is that accounting for the context, most of the OSH factors are insignificant for the presence of various psychosocial risks, which means that context is more relevant for the presence of psychosocial risks. Of the three contextual factors (size, sector and country), country is the most important. We have tested models with sequentially introduced contextual factors (first: size; second: sector; third: country), and most of the OSH factors became insignificant after introducing the country variable to the model.[92]

Two key OSH factors related to lowering the chance for reporting (some) psychosocial risks should be highlighted:

- a procedure to deal with possible cases of threats, abuse and assault;
- an action plan to prevent work-related stress.

The former document can be beneficial for the reporting of the risk of time pressure and poor communication, the latter for long or irregular working hours and difficult customers. Both documents are associated with lower risks of reporting the above-mentioned psychosocial risks.

The reporting of having to deal with difficult customers is clearly different than other risk factors due to its mostly external origin; therefore, it should be approached differently than other risks.

Evidently, as Model 2 results show, the country, sector and establishment size environments also matter in shaping the conducting of OSH management activities. These contexts indicate that a range of cultural, legal, and policy dynamics influence how different types of organisations think about various psychosocial risks and how they act upon them.

Adding contextual factors for modelling the approach to **digitalisation impacts** did not change the conclusion. After the introduction of country, sector and establishment size, all OSH factors remain significant, and the magnitude of their influence did not change significantly. This means that regardless of the context, when an establishment is using any of the digital technologies considered in ESENER 2019, having a health and safety representative and having at least some of the employees working from home, is positively associated with discussing the OSH impacts of digital technologies.

92 More details in the Technical Annex, Section 2.

5. Drivers of and barriers to OSH management

ESENER 2019 and ESENER 2014 gathered feedback on a series of questions concerning the possible drivers of and barriers to complying with OSH legislation. The results from the previous sections show that there is a good level of commitment to adopting OSH management practices (**Subsection 3.2.2**), with the reasons for this explored in this chapter, including the need to fulfil legal obligations, reputational concerns and productivity. However, motivations to adopt OSH management practices are not always positive, and therefore several related barriers are also explored, including paperwork, lack of expertise and costs. **Table 15** provides an overview of the questions from ESENER 2019 examined in this section.

Table 15: ESENER 2019 questions examined in Chapter 5

Driver and barrier topic area	Number	Abbreviated specific items from the ESENER 2019 questionnaire
Drivers of and barriers to OSH management	Q260	Reasons for not carrying out risk assessments
	Q262	In your establishment, what are the main reasons for addressing health and safety? Fulfilling a legal obligation Meeting employee expectations or those of their representatives Maintaining or increasing productivity Maintaining the organisation's reputation Avoiding fines and sanctions from {{Health and Safety Inspectors}}
	Q263	What are the main difficulties in addressing health and safety in your establishment? A lack of time or staff A lack of money A lack of awareness among staff A lack of awareness among management A lack of expertise or specialist support The paperwork The complexity of legal obligations
Barriers to psychosocial risk management	Q308	What are the main obstacles to dealing with psychosocial risks in your establishment? A lack of awareness among staff A lack of awareness among management A lack of expertise or specialist support Reluctance to talk openly about these issues

5.1 Drivers of OSH management

Five key factors for addressing OSH in establishments were explored by ESENER 2019, following on from the approach taken by ESENER 2014. In terms of the overall EU-27 average scores, the most common reason reported was 'fulfilment of legal obligations' (from 85 % to 88 %)[93], followed by 'meeting the expectations of employees or their representatives' (from 79 % to 81 %) and 'avoiding fines or sanctions from the labour inspectorate' (from 77 % to 79 %). This latter point is interesting, considering that ESENER 2019 reported a general decline in the number of establishments inspected; this suggests that fear of penalties is a sustainable driver (see **Table 15**).

Factors reported slightly less but that are nonetheless important included 'reputation' (from 76 % to 77 %) and 'increasing or maintaining productivity of the enterprise' (stable at 66%). These scores may be understandable to some degree, for example if pressure from authorities and employees is more of a concern for management; however, in some respects, the results suggest that the business case or value of OSH on the bottom line is not fully appreciated or understood by industry.

The breakdown of the results by country reveals certain quite pronounced differences when it comes to establishments' most prominent reasons for addressing OSH (see **Table 16**):

- 'Fulfilling legal obligations' was the most reported OSH management driver in 18 of the 33 countries and ranged from 97 % (Portugal) to 70 % (Denmark), suggesting that laying down rules will result in positive uptake of OSH practices.
- 'Meeting expectations from employees or their representatives' was most frequently stated as a reason for addressing OSH in Norway (94 %), Estonia (92 %), Italy (92 %) and Sweden (91 %).
- 'Avoiding fines or sanctions from the labour inspectorate' was most often highlighted by establishments in Portugal (96 %), Italy (95 %) and Bulgaria (93 %).
- 'Maintaining the organisation's reputation' was the most frequently reported driver for managing OSH in Cyprus (93 %), Bulgaria (95 %) and Lithuania (96 %).
- 'Increasing productivity' was reported mostly in Cyprus (87 %), Italy (87 %) and Serbia (87 %).

93 The first result in brackets is for ESENER 2014 and the second ESENER 2019.

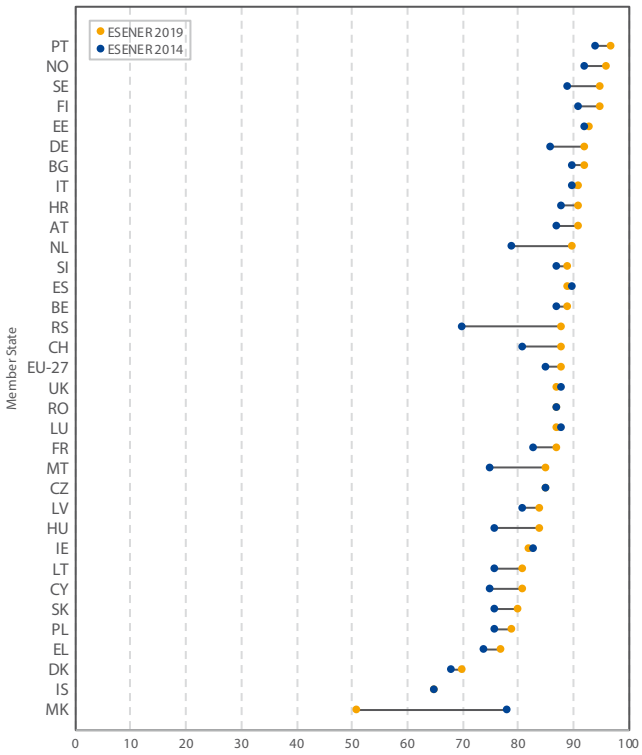
Table 16: Major reasons for addressing health and safety, % establishments by country (ESENER 2019)[94]

Country	Fulfilling legal obligation	Meeting expectations from employees	Avoiding fines from the labour inspectorate	Organisation's reputation	Increasing productivity
EU-27	88	81	79	77	66
AT	91	84	73	83	74
BE	89	89	67	76	63
BG	92	89	93	95	82
CH	88	82	61	77	60
CY	81	79	89	93	87
CZ	85	49	83	72	53
DE	92	79	76	77	70
DK	70	87	72	70	64
EE	93	92	83	91	79
EL	77	83	87	91	83
ES	89	73	80	67	58
FI	95	89	75	85	85
FR	87	84	63	60	38
HR	91	85	89	82	84
HU	84	69	85	79	60
IE	82	77	76	80	58
IS	65	74	61	78	52
IT	91	92	95	94	87
LT	81	86	85	96	86
LU	87	85	69	74	57
LV	84	72	74	88	81
MK	51	55	67	80	59
MT	85	80	76	90	62
NL	90	90	70	78	72
NO	96	94	82	89	76
PL	79	64	75	56	40
PT	97	91	96	93	86
RO	87	84	87	88	84
RS	88	87	91	94	87
SE	95	91	83	84	65
SI	89	77	83	90	81
SK	80	53	83	78	53
UK	87	78	85	84	60

Figure 29 compares the findings of fulfilling legal obligations between ESENER 2014 and ESENER 2019 by country. Generally, it seems that the importance of this factor is consistent and has improved slightly over time. The EU-27 average increased from 85 % to 88 %, with some notable country increases for Serbia (from 70 % to 88 %) and the Netherlands (from 79 % to 90 %); the country score for North Macedonia, however, fell sharply (from 78 % to 51 %).

94 Base: all establishments.

Figure 29: Fulfilling legal obligation as a major reason for addressing health and safety in establishments, reported by country, % establishments by country (ESENER 2014 and 2019[95])



As indicated in **Table 16**, generally the country results for 'avoiding fines and sanctions from the labour inspectorate' as a major driver for managing OSH have not changed much over time. Some exceptions include Serbia (from 70 % to 91 %) and Finland (from 65 % to 75 %). In contrast, the country scores decreased over time in Czechia (from 88 % to 83 %), Estonia (from 90 % to 83 %) and North Macedonia (from 90 % to 67%).

At the same time, certain country patterns can be observed that are largely consistent across both ESENER 2014 and ESENER 2019 findings. Namely, 'avoiding fines and sanctions from the labour inspectorate' seems to be the most commonly reported major driver in southern and eastern European countries (Portugal, Italy, Bulgaria, Serbia, Cyprus, Croatia, Romania, Greece, Lithuania, Hungary and Czechia). Here, a notable exception is the United Kingdom, which also scores high on this factor. This may be partially explained by national differences in inspectorate approaches around the likelihood of fines being issued on the spot for non-compliance.

By activity sector, the findings from ESENER 2019 support the importance of legislation as a major driver for OSH action. The relative proportions of establishments reporting legislation as a major factor were generally high, ranging from 94 % for water supply, sewerage and waste management to 81 % for real estate activities.

Compliance was also a major driver for 'avoiding fines and sanctions from the labour inspectorate'. It was most often named by establishments in mining and quarrying (88 %), accommodation and food service (87 %), and transportation and storage (86 %), and least often in public administration and defence (64 %), professional, scientific and technical activities (68 %) and education (69 %). This pattern by sector can perhaps be related to the frequency of on-site inspections.

Interestingly, 'maintaining or increasing the establishment's productivity' ranked as the least important factor on average. The scores for this factor were also associated with the widest spread, ranging from 75 % in manufacturing to only 44 % in public administration and public defence. The latter finding could be associated with different priorities around raising productivity between the public and private sectors.

By establishment size, the ESENER 2019 results reveal some subtle but potentially interesting differences in the prevalence of the different reasons for managing OSH among establishments belonging to various size classes. This notwithstanding, all factors were important to the different sizes of establishments.

'Fulfilling legal obligation' (93 %), 'meeting expectations from employees or their representatives' (84 %) and 'maintaining the organisation's reputation' (80 %) were most frequently named as a major driver by large establishments. The remaining two factors ('avoiding fines or sanctions from the labour inspectorate' and 'maintaining productivity') were most common among small enterprises (79 % and 65 %, respectively) and microenterprises (80 % and 66 %, respectively). The results seem to correspond with existing research findings to show that smaller firms are more sensitive to financial impacts in addressing OSH.

5.2 Barriers to OSH management

As part of ESENER 2019, establishments were also asked about the major difficulties they face while addressing OSH. In terms of the EU-27 average scores, it seems that the barriers are less prominent than the drivers, although likely still significant for some establishments (see **Table 17**).

'Complexity of legal obligations' was the most commonly reported major barrier, ranking the highest of all 7 factors considered in 17 of the 33 countries surveyed. It is worth noting that the country scores recorded varied quite significantly, ranging from 52 % of establishments in both Belgium and France to 12 % in Norway and 14 % in Latvia.

'Lack of time or staff' was highlighted as the most prominent barrier in Belgium (47 %) and France (46 %); this seems to be connected to perceptions of the complexity of the law in these countries. 'Paperwork', on the other hand, was most often reported as a major barrier in Greece (50 %), Italy (42 %) and Portugal (40 %).

95 Base: all establishments.

Table 17: Major barriers to addressing health and safety, % establishments by country (ESENER 2019)[96]

Country	Complexity of legal obligations	Lack of time or staff	Paperwork	Lack of money	Lack of awareness among staff	Lack of expertise or specialist support	Lack of awareness among management
EU-27	41	33	31	19	19	14	12
AT	37	28	25	8	13	6	4
BE	52	47	39	23	34	20	22
BG	32	31	18	29	16	14	13
CH	27	25	18	11	15	10	8
CY	33	30	35	24	18	20	13
CZ	42	34	23	17	14	15	15
DE	48	36	32	8	13	9	6
DK	18	30	17	17	19	10	12
EE	20	25	19	19	9	9	5
EL	46	30	50	32	19	22	16
ES	34	31	28	21	31	18	22
FI	16	22	11	10	8	6	5
FR	52	46	32	29	20	25	15
HR	29	17	20	15	10	5	5
HU	25	26	10	14	12	6	3
IE	27	20	17	14	10	11	8
IS	14	17	10	11	9	13	6
IT	43	27	42	25	19	14	14
LT	15	17	13	16	6	9	6
LU	32	36	23	14	17	19	11
LV	14	16	7	14	8	7	4
MK	23	21	24	20	13	10	5
MT	22	33	15	12	12	12	6
NL	51	39	35	17	34	15	19
NO	12	13	8	8	4	2	3
PL	43	29	36	24	22	15	16
PT	37	29	40	25	21	12	9
RO	20	31	12	19	20	11	13
RS	15	16	9	17	13	5	7
SE	38	31	16	17	14	11	10
SI	21	27	29	13	8	6	5
SK	39	19	26	26	11	13	10
UK	23	18	14	14	11	10	11

In terms of the complexity of legal obligations, the averages have remained relatively stable over time, including the EU-27 average (from 40 % to 41 %). Arguably, this is quite worrying, but at the same time, OSH requirements place substantive responsibilities on establishments which need to be managed carefully to ensure risk mitigation.

In some of the countries surveyed, the percentage of establishments pointing to 'complexity of legal obligations' as a major problem increased, notably in Sweden (from 18 % to 38 %), Slovakia (from 25 % to 39 %) and Germany (from 38 % to 48%). In this sense, legal obligations may present as both a driver of and a barrier to OSH management (see **Chapter 6**).

96 Base: all establishments.

Interestingly, similar country developments to those described above can also be observed in the changes to scores for 'paperwork'. Between ESENER 2014 and 2019, the proportion of establishments reporting 'paperwork' as a major barrier to addressing OSH increased in Slovenia (from 13 % to 29 %), Slovakia (from 14 % to 26 %) and Germany (from 23 % to 32 %), while decreasing significantly in Italy (from 61 % to 42 %). A notable exception is Sweden, where increasingly, many establishments complain about the 'complexity of legal obligations', but where the score for 'paperwork' remains low (from 14 % to 16 %).

The ESENER 2019 findings by sector indicated that 'complexity of legal obligations' was the most commonly reported major barrier to OSH management across all sectors. The sectoral scores ranged from 47 % in mining and quarrying to 32 % in finance and insurance activities.

'Lack of time and staff' was the second most frequently reported barrier to OSH management in 15 of the 19 sectors. It was most common in public administration and defence (40 %), accommodation and food services (38 %) and education (37 %). Work intensity typically associated with these sectors does seem to be a problem with respect to OSH management.

'Paperwork' was most frequently highlighted as a major barrier to addressing OSH issues by accommodation and food services (35 %), education (34 %) and agriculture, forestry and fishing (32 %).

Table 18: Major barriers to addressing health and safety in establishments, % establishments by sector (ESENER 2019)[97]

Sectors	Complexity of legal obligations	Lack of time or staff	Paperwork	Lack of money	Lack of awareness among staff	Lack of expertise or specialist support	Lack of awareness among management
EU-27	41	33	31	19	19	14	12
Accommodation and food service activities	42	38	35	19	20	14	13
Administrative and support service activities	34	30	24	14	19	13	12
Agriculture, forestry and fishing	38	27	32	19	24	12	11
Arts, entertainment and recreation	36	35	26	25	21	16	13
Construction	41	30	30	15	21	11	9
Education	41	37	34	35	16	19	13
Electricity, gas, steam and air conditioning supply	45	27	24	15	16	16	7
Financial and insurance activities	32	23	24	7	12	13	14
Human health and social work activities	40	35	29	24	17	13	12
Information and communication	32	22	20	11	15	11	12
Manufacturing	40	28	29	18	21	12	11
Mining and quarrying	47	34	29	17	25	11	16
Other service activities	38	29	25	22	14	13	11
Professional, scientific and technical activities	32	26	22	14	12	12	11
Public administration and defence; compulsory social security	42	40	30	34	21	21	17
Real estate activities	34	23	19	10	9	13	9
Transportation and storage	34	28	22	15	19	11	12
Water supply; sewerage, waste management and remediation activities	35	28	20	20	23	14	16
Wholesale and retail trade; repair of motor vehicles and motorcycles	36	28	26	13	15	12	11

97 Base: all establishments.

By establishment size, comparatively, microenterprises tend to report issues with 'complexity of legal obligations' (38 %) and 'paperwork' (28 %), whereas large firms are more likely to experience problems around 'lack of time or staff' (34 %) and 'lack of awareness among management' (25 %). As is often mentioned, administrative burdens fall most heavily on smaller organisations that may not have the expertise or resources to deal with them.

The reasons for not conducting risk assessments regularly were also explored among the roughly one-quarter of all establishments falling into this category (see **Table 19**). Establishments in the EU-27 (82 %) were most likely to confirm that the 'risks are already known', with the score ranging from 91 % in Portugal to 50 % in Bulgaria.

Table 19: Reasons risk assessments are not used regularly, % establishments by country (ESENER 2019)[98]

Country	Risks are already known	No major problems	Necessary expertise is lacking	Procedure is too burdensome
EU-27	82	80	30	20
AT	84	76	24	20
BE	77	81	35	22
BG	50	66	32	33
CH	87	86	26	19
CY	77	55	26	18
CZ	87	85	21	19
DE	83	88	30	24
DK	84	78	16	23
EE	91	87	9	23
EL	65	63	32	17
ES	81	52	35	24
FI	91	87	22	18
FR	84	79	43	21
HR	88	63	15	3
HU	90	96	19	20
IE	88	79	19	21
IS	68	56	31	10
IT	65	69	8	10
LT	81	90	19	19
LU	81	84	27	14
LV	76	91	31	15
MK	78	75	18	10
MT	72	79	19	5
NL	77	82	25	16
NO	72	67	18	6
PL	90	92	14	10
PT	91	40	18	7
RO	80	71	22	15
RS	73	59	13	21
SE	83	61	28	16
SI	82	91	30	13
SK	69	65	13	8
UK	90	77	32	19

98 Base: establishments confirming that they do not carry out risk assessments regularly.

By sector, several sectors associated with high safety risks were more likely to confirm that the 'risks are already known', including mining and quarrying (from 72 % to 98 %) and agriculture, forestry and fishing (from 93 % to 94 %). This contrasts with the result obtained from financial and insurance activities (from 78 % to 72 %). Despite being traditionally characterised as facing greater challenges in managing OSH, micro establishments (from 84 % to 83 %) were more likely to confirm that the 'risks are already known' when compared to large companies (from 71 % to 63 %).

5.3 Barriers to psychosocial risk management

The results to ESENER 2019 showed that psychosocial risks represent specific challenges for OSH management (see **Table 20**). In terms of the main barriers, 'reluctance to talk openly about these issues' (60 %) was the most commonly reported, followed by 'lack of expertise or specialist support' (45 %), 'lack of awareness among staff' (44 %) and 'lack of awareness among management' (33 %).

By country, 'reluctance to talk openly about these issues' was the most commonly reported obstacle in 25 of the 33 countries surveyed, with the exception of countries such as Croatia, Romania, Cyprus, Greece, Bulgaria, Serbia and North Macedonia. Yet this may not necessarily mean that these countries are all strongly aware of the presence of psychosocial risks in the workplace (see the results in **Section 3.3**). The highest scores for this factor were reported by establishments in Norway (78 %), Lithuania (76 %), Ireland (74 %) and Luxembourg (73 %).

'Lack of expertise or specialist support' was most often reported in Greece (70 %), France (64 %), and Ireland (62 %). At the same time, considerable country differences appear in the reporting of this issue with the results for the Netherlands (21 %) and Norway (24 %). Unfortunately, there has been a drop in companies using advice from the labour inspectorate in these latter countries (see **Section 3.6**) although relevant support is available, as confirmed by our survey for this study (see **Section 6.2**).

'Lack of awareness among staff' scored the highest in Latvia (62 %), Ireland (61 %) and Portugal (60 %); it was least often reported by establishments in Czechia(25 %), Finland (34 %) and France (34 %).

Interestingly, establishments in the country group broadly labelled as 'southern and eastern European countries' (North Macedonia, Bulgaria, Greece, Cyprus, Romania, Croatia, Czechia) reported all of the considered barriers to psychosocial risk management relatively less often. Yet, as mentioned, these countries are not consistently among the highest in reporting the presence of psychosocial risks in the establishment (see the results in **Section 3.3**).

Table 20: Major obstacles to dealing with psychosocial risks, % establishments by country (ESENER 2019)[99]

Country	Reluctance to talk openly about the issue	Lack of expertise or specialist support	Lack of awareness among staff	Lack of awareness among management
EU-27	60	45	44	33
AT	61	36	50	27
BE	62	34	42	35
BG	36	36	39	17
CH	53	33	36	20
CY	47	49	41	32
CZ	51	32	25	20
DE	62	41	46	28
DK	53	51	47	45
EE	53	42	48	20
EL	46	70	45	33
ES	58	51	46	40
FI	67	36	34	32
FR	66	64	34	38
HR	50	55	57	56
HU	56	36	45	21
IE	74	62	61	41
IS	63	54	34	39
IT	54	35	43	38
LT	76	47	45	48
LU	73	56	51	34
LV	66	45	62	27
MK	33	33	41	19
MT	62	46	48	33
NL	56	21	45	26
NO	78	24	36	26
PL	66	45	42	32
PT	58	53	60	29
RO	49	47	51	22
RS	54	33	60	41
SE	57	39	49	36
SI	63	45	48	35
SK	58	39	54	41
UK	71	59	59	45

By sector, the ESENER 2019 results revealed that 'reluctance to talk openly about these issues' is the most frequently reported obstacle to managing psychosocial risks in all of the 19 sectors. It was most commonly highlighted in water supply, sewage, and waste management (80 %) and construction (71 %) but the least common in human health and social work (51 %), accommodation and food services (52 %) and education (54 %).

'Lack of awareness among staff' was reported frequently by mining and quarrying (71 %), water supply, sewage and waste management (71 %) and agriculture, forestry and fishing (66 %). This could be due to the strong focus on reducing safety risks in these sectors that has somehow yet to make room for a broader focus on all types of OSH risks. 'Lack of awareness among staff' was highlighted to a much lower degree by education (33 %), human health and social work (34 %) and professional, scientific and technical activities (35 %).

99 Base: all establishments that report the presence of at least one psychosocial risk factor and that regard psychosocial risks more difficult to address than other risks.

Table 21: Major obstacles to dealing with psychosocial risks in establishments, % establishments by sector (ESENER 2019)[100]

Sectors	Reluctance to talk openly about the issue	Lack of expertise or specialist support	Lack of awareness among staff	Lack of awareness among management
EU-27	60	45	44	33
Accommodation and food service activities	52	42	50	24
Administrative and support service activities	65	47	45	38
Agriculture, forestry and fishing	68	34	66	43
Arts, entertainment and recreation	59	52	43	42
Construction	71	50	62	34
Education	54	50	33	26
Electricity, gas, steam and air conditioning supply	70	33	62	35
Financial and insurance activities	65	52	40	45
Human health and social work activities	51	34	34	23
Information and communication	56	49	43	45
Manufacturing	69	47	56	38
Mining and quarrying	69	56	71	59
Other service activities	59	44	35	28
Professional, scientific and technical activities	59	50	35	40
Public administration and defence; compulsory social security	71	53	51	48
Real estate activities	58	44	42	35
Transportation and storage	65	45	53	31
Water supply; sewerage, waste management and remediation activities	80	46	71	40
Wholesale and retail trade; repair of motor vehicles and motorcycles	64	48	50	36

Under ESENER 2019, 'reluctance to talk about these issues' was reported more frequently in large establishments (70 %) as compared to micro-organisations (52 %). 'Lack of awareness among management' also seems to be more prevalent as establishment size increases, considering the results for large (42 %) and micro establishments (31 %). These answers may be partly due to the type of respondents answering the questions. For example, in large organisations, the respondent is more likely to be a health and safety officer who may be more critical than a manager in a small company responding to ESENER questions on psychosocial risk management. An analysis by respondent type is provided in **Chapter 8**.

100 Establishments in the EU-27 that report the presence of at least one psychosocial risk factor and that regard psychosocial risks more difficult to address than other risks.

6. Impact of legislation on OSH management

This chapter provides complementary research on the impact of legislation on OSH management, with a specific focus on the role of legislation as a driver of and barrier to compliance. In investigating this subject, information was gathered through:

- a literature review on the role of legislation in OSH management;
- a country survey to map key national OSH legal reforms, policy features and soft measures[101];
- interviews with national experts on OSH[102] to gather further contextual details.

6.1 Literature review on legislation and OSH

The aim of the literature review on OSH legislation was to identify some of the key issues that help explain why legislation may simultaneously act as driver of and barrier to compliance in establishments. The following sections provide:

- a brief summary of the EU OSH policy framework;
- the role of legislation as a driver to OSH management;
- key barriers to compliance.

6.1.1 Brief summary of the EU OSH policy framework

The current EU OSH *acquis* consists of Framework Directive 89/391/EEC and the related 23 supporting directives, aiming to create a comprehensive package which helps secure a uniform level of minimum protection from occupational risks for all workers across EU Member States (Vogel, 2015)[103]. In defining the responsibilities of employers, the Framework Directive lays down nine key principles to be followed, namely:

1. avoiding risks;
2. evaluating the risks which cannot be avoided;
3. combating the risks at source;
4. adapting the work to the individual, especially as regards the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work rate and to reducing their effect on health;
5. adapting to technical progress;
6. replacing the dangerous by the non-dangerous or the less dangerous;
7. developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors related to the working environment;
8. giving collective protective measures priority over individual protective measures;
9. giving appropriate instructions to the workers.

The evaluation of the practical implementation of the EU OSH directives in EU Member States concluded that while the individual Member States have transposed the requirements of the directives using various legal approaches, it was clear that in all countries, the EU directives constituted the regulatory foundation for OSH management (COWI, 2015).[104]

Similarly, the *ex post* Regulatory Fitness and Performance (REFIT) programme evaluation of the EU OSH directives conducted for the European Commission also concluded that there was a 'good' level of overall compliance with the EU OSH *acquis,* across both EU Member States and establishment sizes, and that the *acquis* remained reasonably effective in achieving its aims of benefiting the health and safety of workers (European Commission, 2017).[105]

6.1.2 OSH legislation as a driver of compliance

A central feature of Framework Directive 89/391/EEC is the requirement to conduct OSH risk assessments regularly. In doing so, the legislation gives employers the responsibility to identify and manage risks, whether safety, ergonomic, chemical or psychosocial, and cover a wide range of specific aspects including repetitive work, lifting heavy loads, prolonged sitting, exposure to vibrations, heat or cold and employee-manager relationships. Rules relating to the appointment of OSH representatives provide opportunities for employees to engage in such processes, acquire training and gather wider employee input to the procedure.[106] By documenting the approach to the management of risks, formulating mitigating responses and updating risk assessments when needed, establishments build awareness of their responsibilities, and may go beyond minimum standards.

101 Presented in the Technical Annex.

102 EU-OSHA focal points: https://osha.europa.eu/en/about-eu-osha/national-focal-points

103 Vogel, L. (2015). The machinery of occupational safety and health policy in the European Union. History, institutions, actors. Brussels, ETUI. https://www.etui.org/publications/guides/the-machinery-of-occupational-safety-and-health-policy-in-the-european-union-history-institutions-actors

104 DG Employment, Social Affairs and Inclusion. (2015). 'Evaluation of the practical implementation of the EU occupational safety and health (OSH) directives in EU Member States'. https://ec.europa.eu/social/BlobServlet?docId=16897&langId=en

105 European Commission. (2017). Ex-post evaluation of the European Union occupational safety and health Directives (REFIT evaluation). https://ec.europa.eu/social/BlobServlet?docId=16875&langId=en

106 As mentioned, national rules vary as to the size of companies that should appoint OSH representatives.

This approach is considered to offer a goal-orientated method to setting legal requirements that provides flexibility as to how establishments can meet the necessary standards. Rather than laying down prospective rules, OSH legislation provides general objectives and dedicated procedures to create a management system that links the need to manage health and safety at work to the management of the business overall.[107]

The goal-orientated design of OSH legislation, its allocation of responsibilities and mandating of ongoing processes are considered to provide the framework for compliance. In a nutshell, this delegated approach can be said to intersect with certain behavioural dynamics, values or beliefs that provide motives for adherence to the rules and protection of employee wellbeing.

For example, it could be assumed that the role of the health and safety representative is allocated to persons interested in the position, whether selected or elected. The commitment to this role may be due to moral obligations to ensure the welfare of colleagues. Commitment may also be shaped by social motives, by seeking approval or respect through actions to protect others.

Alternatively, establishments 'learn by doing' and indirectly build up their OSH knowledge and skills. While key procedures and positions remain essential, day-to-day activities, interactions and frequent discussions ensure that continual experience is gained. Motivations to learn and acquire strong competencies also drive this process.

The institutionalisation of compliance, or self-regulation, is also a key driver: establishments introduce measures tailored to their own circumstances to ensure alignment with the standards set in law. This includes ensuring that the necessary organisational features are introduced, monitoring of employee health and accidents, developing preventive measures and maintaining documents. On a voluntary basis, establishments may seek to further strengthen or externally validate their approach by acquiring ISO 45001 certification, highlighting further how they comply with key standards.[108]

Moreover, the legislation reinforces the 'business case' to meet or exceed OSH standards. Undertaking risk assessments focuses company activities towards introducing preventive measures to raise standards, and at the same time, reduce costs. For example, measures that mitigate accidents reduce sick leave time; purchasing new 'safer' equipment can make working methods more efficient; introducing new working processes can strengthen both safety and quality standards; enhancing staff wellbeing improves job marketing and staff retention; and demonstration of safe working processes can strengthen business growth, enhance reputation and avert fines.[109]

Moreover, external influences are also a factor in strengthening compliance. For example, OSH inspectorates play a central role in examining compliance and may choose to provide guidance during inspections. Clearly, establishments are motivated in aligning their operations with the requirements of official bodies to ensure continuity in their business activities and safeguard their reputations. The focus of the inspections also is likely to have a bearing on the type of follow-up response subsequently received from the establishments.[110]

Another factor relates to the role of trade unions in providing advice and OSH protections. This offers a further layer of organisation through provision of information on necessary compliance steps, updates of approaches for risk identification and management, confirmation of rights, support on how to engage management on OSH, and advice on withdrawing labour from activities deemed dangerous. The level of this influence is likely to vary by country and sector.[111] This type of protection can be compared to the OSH experience of workers without trade union membership, such as migrant workers who form part of cross-border supply chains and have precarious working conditions.[112]

Similarly, establishments may seek external support such as prevention services to help meet OSH standards. The extent of uptake of prevention services is likely linked to the role of the national social insurance systems that may mandate or provide financial support for their use, or to strategic business choices made to demonstrate the mitigation of risks as far as possible. In countries where prevention services are prevalent, such as Germany or Spain, stringent educational and training requirements must be met by prevention companies to ensure the quality of advice and protection offered.[113]

107 European Commission. (2017). Ex-post evaluation of the European Union occupational safety and health Directives (REFIT evaluation). https://ec.europa.eu/social/BlobServlet?docId=16875&langId=en

108 European Agency for Safety and Health at Work. (2020). Improving compliance with occupational safety and health: an overarching review. https://osha.europa.eu/sites/default/files/Improving_compliance_OSH_regulations_report.pdf

109 European Agency for Safety and Health at Work. (2014). The business case for safety and health at work: Cost-benefit analyses of interventions in small and medium-sized enterprises. https://osha.europa.eu/sites/default/files/The%20business%20case%20for%20safety%20and%20health%20at%20work.pdf

110 Cefaliello, A. (2020). Towards an improvement of the legal framework governing Occupational Health and Safety in the European Union. PhD thesis. University of Glasgow.

111 Walters, D. (2020). 'Representing Workers on Safety and Health: The Current Challenge?'. In The Regulation and Management of Workplace Health and Safety (pp. 123-140). Routledge.

112 Danaj, S., Hollan, K., & Scoppetta, A. (2020). Labour Mobility and OSH Vulnerability of Posted Workers: The Cases of Austria and the Slovak Republic. In Health, Safety and Wellbeing of Migrant Workers: New Hazards, New Workers (pp. 115-136). Springer, Cham. https://doi.org/10.1007/978-3-030-52632-0_8

113 Sánchez-Herrera, I. S., & Donate, M. J. (2019). 'Occupational safety and health (OSH) and business strategy: The role of the OSH professional in Spain'. Safety Science, 120, 206-225.

Despite not being a common element of CSR, company demonstration of meeting OSH standards through CSR initiatives is observed to be a growing practice. This includes demonstrating that supply chain operators also meet the same or international standards. Again, this seems to be driven by moral obligations and business imperatives to engage proactively with NGOs and provide transparency to consumers.[114]

Interestingly, the results of ESENER 2019 support the suggestion in related research that the commitment to comply with the rules is connected to moral obligations, concerns about staff wellbeing, business performance and external pressures, and so on (see Section 5.1). For example, fulfilling legal obligations is the main reported reason for compliance (88 % of establishments in the EU-27), and is followed by meeting expectations from employees (81 %), avoiding fines (79 %), organisational reputation (77 %) and increasing productivity (66 %). It appears that these behavioural and business imperatives offer further avenues for research or for informing the design of actions to strengthen compliance.

6.1.3 Key root causes of non-compliance

At the same time, OSH legislation is sometimes seen as a barrier to compliance, for the following reasons:

- The motives of some establishments and individuals may be 'ethically biased';
- The legislation and/or corresponding procedures are perceived by some as too complex or burdensome to follow:
  - due to their design;
  - because of the contextual challenges faced by some establishments.

To begin, an emerging area of behavioural ethics research focuses on how company or personal biases can impact ethical decision-making around legal compliance. This research indicates that establishments do not deliberately act immorally, but rather make ethical deliberations biased by self-interest. This means that wrongdoing can be justified to a certain degree by some, given their interpretation of their own circumstances. In fact, biased cognitive processes can also prevent people from registering ethical dilemmas altogether, meaning that they will systematically fail to observe elements that point to immoral behaviour.[115]

In the area of OSH legislation and moral decision-making, biases impacting non-compliance include deferring to managers who may encourage non-compliance, following the non-compliant behaviour of others in the same social circle, overconfidence in one's own abilities to manage risks, self-interested concerns such as not introducing prevention methods that may be viewed as a cost without benefits, and framing decision-making using heuristics that 'take people out of the management equation', for example when meeting financial targets.[116]

Given this finding, it is suggested that regulatory policy-making should focus on 'ethical nudging' to boost compliance. Such measures are designed to improve ethical deliberations and help people overcome their cognitive and ethical biases that generate wrongdoing. Examples of these approaches include introducing information at appropriate junctures, as when asking people to sign a sworn declaration before submitting documents; or reminding people of the penalties for wrongdoing at the specific time when an ethical decision is being made. These types of methods are proven to be effective in experimental settings.[117]

Traditionally, the focus of public policy research has been to stress that non-compliance is associated with the regulatory and administrative burden of legislation. Typically, the logic is that the requirements are unnecessarily complicated and that reforms can be introduced to ease compliance without 'dumbing down' the requirements or goals. For example, the evaluation of OSH directives pointed out that the transposition of the EU OSH *acquis* has resulted in varying and often fairly high additional administrative and substantive compliance costs for business. However, while some recommendations made by the evaluation on EU directives were focused on clarifying parts of EU legal texts to ease comprehension, reformulating the wording of the rules to better fit the context of the workplace, reinforcing specific provisions to boost their clarity and impact, and widening the scope of the rules to ensure comprehensiveness, many were focused on awareness-raising and providing supplementary guidance to improve interpretation[118]. Yet the evaluation pinpointed several additional requirements in national laws that may not add value to worker safety; it stressed that further research would be needed to assess if these were problematic.[119]

As pointed out by the evaluation, and as discovered through the work conducted for this literature review, there is a shortage of literature that specifically highlights additional legal measures or administrative practices resulting in unnecessary OSH

114 Górny, A. (2014). Influence of corporate social responsibility (CSR) on safety culture. Management, 18(1), 43–57. https://doi.org/10.2478/manment-2014-0004

115 Feldman, Y. & Kaplan, Y. (2019). A Behavioural Ethics Approach to Legal Compliance. https://www.law.ox.ac.uk/business-law-blog/blog/2019/12/behavioural-ethics-approach-legal-compliance

116 Australian Institute of Health and Safety. (2019). Ethics and professional practice. In The Core Bodyof Knowledge for Generalist OHS Professionals. https://www.ohsbok.org.au/wp-content/uploads/2019/11/38.3.-Ethics-and-professional-practice.pdf

117 Feldman, Y., & Kaplan, Y. (2019). Big Data and Bounded Ethicality. Cornell JL & Pub. Pol'y, 29, 39. Data & Bounded Ethicality. Bar Ilan University Faculty of Law Research Paper No. 19-05, Available at SSRN: https://ssrn.com/abstract=3171987 or http://dx.doi.org/10.2139/ssrn.3171987

118 It may be argued though that the main target of EU directives are national legislators and not the employers directly.

119 European Commission. (2017). Ex-post evaluation of the European Union occupational safety and health Directives (REFIT evaluation). https://ec.europa.eu/social/BlobServlet?docId=16875&langId=en

compliance costs. To clarify, while some studies highlight that following OSH requirements is considered burdensome by some establishments[120], there is little evidence to show that the activities themselves are not contributing positively to safety management.

However, the Better Regulation agenda typically highlights several features of legislation that may result in unnecessary burdens, such as:

- **Gaps.** These tend to cause confusion around the scope of the rules: for example, the REFIT evaluation suggested ensuring better coverage of all biological agents under EU rules to ensure all were in scope.
- **Loopholes.** Requirements that are laid down may be ambiguous, meaning that certain circumstances would allow the rules to be circumvented. This provides unfair advantages to those not interpreting the rules rigorously. This could include expanding the existing provisions to include alternative workplaces, due to the COVID-19 pandemic and the increase in remote working generally. OSH hazards to be considered include the availability of ergonomic work equipment and a dedicated working area, the risk of overwork, and increased social isolation and interaction with family life.[121]
- **Inconsistencies.** Rules may be inconsistent if one rule negates the other, or the spirit of the requirements seems incongruent. Similarly, old rules may not be annulled upon the introduction of new laws. The REFIT evaluation noted some inconsistences between directives as applied in some circumstances and suggested alignment in provisions, for example aligning the provisions of Directive 2009/13/EC and Directive 2008/106/EC on medical treatment with provisions of Directive 92/29/EEC on medical treatment on board vessels.
- **Lack of clarity.** Rules may not be sufficiently clear as to the persons in scope or the activities that should be undertaken. This can result in confusion and misapplication. The REFIT evaluation noted that there is a poorly explained relationship between the Safety and/or Health Signs Directive (Directive 92/58/EEC) and EN ISO 7010 that may result in additional compliance costs.
- **Keeping abreast of technological change.** New technologies present risks to employees and the workplace generally, to the extent that existing rules may not be relevant to new methods of working. Further guidance and reforms are needed to clarify how OSH rules apply, for example considering digitalisation, human resource analytics and AI in the workplace.[122] [123] A specific example is the recently introduced Machinery Regulation that includes third party assessment of the safe integration of AI systems in machinery considering OSH objectives.[124]

At the same time, there should be consideration of the wider enforcement, advisory and administrative procedures and formalities that can ease interpretation and compliance, in various ways[125]. These formalities are important: even if the rules are simple to understand, poorly designed procedures, unclear forms and unnecessary information requests can increase complexity, especially if there is no 'go-to service' or guidance offering support or clarifications.

Administrative and procedural simplification. Administrative procedures and formalities can result in additional complexity, if, for example, they are not online, or if forms are difficult to complete or understand.[126] To reduce administrative burdens, the European Commission's eGovernment Action Plan mandates that administrative procedures should be 'digital by default'. EU-OSHA's Online interactive Risk Assessment Tool (OiRA) is an example of an administrative simplification that aims to reduce burdens for MSMEs by digitalising the risk assessment procedure.[127]

Guidance and advice. This provision can offer needed explanations to establishments on the necessary steps that should be taken to ensure compliance. This can be essential, especially if some establishments do not instinctively review the legislation directly. For example, the Danish Working Environment Authority provides online guidance and a helpline for persons requiring support.[128]

Enforcement methods. While inspectorates are mandated to examine whether establishments have met necessary standards and have the right to issue penalties, methods that lack engagement may not yield lasting results. Softer approaches, or

120 Hale, A., Borys, D., & Adams, M. (2015). Safety regulation: the lessons of workplace safety rule management for managing the regulatory burden. Safety science, 71, 112-122. https://www.sciencedirect.com/science/article/abs/pii/S0925753513002701

121 Oxford Research. (2020). 'Regulation and Practices of Remote Work in the Nordics: A study for the Nordic Council of Ministers https://oxfordresearch.se/en/projects/regulations-and-practices-of-remote-work-in-the-nordics/

122 European Agency for Safety and Health at Work. (2019.) OSH and the Future of Work: Benefits and Risks of Artificial Intelligence tools in workplaces. https://osha.europa.eu/sites/default/files/2021-11/OSH_future_of_work_artificial_intelligence.pdf

123 Ahlers, Elke. Flexible and remote work in the context of digitization and occupational health. International Journal of Labour Research 8, no. 1-2 (2016): 85-99. https://labordoc.ilo.org/discovery/delivery/41ILO_INST:41ILO_V2/1271828290002676

124 Details on the Machinery Regulation: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1682

125 See EU-OSHA's work on supporting OSH compliance: https://osha.europa.eu/en/publications/improving-occupational-safety-and-health-changing-world-work-what-works-and-how

126 The eGovernment Action Plan: https://digital-strategy.ec.europa.eu/en/policies/egovernment-action-plan

127 Online interactive risk assessment: https://osha.europa.eu/en/tools-and-resources/oira

128 Danish Working Environment Authority: https://at.dk/en

use of a 'carrot and stick' may encourage more positive responses, for example prompts, clarifications and warnings, supplementary advice or supportive approaches that focus on raising standards. An example is the Danish Working Environment Authority's approach of using advisory 'dialogue meetings' with firms in the construction sector following inspections and identification of non-compliance.[129]

Moreover, a further challenge that is often highlighted when considering the complexity of legislation is the cumulative impact of the multiple rules that establishments should comply with. While individual provisions may be unnecessarily burdensome, the need to follow several types of legislation at the same time can stretch company resources, for example, OSH law, product regulation, working conditions, environment and accounting. Rules applying to establishments may not be complex per se when considered in isolation, but can pose challenges when resources are limited[130]. Some companies may determine that they have to make choices on how they allocate their time and follow rules as far as they consider reasonable considering other constraints, even if it means operating without fulfilling all necessary obligations.[131] This goes to show that procedural simplification and other types of support may be needed to boost compliance efforts generally.

Furthermore, research findings also point to the issue of monetary costs of OSH compliance, including the cost of developing prevention measures (such as investing in improving working conditions, purchasing personal protective equipment, and commissioning check-ups and training) and developing and maintaining an OSH management system. Direct compliance costs have been found to be more difficult to budget for small and medium-sized enterprises (SMEs) as they are not able to benefit from economies of scale by distributing their OSH compliance costs over a number of products or markets[132]. It has also been noted that the low growth ambitions of some MSEs may result in the conclusion that investing in compliance is not worthwhile.[133]

In addition, one should also keep in mind that the goal-orientated method of OSH legislation provides flexibility on how the legislation should be followed in establishments. While legislation sets down key building blocks, the real cost of compliance is dependent not only on the design of specific national rules but also on the enterprises' interpretation. This is likely to differ markedly from one enterprise to another, depending on the specific risk factors, workplace operations and the design and operation of the OSH management system.[134]

6.1.4 Key barriers to compliance (perceptions and challenges)

The ESENER 2019 results show that there are several barriers to following OSH rules, with the main reasons being the complexity of the legislation (41 % for the EU-27), lack of time (33 %), paperwork (31 %), lack of money (19 %), lack of expertise (14 %) and lack of awareness among management (12 %) (see **Section 5.2**).

Notably, it seems that the barriers to compliance seem to generate lower responses when compared to the reasons for complying with the rules mentioned in **Section 5.1**. This may not mean necessarily that these issues are somehow less problematic, as they could affect some companies more than others.

The results on barriers by establishment size suggested that the differences between establishment size were not great, although the issues of complexity of the legislation and paperwork were more frequently reported by small and micro enterprises, further highlighting the resource constraints experienced by these organisations.

ESENER 2019 also reported on the reason given for not completing risk assessments. Those not completing risk assessments regularly (25 % for the EU), suggested there was no need as the risks are already known (82 %), there are no major problems (80 %), expertise is lacking (30 %) and the procedure is too burdensome (20 %). While the first reason may suggest that the risks are managed informally, the second implies overconfidence in one's ability to manage risks. Yet finding the procedure burdensome is still a notable issue for those not completing risk assessments.

Several studies stress that MSMEs have specific challenges and barriers to meeting OSH requirements. Based on interviews with 58 safety officers in European SMEs, one study identified 'stringent

129 PWC / Oxford Research. (2017). 'Evaluation of labour inspections in the construction sector'. A study on behalf of the Danish Working Environment Authority.

130 This may also be the case when it comes to changes in the law – even when it is a simplification- and the required adaptations. In the ESENER series there is evidence suggesting that such changes may be regarded as 'complex' as they lead to new procedures, consultations and processes in order to comply with the new regulations.

131 Centre for Strategy & Evaluation Services. (2015). Cost of the Cumulative Effects of Compliance with EU Law for SMEs. https://ec.europa.eu/docsroom/documents/16321/attachments/2/translations/en/renditions/pdf

132 Rzepecki, J. (2012). Cost and benefits of implementing an occupational safety and health management system (OSH MS) in enterprises in Poland. International Journal of Occupational Safety and Ergonomics, 18(2), 181-193. https://doi.org/10.1080/10803548.2012.11076927

133 Hasle, P., Kvorning, L. V., Rasmussen, C. D., Smith, L. H., & Flyvholm, M. A. (2012). A model for design of tailored working environment intervention programmes for small enterprises. Safety and health at work, 3(3), 181-191. https://doi.org/10.5491/SHAW.2012.3.3.181

134 European Commission. (2017). Ex-post evaluation of the European Union occupational safety and health Directives (REFIT evaluation). https://ec.europa.eu/social/BlobServlet?docId=16875&langId=en

legal regulations' and 'bureaucracy' as the most frequently perceived challenges.[135]

However, OSH rules are required to be stringent and specific, and also extensive in terms of the risks covered, so that workers can be protected, and to introduce targeted sanctions for non-compliance. Ongoing application of the OSH management system is also required to support risk management and compliance. In the context of the REFIT evaluation, multiple stakeholders voiced concerns that legally exempting certain establishments from the obligation to comply with OSH regulations, or deregulating generally for the purpose of reducing regulatory and administrative burdens would contribute to a deterioration of firms' OSH management performance.[136] Again, it seems that support or procedural simplifications are needed to enable firms to manage their obligations.

In attempting to meet legal obligations, specific challenges can reduce the ability of firms, particularly MSMEs, to comply, including:

- **OSH knowledge:** lack of OSH-specific expertise necessary to develop a workplace level solution which would satisfy the OSH legal requirements (Hale and Swuste, 1997)[137] (Hasle and Limborg, 2006)[138] (Masi and Cagno, 2014)[139].
- **Resources:** lack of access to guidance materials, training resources and OSH practitioner advice to supporting the introduction of appropriate OSH management systems (Janicak, 1996)[140] (ECOTEC, 2005)[141] (MacEachen et al., 2010)[142] (Esterhuyzen, 2019)[143].
- **Safety culture:** lack of understanding and buy-in at the firm level can lead to an enterprise focusing excessively on fulfilling the legal requirements rather than improving OSH management at the workplace. Ideally, organisations should develop a safety culture where the common organisational values and actions are aligned around reducing risks.[144]

In addressing these challenges, several solutions have been suggested for MSMEs, including:

- **Guidance:** focused guidance including relevant real-life examples on risk management approaches can be used as a means to address knowledge and resource gaps. [145]
- **Tailored advice:** support received from authorities, local territorial players with sectoral knowledge, social partners, external consultants, collaborations with associations and networks of companies have been documented as overcoming hurdles to compliance.[146] [147]
- **Financial incentives:** adjustments in insurance premiums or grants can help companies introduce training and equipment to

135 Masi, D., & Cagno, E. (2015). Barriers to OHS interventions in small and medium-sized enterprises. Safety science, 71, 226-241. https://doi.org/10.1016/j.ssci.2014.05.020

136 European Commission. (2017). Ex-post evaluation of the European Union occupational safety and health Directives (REFIT evaluation). https://ec.europa.eu/social/BlobServlet?docId=16875&langId=en

137 Hale, A.R. & Swuste, P. (1997) Sharing workplace solutions by solution databanks. Volume 26, Issues 1–2, June–July 1997, Pages 95-10.

138 Hasle, P. & Limborg, H. J. (2006). A Review of the Literature on Preventive Occupational Health and Safety Activities in Small Enterprises. https://www.researchgate.net/publication/7168717_A_Review_of_the_Literature_on_Preventive_Occupational_Health_and_Safety_Activities_in_Small_Enterprises

139 Masi, D., Cagno, E., & Micheli, G. J. (2014). Developing, implementing and evaluating OSH interventions in SMEs: a pilot, exploratory study. International journal of occupational safety and ergonomics, 20(3), 385-405. https://doi.org/10.1080/10803548.2014.11077059

140 Janicak, C.A. 1996. Employers' knowledge of the hazard communication standard requirements and the perceived barriers to compliance. Journal of Safety Research, 27(4). 233-239.

141 Ecotec (2005) Obstacles preventing worker involvement in health and safety. A study for the Health and Safety Executive, UK.

142 MacEachen et al (2010) Workplace Health Understandings and Processes in Small Businesses: A Systematic Review of the Qualitative Literature J Occup Rehabil 20, 180–198.

143 Esterhuyzen, E. (2019) mall business barriers to occupational health and safety compliance. The Southern African Journal of Entrepreneurship and Small Business Management Vol. 11, No. 1.

144 Tear, M. J., Reader, T. W., Shorrock, S., & Kirwan, B. (2020). Safety culture and power: Interactions between perceptions of safety culture, organisational hierarchy, and national culture. Safety Science, 121, 550–561. https://doi.org/10.1016/j.ssci.2018.10.014

145 Olsen, K. B., & Hasle, P. (2015). The role of intermediaries in delivering an occupational health and safety programme designed for small businesses–A case study of an insurance incentive programme in the agriculture sector. Safety science, 71, 242-252. https://doi.org/10.1016/j.ssci.2014.02.015

146 Masi, D., Cagno, E., & Micheli, G. J. (2014). Developing, implementing and evaluating OSH interventions in SMEs: a pilot, exploratory study. International journal of occupational safety and ergonomics, 20(3), 385-405. https://doi.org/10.1080/10803548.2014.11077059

147 Frick, K. (2019, March 31). Critical perspectives on OSH management systems and the future of work. Ilo.org. https://www.ilo.org/global/topics/safety-and-health-at-work/events-training/events-meetings/world-day-for-safety/33thinkpieces/WCMS_680397/lang--en/index.htm

target specific needs that would not have otherwise benefited from investment.[148]

- **Digitalisation:** disseminating the use of existing online tools such as OiRA can ease compliance procedures, and using data on the online submission of completed risk assessments can inform enforcement strategies.

Overall, legislation can be a key driver in aligning moral, behavioural and commercial interests towards meeting OSH obligations. Moreover, in reducing barriers, rules should be designed to ensure clarity, consistency, applicability and avoidance of additional unnecessary costs. The extensive and comprehensive scope of OSH requirements will naturally require investment in setting up and running OSH management processes that can be integrated efficiently into management practices albeit requiring resources and commitment.

Thus, as mentioned in the EU Strategic Framework on Health & Safety at Work (2021-2027)[149], the design of the enforcement and advisory framework is key in helping establishments overcome the challenges of compliance, considering the resource and information constraints that smaller organisations typically face.[150]

6.2 Interview results

Follow-up interviews were carried out with 11 selected national experts (from Austria, Denmark, Estonia, Finland, Germany, Italy, Lithuania, the Netherlands, Norway, Sweden and Switzerland) to learn about their views on the issue of legislation as both a driver of and barrier to compliance, and also on methods to reduce complexity.

The purpose was to learn whether and how national legislation was designed to encourage simple understanding and implementation of the rules and OSH management system. All experts agreed that national OSH laws are by default 'complex', given their extensive focus on protecting workers in many different types of working environments or situations. Companies are responsible for acquiring the relevant knowledge and implementing provisions to meet the standards set. This naturally results in an investment of time and resources in familiarisation and administrative activities to ensure comprehensive coverage of all risks, and in introducing substantive approaches to mitigate risks identified. Regardless of how 'simple' the rules could be made, and it was noted that this would be difficult to achieve, effective management of OSH requires accumulation of significant experience to reach the point where it is seamlessly integrated into wider organisational activities.

These responsibilities were said to present challenges to some managers, companies or even the wider national culture, which may be less prone to focusing on risk management as intended in the law. Given the hurdles, the main proposed solution to reducing this 'complexity' was the provision of advisory support or services offered by authorities, unions, employer associations, accident insurance companies or similar organisations. The Nordic countries suggested that it is generally understood that companies consider OSH a responsibility to be fulfilled and that assistance is frequently requested from external organisations when needed.

Online approaches to the submission of risk assessments were seen as key in reducing procedural complexity. The Lithuanian online system is regarded as a procedural simplification for establishments, given the simple steps to be followed and the supporting advice provided online. It also offers inspectorates the opportunity to identify companies that have not submitted their risk assessments. The Dutch national expert echoed the Dutch version of OiRA in supporting the easing of completion of risk assessments, while the Estonian expert stressed the importance of using new digital technologies such as online platforms to share information and offer support. In Italy, online platforms are used to share detailed information tailored to micro enterprises on how to conduct risk assessments.

Experts were asked what general areas of risk management are subject to national requirements which are not covered by EU legislation. The chief response is that EU legislation already covers the main types of risks extensively, and the open-ended focus on risk management in EU law means that there are no major general gaps. However, psychosocial risk management is an area seeing further developments in countries such as the Netherlands, Sweden, Denmark, Italy and Norway. Norwegian legislation takes into account the sectoral prevalence of specific risks, and therefore provides more targeted provisions. In Lithuania, the importance of undergoing high-quality OSH training is stressed, with every employer required to obtain an OSH training certificate. Training provision is overseen by the state and is undergoing continuous improvement. In Italy, companies are required to assess the risk of work-related stress using a methodology laid down by authorities.

Moreover, since the COVID-19 pandemic, in some cases there has been a focus on clarifying legislation to cover the changing working environment. For example, in the Netherlands, legislation has been introduced to stress the need to include homeworkers in risk assessments, considering the possible risks from the ergonomic conditions, working hours, stress and so on. However, mostly to protect the work environment, countries have provided information to employers on how to follow general pandemic requirements such as social distancing and wearing of masks, and with respect to specific sectoral rules for the accommodation and food industry, for instance. Since the onset of the pandemic,

148 Olsen, K. B., & Hasle, P. (2015). The role of intermediaries in delivering an occupational health and safety programme designed for small businesses–A case study of an insurance incentive programme in the agriculture sector. Safety science, 71, 242-252. https://doi.org/10.1016/j.ssci.2014.02.015

149 EU Strategic Framework on Health & Safety at Work (2021-2027): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0323&from=EN

150 EU Strategic Framework on Health & Safety at Work (2021-2027): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0323&from=EN

it was noted that interaction with bodies providing OSH advice increased.

Because company inspections provide a good opportunity for learning and knowledge sharing, experts were asked about the ways in which inspections have been designed to enhance understanding of the rules. Most of them highlighted the importance of offering free and easily accessible feedback, advice and consultation for companies.

In this context, they were also asked in what way the need for compliance is promoted as a reason to manage OSH (informing companies of fines, risks to reputation and so on). Overall, it seems that this aspect is not focused on extensively and is seen as a last resort. However, to emphasise the need to comply with the law, Germany recently implemented a minimum inspection quota to alert companies of the likelihood of being inspected. Moreover, rather than using threats or fines, in some countries, such as Lithuania, the Netherlands and Norway, it was pointed out that in case of noncompliance, the idea is always to support and help in the first instance. This was largely due to considerations around how to best engage establishments, bearing in mind that they need to adopt approaches that lead to sustainable changes. The Lithuanian expert, for instance, referred to the allocation of more resources to support sectors where compliance may be somewhat lacking, including agriculture and construction. These resources are being used for livestreams, consultations and workshops that focus on specific sectoral issues.

Regarding the reasons why some companies perceive the legislation as a barrier, many experts mentioned that lack of in-house OSH knowledge is a key problem, especially in smaller companies. In such cases, companies do not see the benefit, such as increased productivity or quality, of complying with OSH legislation. Similarly, the Swedish expert mentioned that some companies tend to think mostly of costs whenever they are asked to implement a new OSH measure; however, benefits are typically recognised afterwards.

OSH legislation has gradually become more expansive in recent years, for example, including psychosocial risks more directly. Nevertheless, on average, establishments do not find that legal obligations have become more complex. Data from ESENER, however, reveals that there is some variation, depending on the national context. In Germany, for instance, where a number of reforms were implemented after ESENER 2014, the share of establishments that found the complexity of legal obligations prevents them from complying increased by 10 percentage points. A significant increase of 20 percentage points was also seen in Sweden, and a decrease of 5 percentage points in Norway.

Furthermore, experts were also asked whether old OSH rules are nullified or amended when new rules in a similar area are introduced. The general view was that new rules are not introduced often and that the transposition of the EU law has created a relatively stable legislative environment. If changes are made, these are relatively minor, such as changing limit values for dangerous substances. Theoretically, reforms of the law could be made but often the focus is on making procedures more efficient, for example through online measures.

6.3 Regression analyses

6.3.1 Introduction

The regression analyses explored the relationship between perception of legal obligations and the approach to health and safety management in the establishment. More specifically, two research questions were asked:

1. How are OSH factors related to the perception of legal obligations as a difficulty in addressing health and safety in the establishment?
2. How are OSH factors associated with fulfilling legal obligations as a major reason for addressing health and safety?

The idea was to assess whether OSH factors are able to decrease the perception of legal obligations, being the only driver for addressing health and safety issues in the establishment.

The OSH factors hypothesised to be related to perception of legal obligations included using employers' organisations and trade unions as source of information, the presence of health and safety representatives, the use of external OSH providers, visits made by the labour inspectorate in the past 3 years, and the reported use of OSH services.[151]

6.3.2 OSH factors

Application of OSH management practices is, in general, significantly related to the perception of legal obligations as complex and a major reason for addressing health and safety. For the perception that complexity of legal obligations is a major difficulty in addressing health and safety in the establishment, three of the six OSH factors are proven to be significant: the use of external providers of OSH services **is positively associated** with establishments perceiving complexity of legal obligations as a major difficulty (by 17 %, compared to establishments which do not use external providers). On the other hand, the presence of health and safety representatives, and being visited by labour inspectorates in the past 3 years, **is negatively associated** with perceiving legal obligations as too complex (by 24 % and by 4 %, respectively). The remaining non-significant OSH factors were source of information – employers' organisation, source of information – trade union, and sum of OSH services used.

For the perception that legal obligation is a major reason for addressing health and safety in the establishment, all six OSH factors are proven to be significant. Five factors have positive influence, that is, they increase the probability of reporting that

151 This last measure was for the sum of services used from 0 to 5.

legal obligations are the major reason for addressing health and safety. The strongest effect was observed for health and safety representatives (35 % higher chances compared to the situation where there is no such representative), followed by trade unions as a source of information and the use of external OSH providers. The only factor with negative effect – that is, decreasing the chances of perceiving legal obligations as a major reason for addressing health and safety – is being visited in labour inspectorate in the past 3 years (by 12 %). It should be noted however, that this was the result of Model 1, that is, without contextual factors.

The relationship of OSH practices and the perception of legal obligation is evidently complex. Most of the OSH practices increase the chances of reporting that legal obligations are the main reason for addressing health and safety, which means that the establishment applying those practices addresses health and safety due to legal obligations. The situation with the perception of complexity of legal obligations is different, though. The only factor positively associated withperceiving legal obligations as a major difficulty in addressing health and safety is the use of external providers. It may suggest that when an establishment uses external providers, it relies on the provider's knowledge of legal obligations and therefore perceives they are too complex. Or perhaps the services provided are not tailored enough to the needs of some establishments, considering their level of understanding.

Regarding the labour inspectorate, when an establishment has been visited, the chance for addressing health and safety due to legal obligations is lower (compared to those not visited), and at the same time, legal obligations do not seem to be complex. We may conclude that the labour inspectorate visit supports better knowledge and understanding of legal obligations in the area of health and safety. Establishments visited by labour inspectorate are able to see other reasons (than fulfilling legal obligations) for addressing health and safety. Such visits can also enhance the perception that legal obligations are not too complex.

6.3.3 Accounting for the context: country, activity sector and business size

The introduction of the context variables proved the OSH management variables remained significant, yet there were notable changes in the direction of the effect. This means that in a more complex modelling scenario considering a wide range of contextual factors, the OSH management variables retained their general explanatory power with respect to the OSH outcomes.

In understanding legal obligations as a major reason for addressing health and safety (country, sector, size), the influence of OSH factors (all but one) remained significant, showing that even accounting for the context, OSH factors play an important role. The effect of contextual factors was seen in weakening the probability of OSH factors (but still maintaining the significance). The only factor whose effect diminished by adding contextual factors is a **visit of labour inspectorate** – now insignificant in Model 2.

For the probability of perceiving legal obligations as too complex, the introduction of contextual factors (country, sector, size) generates more nuanced results. The increase of this probability is related to the use of external providers (as in Model 1), to recent visits of labour inspectorate (opposite direction in Model 1), and to the employers' organisation as a source of information (insignificant in Model 1). The drop in the above-mentioned probability is related to the presence of a health and safety representative (similar as in Model 1) and to the sum of used OSH services – the more services the establishment uses, the less chance it will perceive legal obligations as too complex. Finally, trade unions as a source of information have no influence on the perception of complexity of legal obligations.

In summary, **addressing health and safety due to legal obligations** is related to more frequent reporting of having a health and safety representative, OSH services, external providers and both employers and trade unions as source of information. Establishments using more OSH activities are aware that health and safety procedures are derived from legal obligations, and this is universal across countries and sectors.

The increased **perception of complexity of legal obligations** is related to the use of external providers. It means, that in any context, using external providers is related to the perception of complexity of legal obligations. We are not able, however, to identify cause and effect; relying on external OSH providers can either cause confusion in the area of legal obligations or the use of external providers is an effect of the perception of legal obligations as complex. The presence of a health and safety representative and more frequent use of OSH services may diminish the perception of the complexity of legal obligations.

Being visited by a labour inspectorate in certain contexts is positively associated with the perception of complexity of legal obligations, and a detailed analysis of the effect of the context suggests that this perception is higher in specific sectors (especially electricity, gas, steam and air conditioning supply; and education), and lower in the biggest enterprises. A similar effect was observed for the employers' organisation as a source of information – being positively associated with the perception of complexity only in certain contexts.

7. Employee participation in OSH

7.1 Introduction

There is substantial evidence indicating that worker participation significantly benefits OSH management, as has been shown throughout the report. Bearing this in mind and to support the interpretation, this chapter combines findings from a literature review on employee representation in OSH with the ESENER 2019 results on the area of employee involvement.

The relevance of worker involvement in OSH constitutes an extensive body of literature. The topic has been covered in depth in the European context, due to the region's longstanding tradition of social dialogue in industrial relations as supported by national and EU-level law, approaches to employee involvement in corporate governance, and integrated manager-worker management systems.

Table 22 provides an overview of the ESENER questions explored in this chapter. As indicated, ESENER plays a key role in monitoring the type and extent of employee involvement in OSH management across Europe, focusing on the methods of OSH employee representation, the extent of training and engagement of OSH representatives, and the level of wider employee participation.

Table 22: Overview of worker participation topic areas and corresponding abbreviated ESENER 2019 items

Worker participation topic area	Number	Items from the ESENER 2019 questionnaire discussed in this chapter
Methods of formal employee representation at the workplace	Q350	Which of the following forms of employee representation do you have in this establishment? • A works council [If not =CY,MK,SE] • A trade union representation [If not =AT,DE,LU] • A health and safety committee [If not =MK,SI] • A health and safety representative.
	Q351	Are the {{health and safety representatives}} elected by the employees or selected by the employer?
Training and commitment to OSH representatives and committees	Q354	Are {{the health and safety representatives}} provided with any training during work time to help them perform their health and safety duties?
	Q352	How often is health and safety discussed between employee representatives and the management? Do such discussions take place regularly, occasionally or practically never?
	Q353	How often do controversies related to health and safety arise [between employee representatives and management]? Is this often, sometimes or practically never the case?
Direct participation of employees in OSH management	Q355	And about the employees themselves: on which of the following topics does your establishment provide them with training? • The proper use and adjustment of their working equipment and furniture • The use of dangerous substances • On how to prevent psychosocial risks such as stress or bullying • On how to lift and move heavy loads or people • Emergency procedures • On how to assess mobile or external workplaces on health and safety risks.
	Q356	Is any of this [employee OSH] training also provided in different languages?
	Q303a	Has an employee survey including questions on work-related stress been conducted in your establishment in the past 3 years?
	Q303b	Have employees been involved in identifying possible causes for work-related stress, such as time pressure or difficult clients?
	Q258	If employees are usually involved in the design and implementation of measures following a risk assessment.
	Q306	Did the employees have a role in the design and set-up of measures to address psychosocial risks?

The literature on worker engagement in OSH distinguishes between indirect and direct approaches. **Indirect approaches** to worker engagement refer to formalised arrangements allowing for the participation of workers in the management of occupational health and safety using OSH-specific means of collective representation.[152] As indicated in **Figure 30**, and as covered by ESENER, two forms of representative participation in OSH management are usually adopted, health and safety representatives, and health and safety committees, potentially with some form of trade union support.

Direct approaches to worker participation are defined as activities and arrangements which involve employees personally, rather than being carried out **by appointed worker representatives**[153] This may include ongoing discussions, employee surveys and employee involvement in the design of OSH measures.

Figure 30: Overview of indirect and direct approaches to OSH management

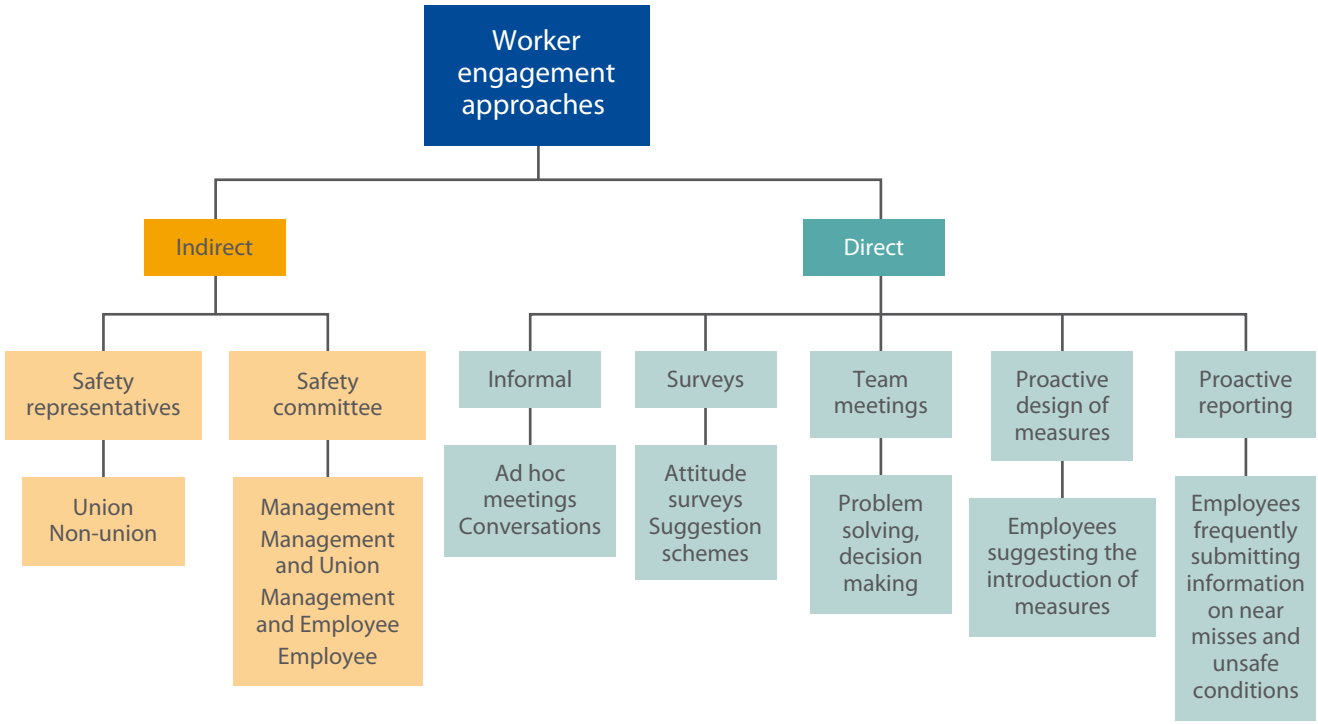


Figure adapted from Cameron et al. (2006)[154]

Informed by this framework, in the following sections, the literature review findings are used to introduce the ESENER results on indirect and direct approaches to employee involvement in OSH. The EU-27 results concerning employee involvement in OSH management showed limited change over the 2014 to 2019 period.

In terms of indirect worker engagement, for both 2014 and 2019, the proportion of establishments reporting the use of health and safety representatives (56 % and 56 %, respectively) and health and safety committees (20 % and 22 %, respectively) remained almost the same.

As regards more direct employee engagement approaches, the data suggest that employee involvement in the design and implementation of new measures has not changed significantly (from 81 % to 80 %), while involvement in the design and set-up of measures to address psychosocial risks has decreased slightly (from 63 % to 56 %), and health and safety issues are less frequently discussed in team meetings in 2019 (35 %) compared to 2014 (61 %).

152 Walters, D. & Nichols, T. (2008). Worker Representation and Workplace and Safety. British Journal of Industrial Relations, 46(2):381-383. https://doi.org/10.1111/j.1467-8543.2008.00682_8.x

153 Ollé-Espluga, L., Vergara-Duarte, M., Belvis, F., Menéndez-Fuster, M., Jódar, P., & Benach, J. (2015). What is the impact on occupational health and safety when workers know they have safety representatives?. Safety science, 74, 55-58. https://doi.org/10.1016/j.ssci.2014.11.022

154 Lawani, K., Hare, B., & Cameron, I. (2017). Developing a worker engagement maturity model for improving occupational safety and health (OSH) in construction. Journal of Construction Project Management and Innovation, 7(2), 2116-2126.

7.2 Indirect forms of OSH management (general and OSH-specific forms)

7.2.1 Literature review results on indirect forms of OSH management

The **indirect forms** of OSH management mentioned, such as the presence of a health and safety representative or committee, have been commended in the literature for enabling a wider inclusion of employee perspectives in OSH management, helping both downward and upward problem solving, and improving idea generation.[155]

According to the current state of research, health and safety representatives have been found to share certain common features: they are typically experienced employees who have a relatively long tenure with the firm; they are employed based on a fixed contract; and they may also be members of a trade union. The literature documents several approaches to how the role of a health and safety representative is realised in a particular establishment: (1) individual health and safety representatives can be appointed by managers; (2) they can be workers or worker representation bodies such as a works council; (2) shop stewards (i.e. elected union officials) can fulfil health and safety representative duties; and (3) a works council can exercise the functions of a health and safety representative, as is the case in Germany and the Netherlands.[156]

The literature broadly defines health and safety committees as joint consultative forums in which workers and management come together to discuss health and safety issues in the establishment. Health and safety committees typically have either a single-issue agenda (that is, they have been set up with the sole purpose of discussing OSH) or a multi-issue agenda.[157] As indicated in **Table 22**, OSH committees can differ in terms of composition, allowing for different configurations of membership of management, trade union representatives and employees.[158]

According to Frick (1998), there is a twofold rationale behind the activities of health and safety representatives. Their primary task is to assist management in identifying and prioritising OSH-related issues and developing and implementing appropriate preventive measures. At the same time, however, they also play a role in reconciling the interests of workers (whose primary demand are safe workplaces) and employers (who are focused on the general efficiency and cost-effectiveness of the business).[159]

As part of 'The Impact of Safety Representatives on Occupational Health: A European Perspective' (the EPSARE project), a comprehensive review identified three contextual factors acting as either drivers of or barriers to the activities of health and safety representatives in European workplaces: (1) social and political conditions, (2) conditions within firms, and (3) specific conditions of OSH representation.[160]

Clearly, **trade unions** play a key role in shaping these conditions. A study by Benach et al. proposes that positive systemic links can be established between a strong worker bargaining power, a strong welfare state, equality in employment relations, and the state of occupational health.[161] Having the structural support of trade unions at the firm, sectoral, regional, and national level has been commonly named in literature as a factor contributing to the effectiveness of health and safety representatives.[162]

In the regulatory context, unions have been presented as an important driver of changes in legislation and collective agreements. They have historically advocated for the introduction of legal provisions which grant health and safety representatives increased access to resources and broader consultation and participation competencies, as well as proposed new methods of appointing health and safety representation and alternative representation forms, and helped ensure management's compliance with the requirements. For instance, in 2006,

155 Cameron, I., Hare, B., Duff, R. and Maloney, B. (2006). An investigation of approaches to worker engagement. RR516. London: HSE Books. https://www.hse.gov.uk/research/rrpdf/rr516.pdf

156 Ollé-Espluga, L., Vergara-Duarte, M., Belvis, F., Menéndez-Fuster, M., Jódar, P., & Benach, J. (2015). What is the impact on occupational health and safety when workers know they have safety representatives?. Safety science, 74, 55-58. https://doi.org/10.1016/j.ssci.2014.11.022

157 Milgate, N., Innes, E. V., & O'Loughlin, K. (2002). Examining the effectiveness of health and safety committees and representatives: a review. Work, 19(3), 281-290. https://content.iospress.com/articles/work/wor00263

158 Cameron, I., Hare, B., Duff, R. and Maloney, B. (2006). An investigation of approaches to worker engagement. RR516. London: HSE Books. https://www.hse.gov.uk/research/rrpdf/rr516.pdf

159 Frick, K., & Walters, D. (1998). Worker representation on health and safety in small enterprises: Lessons from a Swedish approach. Int'l Lab. Rev., 137, 367. https://labordoc.ilo.org/discovery/fulldisplay?docid=alma993325483402676&context=L&vid=41ILO_INST:41ILO_V1&lang=en&adaptor=Local Search Engine&tab=Everything&query=creator,exact,Nussbaum, Martha C.&facet=creator,exact,Nussbaum, Martha C.

160 Read more about the ESPARE project: https://www.etui.org/publications/reports/the-impact-of-safety-representatives-on-occupational-health

161 Benach, J., Muntaner, C., Solar, O., Santana, V., & Quinlan, M. (2007). Employment, work, and health inequalities: a global perspective. Geneva: WHO, 478. https://www.researchgate.net/publication/318362723

162 Walters, D. (2006). One step forward, two steps back: worker representation and health and safety in the United Kingdom. International Journal of Health Services, 36(1), 87-111. One Step Forward, Two Steps Back: Worker Representation and Health and Safety in the United Kingdom - David Walters, 2006 (sagepub.com).

campaigning by trade unions resulted in the enactment of a law in Spain requiring health and safety representatives in the construction sector to be informed of all subcontracting agreements entered into by the firm. Another example is the supporting role played by trade unions in developing the Swedish system of regional health and safety delegates.

Moreover, numerous studies point to the importance of union backing of health and safety representatives at the intra-firm level. Unions help health and safety representatives overcome barriers to workplace action by developing and delivering targeted participatory training courses.[163]

A 2007 study of Spanish health and safety representatives found that union-organised training was more effective than other forms of training.[164] Research has proposed that worker-centred and empowerment-based contents and methodology could be the reason why union-provided training is particularly successful in helping health and safety representatives initiate and further develop their activities. The effectiveness of unions as training providers has also been linked to the general dynamics of worker organisation and industrial relations within occupational health and safety.[165] Furthermore, it is argued that unions help create a support system for health and safety representatives by providing them with access to information channels and technical and legal advice, helping them put the skills obtained during training into practice and engage more proactively in the management of OSH.

The beneficial impact of trade union backing has also been discussed in the context of methods of electing health and safety representation. Studies have hinted at the increased effectiveness of health and safety representatives appointed by worker representation bodies with trade union backing, and of health and safety committees with members selected by trade unions. Health and safety committees created as a result of the management's initiative are less effective than union-organised safety initiatives at complying with regulations.[166]

At the same time, it is essential to bear in mind that researchers proposing that a clear and universal association exists between the 'union effect' and the effectiveness of worker engagement in managing OSH tend to be somewhat selective in drawing conclusions based on existing data. Numerous studies have found the relationship between worker participation and union support arguably to be less than straightforward, thus suggesting that trade union support should be examined as a potential contributing factor – but not a definite predeterminant – of the success of OSH representation. [167]

The OSH management context is also shaped by the **establishment size**. The current state of research generally proposes that both coverage and effectiveness of OSH representation tend to be proportionate to workplace size, with informal methods of worker engagement in managing OSH being more popular in smaller enterprises.[168] A study on the challenges to OSH representation in European SMEs identified the following factors as possible barriers: limited OSH experience of both management and workers, limited development of safety management resources, restricted access of workers to general employee workplace representation, limited access to external resources, infrequent inspections, and control.[169]

EU-OSHA's OSH Overview on MSEs reinforced these findings, stressing that structural changes to the economy has resulted in employees, particularly of smaller enterprises, finding themselves in precarious and informal situations at work without oversight from employee representatives or formalised OSH management procedures. This has led to inconsistent work patterns, high workloads and unreasonable allocation of responsibilities, all of which likely intensify the presence of OSH risk factors in the work environment.[170]

163 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(1), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

164 García, A. M., Lopez-Jacob, M. J., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. Journal of Epidemiology & Community Health, 61(9), 784-790.

165 Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of Safety Representatives on occupational health: a European perspective (the EPSARE project). https://www.etui.org/sites/default/files/Report_107_EN.pdf

166 Weil, D. (1999). Are mandated health and safety committees substitutes for or supplements to labor unions?. ILR Review, 52(3), 339-360.

167 Robinson, A. M., & Smallman, C. (2013). Workplace injury and voice: a comparison of management and union perceptions. Work, employment and society, 27(4), 674-693. https://www.researchgate.net/publication/258200426_'Workplace_Injury_and_Voice_A_Comparison_of_Management_and_Union_Perceptions'

168 Shearn, P. (2004). Workforce participation in the management of occupational health & safety. HSL Report no. ERG/04/01, September. Buxton: Health and Safety Laboratory.

169 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(1), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

170 European Agency for Safety and Health at Work. (2018). Safety and Health in micro and small enterprises in the EU: Final report from the 3-year SESAME project. https://osha.europa.eu/sites/default/files/Safety_and_health_MSEs_Final_report_3_yr_SESAME.pdf

Another study found that in smaller firms, health and safety representatives were rarely elected to perform only OSH-related duties, which was likely to jeopardise their performance.[171] Moreover, health and safety representatives in smaller firms have been suggested to be more likely to avoid exercising their statutory rights due to an increased fear of dismissal.[172] Research proposes that external OSH management support could be a possible solution for SMEs, including joint sectoral or regional representation, interventions from inspectorates and regulatory bodies, as well as provision of expert advice and support by external OSH practitioners. Frequently highlighted successful examples include the established Swedish system of regional health and safety representatives, as well as collaborative territorial initiatives in the Netherlands, Italy, Spain and Denmark.[173]

7.2.2 ESENER results on forms of employee representation (indirect OSH management)

ESENER 2019 continued its focus on monitoring 'indirect' forms of employee representation, considering general (works council and trade union) and specific forms (health and safety representative and committees), with the key results including the following:[174]

- In 2019, an average of 24 % of establishments in the EU-27 reported having a works council in place, a score approaching the ESENER 2014 average (25 %).
- Presence of workplace trade union representation was reported on average at 18 % of establishments in the EU-27, a slight decrease from the 20 % since ESENER 2014. This seems to be in line with the general trend of a falling degree of unionisation in Europe.
- Appointment of a health and safety representative was the most commonly reported form of workplace employee representation in the EU-27. Their presence was reported by 56 % of the surveyed establishments, a figure which remained unchanged since ESENER 2014.
- Establishment of health and safety committees was reported by 22 % of establishments in the EU-27 in 2019 (a slight increase from 20 % in 2014).

Under ESENER 2019, by country, the results reveal some potentially interesting differences in the forms of employee representation (see **Table 23**). 'Works councils' were most commonly present in establishments located in Bulgaria (56 %), Luxembourg (39 %) and Denmark (44 %).

'Trade union representation' was most frequently reported by respondents in Norway (68 %), Iceland (55 %), Denmark (52 %) and Sweden (48 %), indicating the longstanding prevalence of trade unions in the Nordic countries.

In terms of OSH-specific employee representation, 'health and safety representatives' were most commonly reported in establishments in Romania (87 %), Lithuania (87 %) and Italy (81 %). While these three countries were also among the highest scoring during ESENER 2014, it is worth noting that the reported results for Romania and Lithuania have increased markedly over time (from 78 % to 87 %).

Under ESENER 2014 and 2019, the presence of a 'health and safety representative' was least often reported in France (from 25 % to 24 %), Portugal (constant at 24 %) and Poland (from 25 % to 26 %). Notably, the country score for Greece seems to have improved over time (an increase from 17 % to 24 %).

During both ESENER 2014 and 2019, 'a health and safety committee' was commonly reported in establishments in Denmark (an increase from 50 % to 58 %), Bulgaria (a slight change from 44 % to 45 %) and Finland (41 %), and to a lesser extent in Latvia (slight rise from 2 % to 3 %), Hungary (an increase from 3 % to 7 %) and Czechia (constant at 8 %).

The ESENER 2019 findings suggest that the different forms of employee representation were not widespread in Portugal, Poland, Latvia and Greece.

171 García, A. M., Lopez-Jacob, M. J., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. Journal of Epidemiology & Community Health, 61(9), 784-790. 790.

172 Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of Safety Representatives on occupational health: a European perspective (the EPSARE project). https://www.etui.org/sites/default/files/Report_107_EN.pdf

173 Frick, K., & Walters, D. (1998). Worker representation on health and safety in small enterprises: Lessons from a Swedish approach. Int'l Lab. Rev., 137, 367. https://labordoc.ilo.org/discovery/fulldisplay?docid=alma993325483402676&context=L&vid=41ILO_INST:41ILO_V1&lang=en&adaptor=Local Search Engine&tab=Everything&query=creator,exact,Nussbaum, Martha C.&facet=creator,exact,Nussbaum, Martha C.

174 Under ESENER 2019, for Q350, certain response options were excluded where the prior 2014 country average score was equal to 0 %. Namely, the option 'a works council' was excluded in Cyprus, North Macedonia, and Sweden. Moreover, the option 'a trade union representation' was excluded in Germany, Luxembourg and Austria, while the option 'a health and safety committee' was excluded in North Macedonia and Slovenia.

Table 23: General and OSH-specific employee representation at the workplace, %establishments by country (ESENER 2019)[175]

Country	Health and safety representative	Works council	Health and safety committee	Trade union representation
EU-27	56	24	22	18
AT	70	20	10	-
BE	27	23	29	23
BG	78	56	45	12
CH	34	25	19	13
CY	42	-	39	22
CZ	61	6	8	8
DE	73	18	24	-
DK	72	44	58	52
EE	60	29	14	6
EL	26	16	15	12
ES	49	30	18	21
FI	66	39	41	32
FR	24	35	29	20
HR	63	19	26	15
HU	48	12	7	7
IE	69	38	35	18
IS	52	7	30	55
IT	81	23	10	16
LT	87	28	17	8
LU	62	49	21	-
LV	26	10	3	10
MK	52	-	-	13
MT	61	10	28	14
NL	42	19	16	6
NO	80	15	32	68
PL	26	12	20	15
PT	24	4	13	7
RO	87	36	36	18
RS	61	10	25	18
SE	72	-	37	48
SI	33	16	-	20
SK	63	31	27	17
UK	72	32	37	19

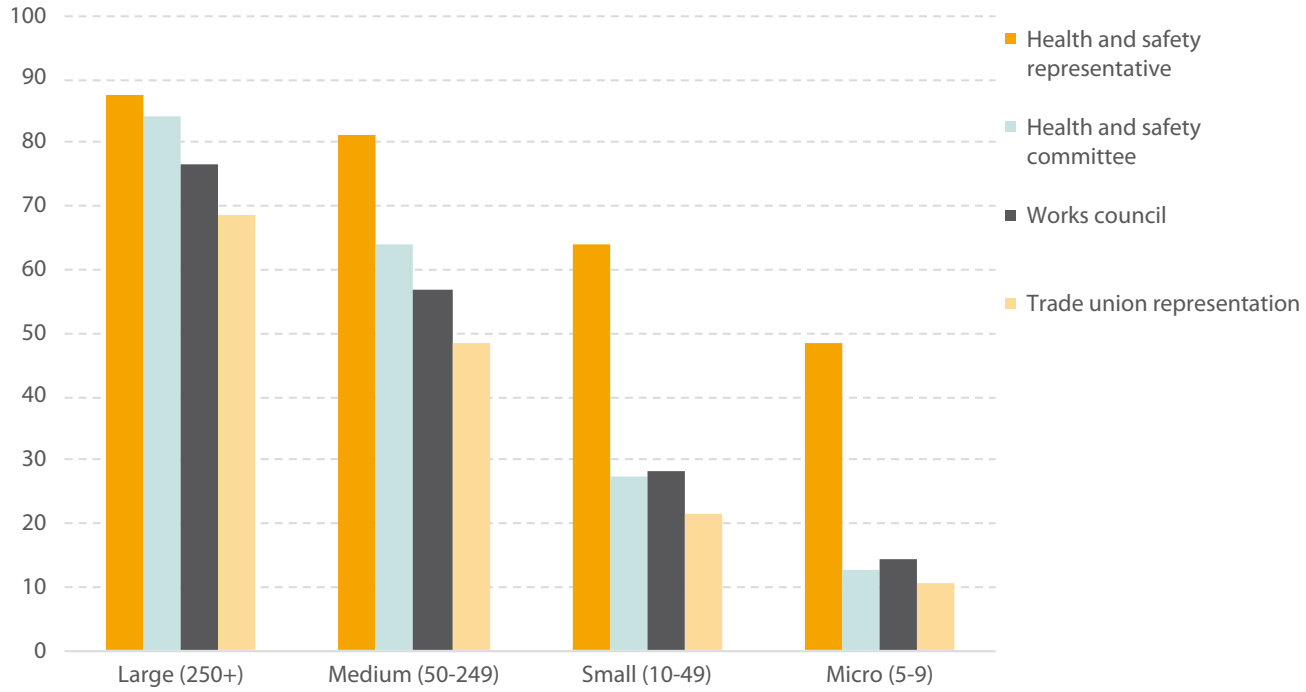
175 Base: all establishments.

With respect to establishment size, ESENER 2019 revealed a positive relationship with the level of OSH and general employee representation and the number of employees at the company, as expected (see **Figure 31**).

'A health and safety representative' was reported to be present in 64 % of small and 49 % of microenterprises, while the same was true of 87 % in large enterprises.

More prominent differences between larger and smaller enterprises were noted for 'trade union representation' – this was reported by 68 % of large enterprises, compared to 11 % of microenterprises. The same applies for 'a health and safety committee', found in 84 % of large enterprises, but only 13 % of microenterprises.

Figure 31: Forms of employee representation at the workplace, % establishments by establishment size (ESENER 2019)[176]



7.2.3 Literature review results on legislation and election of health and safety representatives

The existence of 'legislative steering' promoted by regulatory agencies and the labour inspectorate has been identified by multiple studies as a key prerequisite for ensuring that health and safety representatives have the necessary mandate to conduct their activities as intended, with direct election providing a positive route to the voicing of concerns as regards management. The literature suggests that if selected by the employer, health and safetyrepresentatives may be less effective at complying with regulations and may be more influenced by management concerns.[177]

The right of employees to select autonomous health and safety representatives with the function of participating in OSH management in tandem with management is safeguarded by the provisions of EU Framework Directive 89/391/EEC.[178] However, several studies argue that differences persist in how the directive has been transposed nationally, potentially leading to discrepancies at national level in the existing legal backing for the activity of health and safety representatives.[179]

Vogel and Walters point to the lack of a precise definition of how the participatory management of OSH is to be achieved as a possible reason for the uneven transposition of the directive.[180] For example, a 2005 survey of Polish enterprises found that the importance of involving health and safety representatives

176 Base: all establishments in the EU-27.

177 García, A. M., Lopez-Jacob, M. J., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. Journal of Epidemiology & Community Health, 61(9), 784-790.

178 Framework Directive on Safety and Health at Work (Directive 89/391 EEC): https://osha.europa.eu/da/legislation/directives/the-osh-framework-directive/1

179 Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of Safety Representatives on occupational health: a European perspective (the EPSARE project). https://www.etui.org/sites/default/files/Report_107_EN.pdf

180 Vogel, L., & Walters, D. (2009). An afterword on European Union policy and practice. In Workplace Health and Safety (pp. 90-105). Palgrave Macmillan, London. https://www.researchgate.net/publication/304644151_An_Afterword_on_European_Union_Policy_and_Practice

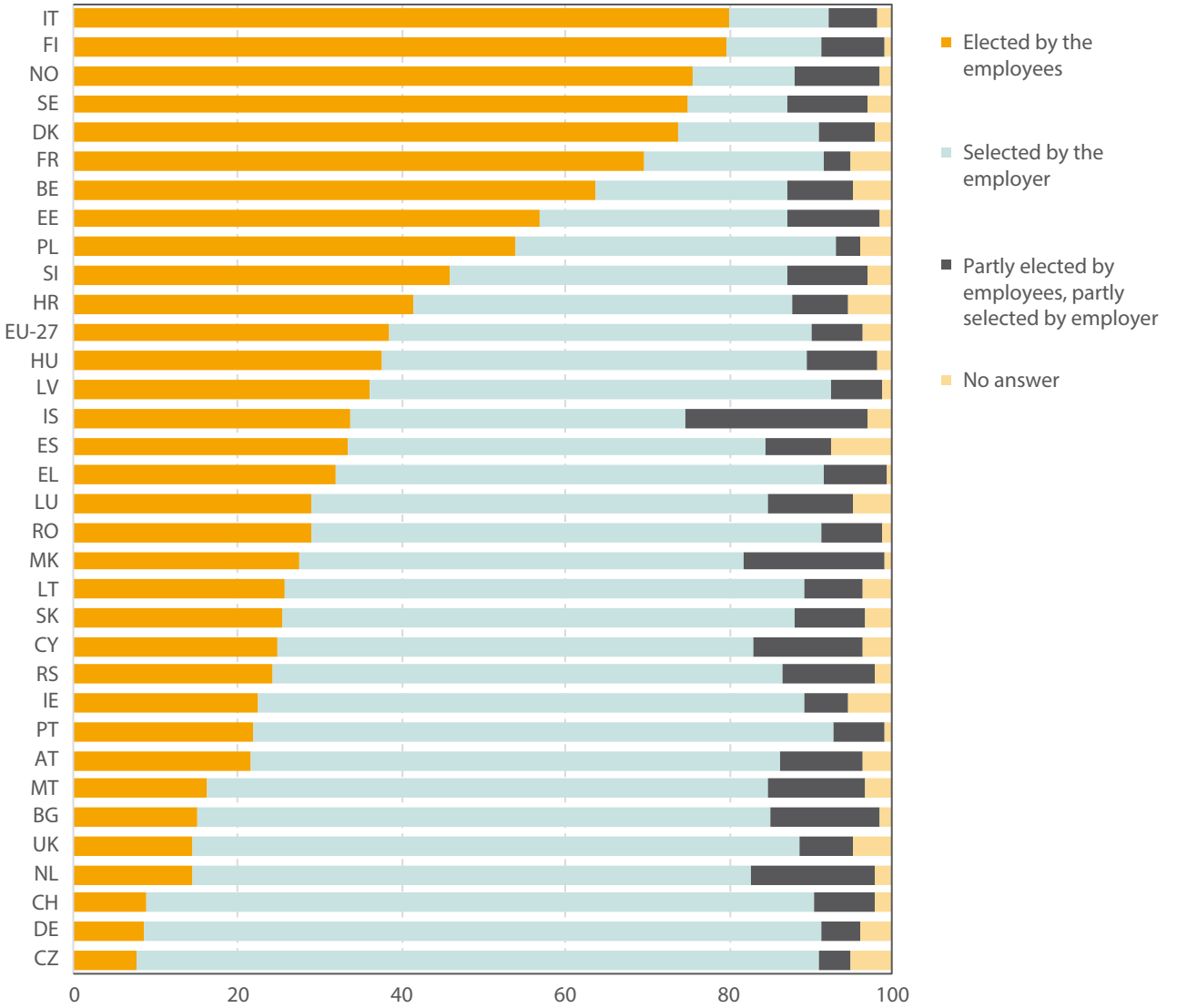
in the implementation of OSH management systems has been insufficiently addressed by the mandatory legal provisions. Since the prevailing approach to OSH management adopted by most firms was to achieve only the minimum level of compliance with the existing regulations, the result was a relatively low level of health and safety representative involvement, compared with other Member States.[181]

7.2.4 ESENER results on election of OSH representatives

In order to further investigate the dynamics around the appointment of health and safety representation in European workplaces, ESENER 2019 introduced a new question on whether health and safety representatives had been selected by employers or elected by employees.

For the EU-27, health and safety representatives were most commonly selected by the employer (52 %), whereas 38 % noted that employees had elected their health and safety representatives; the use of a mixed approach was reported by 6 % of the respondents (see **Figure 32**).

Figure 32: Whether OSH representatives are elected by employees or selected by employer, % establishments by country (ESENER 2019)[182]



181 Podgórski, D. (2005). Workers' involvement—a missing component in the implementation of occupational safety and health management systems in enterprises. International journal of occupational safety and ergonomics, 11(3), 219-231.

182 Base: all establishments.

The breakdown by country shows that health and safety representatives were reported as most commonly selected by the employer in Czechia (83 %), Germany (83 %), and Switzerland (82 %).

On the other hand, health and safety representatives were most often elected by the employees in Finland (80 %), Italy (80 %) and Norway (76 %). Considering that Sweden (75 %) and Denmark (74 %) were also among the highest scoring countries, a connection could be made to the role of trade unions in Nordic countries.

The interview feedback helped to shed light on these results for some countries:

- In the Netherlands, the health and safety representative is appointed by the employer, but there is some influence from work councils that have the right to approve the designated person. Employees can choose the training needed for the health and safety representative. For companies with fewer than 25 employees, managers can perform the OSH 'prevention' role.
- The Lithuanian national expert found this question interesting, as in some cases health and safety representatives are both selected by the employer and elected by the employees. A joint employer or employee health and safety committee is mandatory in companies with at least 50 employees, and these comprise employer and employee representatives plus other specialists. Small companies with 20 employees can set up a joint committee if there is sufficient demand and no trade union support. However, micro firms cannot use such procedures.
- In Germany, health and safety representatives are appointed by the employer, with some exceptions for micro firms.
- In Austria, health and safety representatives are appointed by the employer, but works councils may influence the appointment.

By sector, OSH representation was most commonly reported to be selected by the employer in real estate activities (63 %), accommodation and food services (62 %) and agriculture, forestry and fishing (62 %). But health and safety representatives were more frequently elected by the employees themselves in electricity, gas, steaming and air conditioning (53 %), water supply, sewage and waste management (52 %) and education (44 %). Again, higher levels of trade union representation likely influence the approach taken in these latter sectors (see **Table 24**).

Table 24: Whether health and safety representatives are elected by employees or selected by employer, % establishments by sector (ESENER 2019)[183]

Sectors	Selected by the employer	Elected by the employees	Partly elected by employees, partly selected by employer	No answer
EU-27	52	38	6	4
Accommodation and food service activities	62	29	6	2
Administrative and support service activities	59	31	6	3
Agriculture, forestry and fishing	62	27	10	1
Arts, entertainment and recreation	57	31	5	7
Construction	59	32	7	2
Education	45	44	7	4
Electricity, gas, steam and air conditioning supply	42	53	5	0
Financial and insurance activities	47	40	6	7
Human health and social work activities	54	35	7	4
Information and communication	54	34	8	3
Manufacturing	48	42	6	3
Mining and quarrying	56	40	2	1
Other service activities	61	27	8	3
Professional, scientific and technical activities	60	30	7	3
Public administration and defence; compulsory social security	45	43	7	5
Real estate activities	63	29	4	4
Transportation and storage	52	38	6	4
Water supply; sewerage, waste management and remediation activities	41	52	3	4
Wholesale and retail trade; repair of motor vehicles and motorcycles	60	29	6	4

183 Base: all establishments in the EU-27.

By establishment size, a positive relationship was observed between size and having health and safety representatives elected by employees themselves: this was the case in 48 % of large enterprises, and 31 % of micro enterprises. In turn, smaller enterprises more often reported the selection of health and safety representatives by the employer, with 59 % of micro establishments confirming this approach compared to 37 % of large enterprises. The degree of trade union membership and employee number thresholds as applied in legislation likely account for these trends.

7.3 Training and commitment to health and safety representatives and committees

7.3.1 Literature review results on training and commitment to OSH representatives

In order to boost the effectiveness of health and safety representatives and committees, certain conditions need to be in place.

For example, specialised **training** and access to resources, whether provided by trade unions, external expert educators, or in-house by the firm, are regarded as essential for the effective performance of health and safety representatives.[184] Jensen (2002)[185] emphasises that while access to competent sources of OSH knowledge and advice can enhance worker engagement, the information need not necessarily come from a trade union. It was also noted that in non-unionised workplaces, training offered by the employer was also considered beneficial to the activity of health and safety representatives.[186]

Suitable training should equip health and safety representatives with OSH-specific knowledge, including a detailed understanding of the OSH issues specific to the given workplace and sector, as well as information about the relevant legislation and the legally mandated duties of all parties involved in OSH management.[187] At the same time, research also points to the importance of teaching health and safety representatives how to communicate with management.

The concepts of 'technical-legal' representation and 'knowledge activism' propose that health and safety representatives who make strategic and tactical use of independently gathered technical, scientific and legal knowledge are likely to be more successful in proactively seeking change, even in contexts where they are not externally granted substantive power or support. Improving representational skills, self-training, and autonomous collection of information have been proposed in the literature as ways of increasing the empowerment of health and safety representatives and their capacity to assertively exercise their rights.[188] Increased empowerment, in turn, can allow health and safety representatives to counteract any systemic barriers to their activity, such as low levels of worker organisation, inadequate legislation and enforcement, and attempts by managers to take over the handling of OSH issues.[189]

The **commitment of employers and managers** to addressing worker engagement in OSH and OSH issues in general is a firm-specific factor highlighted as conducive to the effective activity of health and safety representatives.[190] [191]

Managers are needed to approve recommendations or changes proposed by health and safety representatives.[192] They also grant health and safety representatives access to company information on OSH matters, financial and physical resources and training. Several studies emphasise the importance of management in

184 Milgate, N., Innes, E. V., & O'Loughlin, K. (2002). Examining the effectiveness of health and safety committees and representatives: a review. Work, 19(3), 281-290. https://content.iospress.com/articles/work/wor00263

185 Jensen, L. (2002) Assessing Assessments: The Danish Experience of Workers in Risk Assessments. Danish Technical University.

186 Shearn, P. (2004). Workforce participation in the management of occupational health & safety. HSL Report no. ERG/04/01, September. Buxton: Health and Safety Laboratory.

187 García, A. M., Lopez-Jacob, M. J., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. Journal of Epidemiology & Community Health, 61(9), 784-790.

188 Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of Safety Representatives on occupational health: a European perspective (the EPSARE project). https://www.etui.org/sites/default/files/Report_107_EN.pdf

189 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(1), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

190 Ollé-Espluga, L., Vergara-Duarte, M., Belvis, F., Menéndez-Fuster, M., Jódar, P., & Benach, J. (2015). What is the impact on occupational health and safety when workers know they have safety representatives?. Safety science, 74, 55-58. https://doi.org/10.1016/j.ssci.2014.11.022

191 EU-OSHA. (2012). 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). https://osha.europa.eu/sites/default/files/esener-workers_en.pdf

192 Shearn, P. (2004). Workforce participation in the management of occupational health & safety. HSL Report no. ERG/04/01, September. Buxton: Health and Safety Laboratory.

allocating time and pay for health and safety representatives' duties, so they can perform without fear of having their work duties taken over by their co-workers.[193]

Moreover, research also points to management's role in establishing effective communication channels between all stakeholders, including health and safety representatives, health and safety committees, and employees. Lastly, managers are the ones setting the tone regarding worker engagement in OSH in the establishment. If management behaves in a way which suggests that OSH management is low priority, for example by not participating in health and safety committee meetings, the effect may be that OSH is devalued.

A problematic aspect is the issue of marginalising representation, where managers show preference for direct forms of worker engagement over consulting health and safety representatives or committees. A recent study found that in many European workplaces, despite formal arrangements for representation being in place, management had introduced these in order to comply with legal standards or client demand; in practice, however, OSH management took place primarily through direct communication between management and employees, without proactively engaging the health and safety representatives.[194] An associated concept of 'appropriating OSH representation' refers to reducing the role of OSH representation to a resource in an OSH system which is designed and directed by management.[195] A recent study of Danish enterprises describes the phenomenon of 'mainstreaming of OSH management', where OSH issues are treated similarly to other operational issues in the enterprise, including cost efficiency and not disrupting the operations of the core business. For example, health and safety representatives may focus on closer cooperation with management, which may lead to them 'losing' their representative function as they become distant from their constituents and no longer strongly identify with the OSH perspective of the workers.[196]

Several studies highlight that the **intensity of interactions** between OSH representation and other workers, including the level of recognition and support health and safety representatives receive, has an impact on the effectiveness of their activity.[197] Research proposes that regular communication between OSH representation and their constituencies helps workers to better identify any near misses or OSH hazards, and allows health and safety representatives to relay the information to management and initiate timely and appropriate risk-mitigating action.[198]

Several studies point to the importance of **employee voice plurality** in joint health and safety committees, proposing that workers from different departments and from across the workplace hierarchy be included in both discussion and decision-making, with a particular emphasis on including workers from company departments associated with the most pressing OSH risks and current issues.[199]

7.3.2 ESENER results on training and commitment to health and safety representatives and committees

Establishments were asked if they provide training to health and safety representatives during work time to help them perform their OSH duties. For the EU-27, the results showed that 79 % of establishments did so, a slight decrease from the 2014 average of 80 %. Such training was reported almost universally in Estonia (from 93 % to 95 %), followed by Norway (from 85 % to 89 %) and Czechia (from 89 % to 88 %). Countries least likely to do so included Lithuania (from 74 % to 58 %) and Latvia (from 73 % to 59 %), both reporting notable drops since 2014 (see **Figure 33**).

193 García, A. M., Lopez-Jacob, M. J., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. Journal of Epidemiology & Community Health, 61(9), 784-790.

194 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(1), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

195 Jespersen, A. H., Hasle, P., & Nielsen, K. T. (2016). The wicked character of psychosocial risks: implications for regulation. Nordic Journal of Working Life Studies, 6(3), 23-42. https://doi.org/10.19154/njwls.v6i3.5526

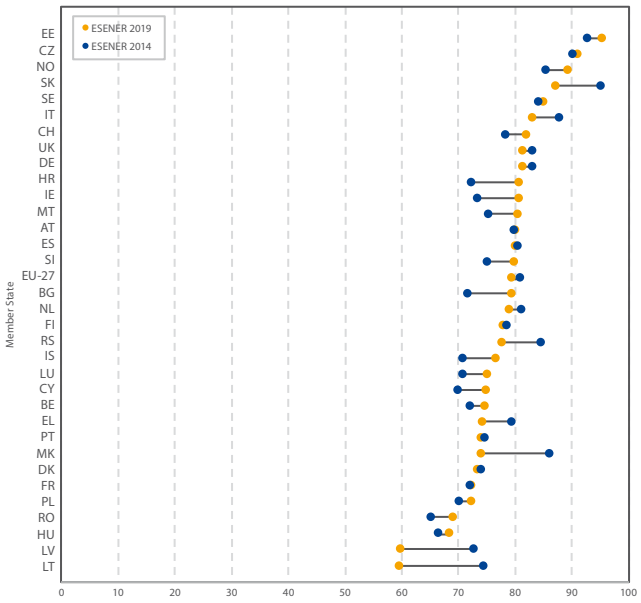
196 Shearn, P. (2004). Workforce participation in the management of occupational health & safety. HSL Report no. ERG/04/01, September. Buxton: Health and Safety Laboratory.

197 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(1), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

198 Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of Safety Representatives on occupational health: a European perspective (the EPSARE project). https://www.etui.org/sites/default/files/Report_107_EN.pdf

199 Milgate, N., Innes, E. V., & O'Loughlin, K. (2002). Examining the effectiveness of health and safety committees and representatives: a review. Work, 19(3), 281-290. https://content.iospress.com/articles/work/wor00263

Figure 33: Training of health and safety representatives provided during work time to help them perform their health and safety duties, % establishments by country (ESENER 2019 and ESENER 2014)[200] [201]



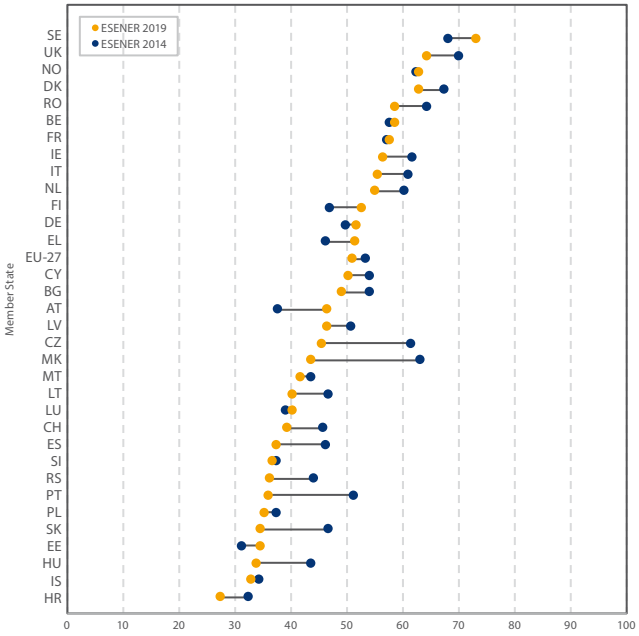
By sector, both in 2014 and 2019, health and safety representatives were most commonly reported to be provided with OSH-specific training during work time in water supply, sewerage and waste management (from – 88 % to 90 %), human health and social work (from 86 % to 85 %), and mining and quarrying (from 89 % to 84 %). Lack of training was most prevalent in professional, scientific and technical activities (from 75 % to 73 %), accommodation and food services (from 78 % to 76 %), and transportation and storage (from 79 % to 77 %).

Provision of training during work time to health and safety representatives is positively related to establishment size class, as expected. In 2019, training was reported to be provided in 91 % of large establishments compared to 74 % of micro establishments.

Another factor positively influencing the health and safety representatives' ability to perform their duties is their involvement in discussing OSH with the management. ESENER 2014 and ESENER 2019 both enquired about the frequency of such interactions, but it is worth nothing that the phrasing of the response options changed under ESENER 2019, which may affect the measurement of the results over time for this question.

In 2019, health and safety was on average discussed regularly between employee representatives and management in roughly half (51 %) of the surveyed establishments in the EU-27. By country, the establishments which reported the answer 'regularly' were most frequently located in Sweden (73 %), the United Kingdom (65 %), Norway (63 %) and Denmark (63 %) (see **Figure 34**).

Figure 34: Regular discussions on OSH between employee representatives and management, % establishments by country (ESENER 2019 and ESENER 2014[202])



By sector, it appears that OSH issues are most regularly discussed between employee representatives and management in human health and social work (66 %), mining and quarrying (63 %) and electricity, gas, steam and air conditioning (61 %). It is worth pointing out that these three sectors also repeatedly scored the highest in terms of how often OSH representatives were provided with training. For the different establishment sizes, regular discussions on OSH between employee representatives and management were reported more often in large workplaces (81 %) than in micro establishments (45 %).

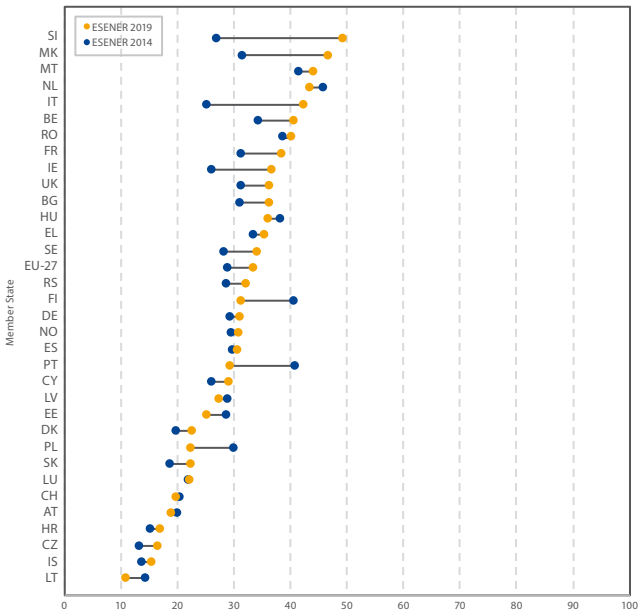
Respondents were asked how often controversies related to OSH arise during OSH-related discussions between employee representatives and management. In terms of the EU-27 average from 2014 to 2019, subtle changes were noted (from 31 % to 33 %) for the sum of responses for 'often' and 'sometimes'. The highest scoring countries were Slovenia (from 27 % to 50 %), North Macedonia (from 32 % to 47 %) and Malta (from 41 % to 44 %) (see **Figure 35**).

200 Base: all establishments with a health and safety representative.

201 Due to the very small number of respondents who chose the option 'Yes, but only some of them' in the visualisations, the responses for this option have been combined with the responses for the option 'Yes'.

202 Base: all establishments with some form of employee representation.

Figure 35: Frequency with which controversies related to health and safety arise during discussions between employee representatives and management (answers in form of 'often' or 'sometimes'), % establishments by country (ESENER 2019 and ESENER 2014)[203]



For the combined response options 'sometimes' and 'often', the sectoral scores remained relatively stable over time. In both 2014 and 2019, the sectors where controversies related to OSH tended to arise most frequently were mining and quarrying (from 53 % to 45 %), water supply, sewerage and waste management (from 45 % to 45 %) and public administration and defence (from 36 % to 41 %). All establishments experienced increased occurrence of OSH-related controversies. In 2019, the response option 'often' was reported most frequently by large establishments (from 12 % to 14 %) followed by medium (from 6 % to 8 %), small (from 3 % to 6 %) and micro establishments (from 3 % to 5 %).

7.4 Participation of employees in managing health and safety

Methods involving direct consultation of the general workforce in OSH were also explored by the literature review. **Direct worker** engagement, in the form of behaviour-based schemes encouraging employees to monitor their own and their co-workers' workplace conduct has been gaining salience as one of the preferred approaches to fulfilling corporate health and safety aims in large firms, globally.[204] However, the resulting phenomena of 'individualisation' and 'responsibilisation' of OSH management, as well as the development of 'blame-the-worker' attitudes have received criticism from researchers, who claim that that these phenomena can undermine the successful activity of autonomous forms of collective OSH representation.

However, **direct approaches can be used in combination with indirect methods,** and it has been mentioned that both should apply to ensure comprehensive OSH management. Shearn (2004) suggests that direct and indirect forms of worker engagement in OSH management are complementary in nature. At the same time, research points to the numerous preconditions which must be fulfilled for direct worker engagement to be effectively translated into positive OSH outcomes. These include ensuring that the employee input is based on up-to-date knowledge by providing employees with appropriate training, as well as guaranteeing that managers follow up on the OSH insights received from employees.[205] It has been emphasised that in many enterprises, no formal obligation exists for management to address the outcomes of informal employee consultations on OSH, which can potentially hinder the impact of direct worker engagement on OSH management practices, especially in non-unionised workplaces and where the bargaining power of employees is otherwise low.

7.4.1 ESENER results on direct OSH management methods

ESENER 2019 investigated the topic of direct involvement of employees in the management of OSH, including the management of psychosocial risks.

A positive result was seen in the extent of involvement of employees in the design of measures introduced following a risk assessment, with a similar EU-27 score obtained under ESENER 2019 (80 %) as in ESENER 2014 (81 %).

However, the results by country indicated both marked variation in the extent of these phenomena and some changes in the levels reported since ESENER 2014. The extent of employee involvement ranged from 91 % of establishments in Austria to 65 % in Bulgaria. By way of example, one can discern positive increases in countries like Slovakia (from 65 % to 72 %) and Denmark (from 82 % to 87 %), while some deterioration was also documented, as seen with Czechia (from 79 % to 72 %) and Greece (from 78 % to 71 %) (see **Figure 36**).

203 Base: all establishments where health and safety is discussed at least occasionally between employee representatives and management.

204 Walters, D., & Wadsworth, E. (2020). Participation in safety and health in European workplaces: Framing the capture of representation. European Journal of Industrial Relations, 26(€), 75-90. https://journals.sagepub.com/doi/pdf/10.1177/0959680119835670

205 Shearn, P. (2004). Workforce participation in the management of occupational health & safety. HSL Report no. ERG/04/01, September. Buxton: Health and Safety Laboratory.

Figure 36: Employee involvement in design and implementation of measures following a risk assessment, % establishments by country (ESENER 2019 and ESENER 2014)[206]

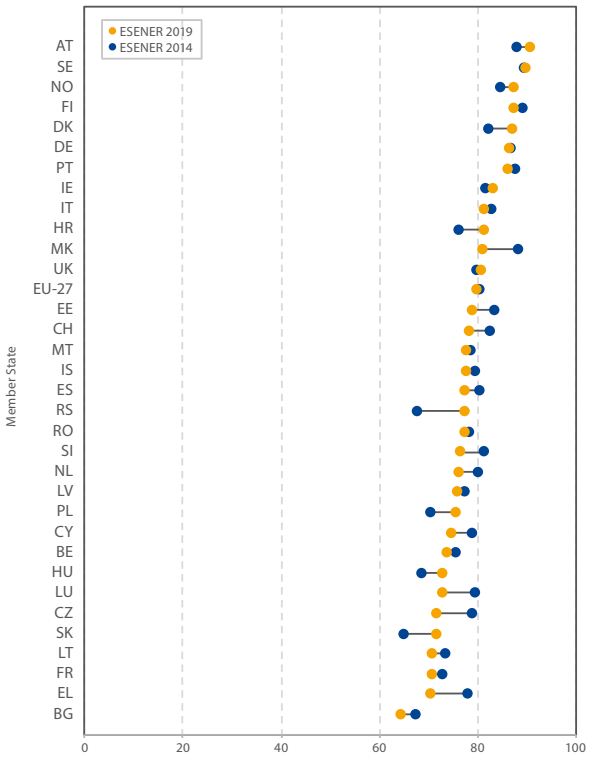
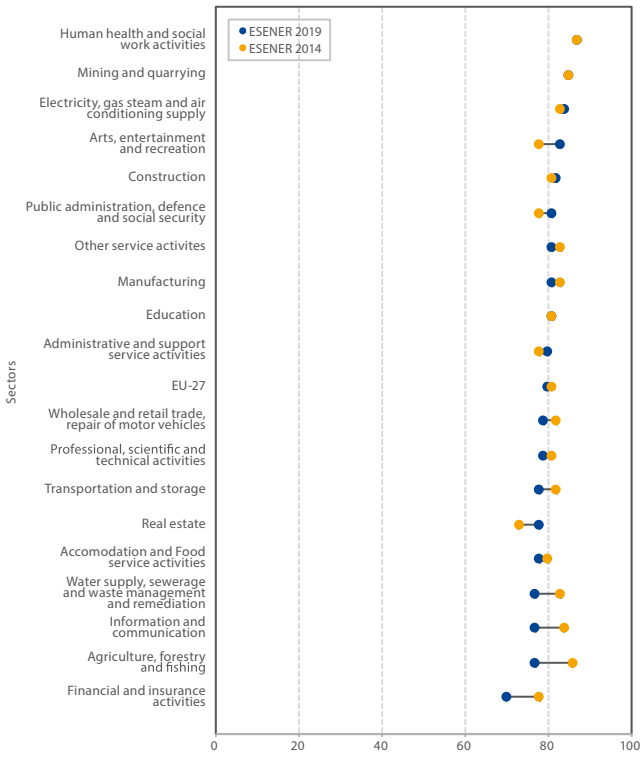


Figure 37: Employee involvement in design and implementation of measures following a risk assessment, % establishments by sector (ESENER 2019 and ESENER 2014[207])



By sector, the differences were fewer than those by country, with the results for ESENER 2019 ranging from 87 % to 70 %. The results showed that the top sectors had not changed dramatically since ESENER 2014, namely human health and social work (87 % to 87 %), mining and quarrying (85%) and electricity, gas, steam and air conditioning supply (from 84% to 83%).

On the other hand, sectors with the lowest levels of employee involvement experienced relatively pronounced decreases over time, such as financial and insurance activities (from 78 % to 70 %), water supply, sewerage, and waste management (from 82 % to 77 %) and agriculture, forestry and fishing (from 86 % to 77 %).

While the 'sector' dimension seemed less important than the 'country' dimension in determining employee involvement in the design and implementation of measures following a risk assessment, the results suggested that all sectors, apart from 'human health and social work activities', saw decreased employee involvement.

Interestingly, the establishment size results revealed that there were no major differences between different types of organisations, and that the overall scores had not changed dramatically since ESENER 2014. On a positive note, large (from 78 % to 83 %) and medium-sized (from 79 % to 81 %) organisations had become slightly more proactive in involving employees in the design and implementation of measures. However, it appeared that micro entities (from 85 % to 81 %) had lost their position as the leading type of organisation in involving employees in the design of measures. Despite this, it seems that all sizes of establishments can easily accommodate the practice.

The regression analysis results suggested that the chances of employee involvement in the design and implementation of measures improves when establishments have OSH representatives and use internal staff to conduct risk assessments (see **Section 3.7**). Again, enhancing employee involvement in OSH management is positively associated with better outcomes in other related areas.

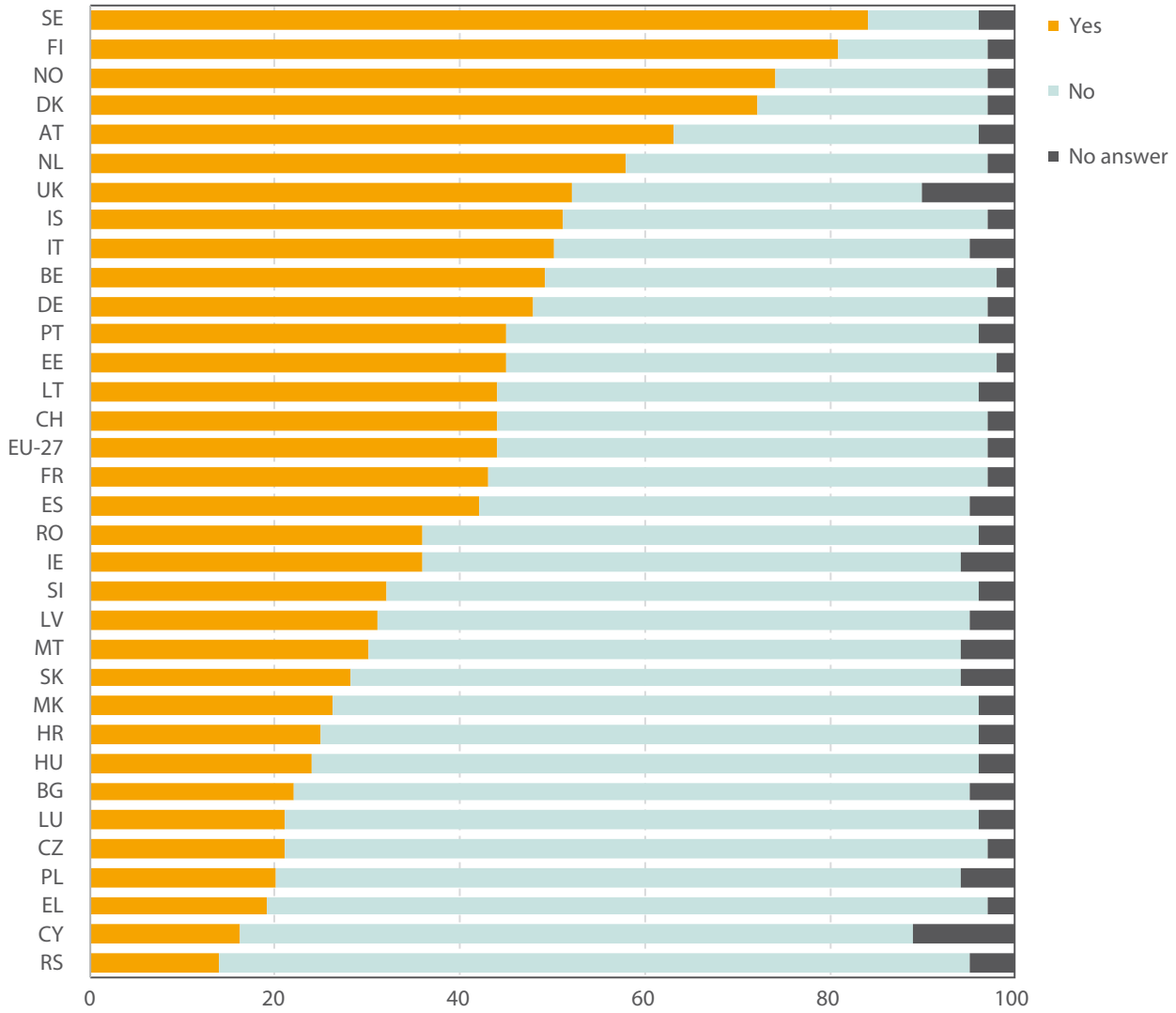
206 Base: establishments conducting risk assessments.

207 Base: establishments in the EU-27 conducting risk assessments.

ESENER 2019 contained some new questions to provide insight into the topic of direct employee involvement around the management of work-related stress. The first question, asked to establishments with more than 20 employees, was whether an employee survey including questions on work-related stress had been conducted in their establishment in the past 3 years.

On average, 44 % of the surveyed establishments in the EU-27 reported that such a survey has been conducted in their respective establishment in the past 3 years. Nordic countries did well in this measure as seen in Sweden (84 %), Finland (81 %), Norway (74 %) and Denmark (72 %). Generally, this practice was least reported in eastern and southern Europe including Serbia (14 %), Cyprus (16 %) and Greece (19 %). See **Figure 38**.

Figure 38: Whether an employee survey including questions on work-related stress was conducted in the past 3 years, % establishments by country (ESENER 2019)[208]

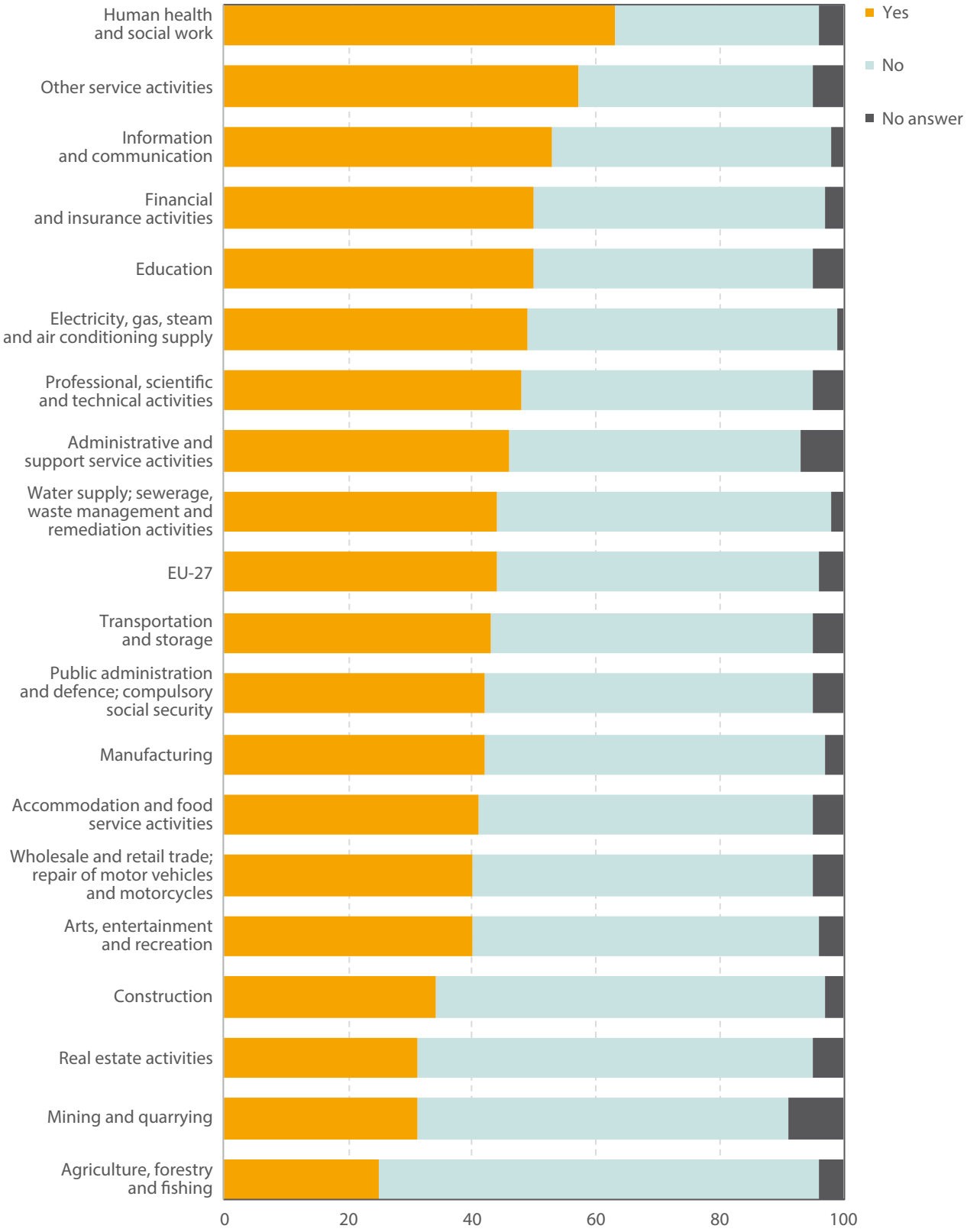


The sectors most commonly reporting the use of surveys to identify work-related stress included human health and social work (63 %), other service activities (57 %) and information and communication (53 %). By contrast, some of the lowest sectoral scores were reported in the typically heavy or manual sectors such as agriculture, forestry and fishing (25 %), mining and quarrying (31 %) and construction (34 %) (see **Figure 39**).

As expected, large establishments (66 %) were more likely to use such surveys, compared to small enterprises (40 %) with 20 or more employees.

208 Base: all establishments with 20 or more employees.

Figure 39: Whether an employee survey including questions on work-related stress was conducted in the past 3 years, % establishments by sector (ESENER 2019)[209]



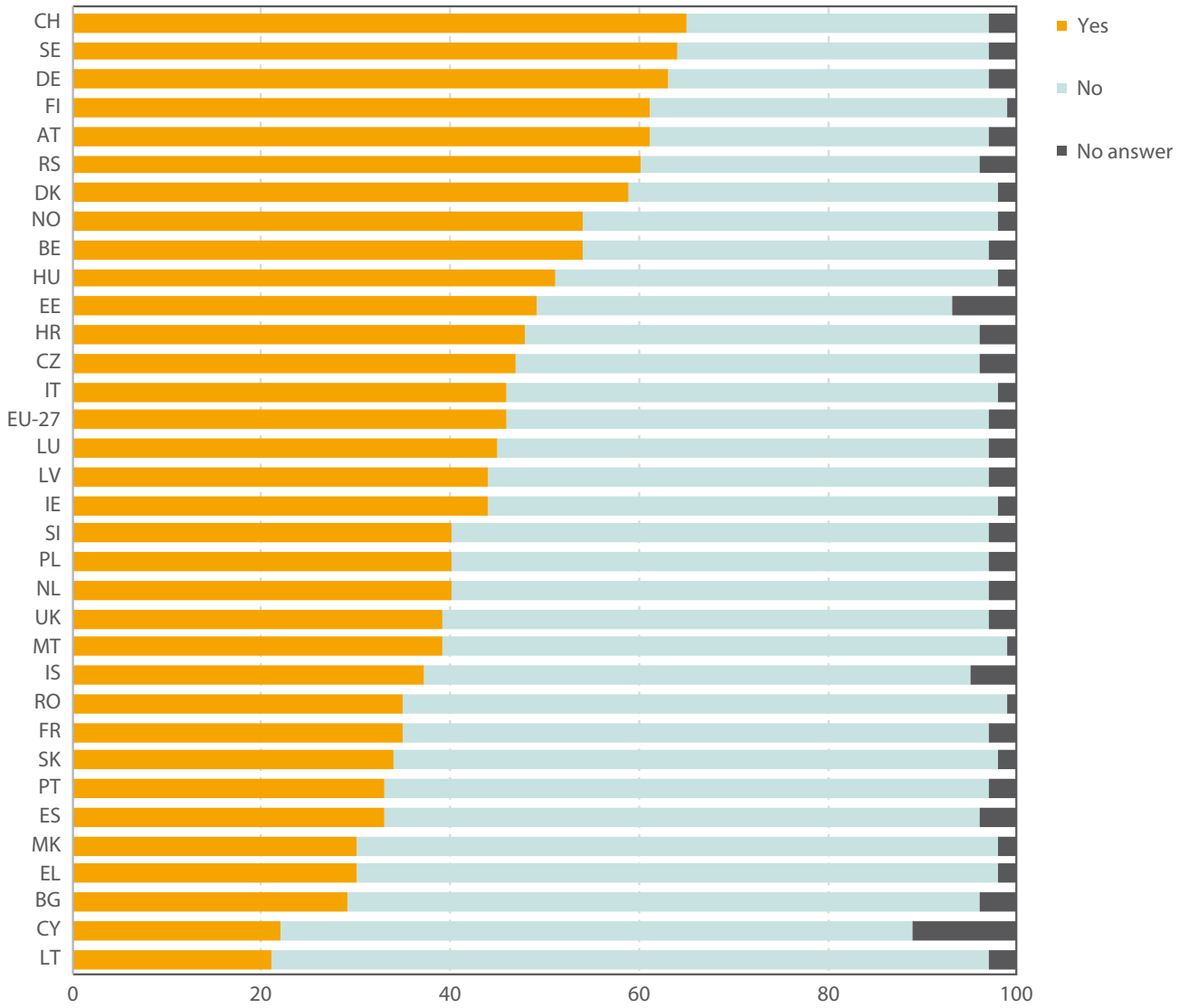
An alternative question, posed only to establishments with fewer than 20 employees, was whether employees had been involved in identifying possible causes for work-related stress, such as time pressure or difficult clients.

209 Base: all establishments in the EU-27 with 20 or more employees.

For the EU-27, 46 % of such establishments reported that employees had been involved in identifying possible causes for work-related stress. The highest shares by country were reported in Switzerland (65 %), Sweden (64 %) and Germany (63 %), and to a lower extent in Lithuania (21 %), Cyprus (22 %) and Bulgaria (29 %) (see **Figure 40**).

As observed with the associated question posed to larger establishments, there seems to be a general pattern of lowest scores for this factor in southern and eastern European countries.

Figure 40: Whether employees were involved in identifying possible causes for work-related stress, % establishments by country (ESENER 2019)[210]



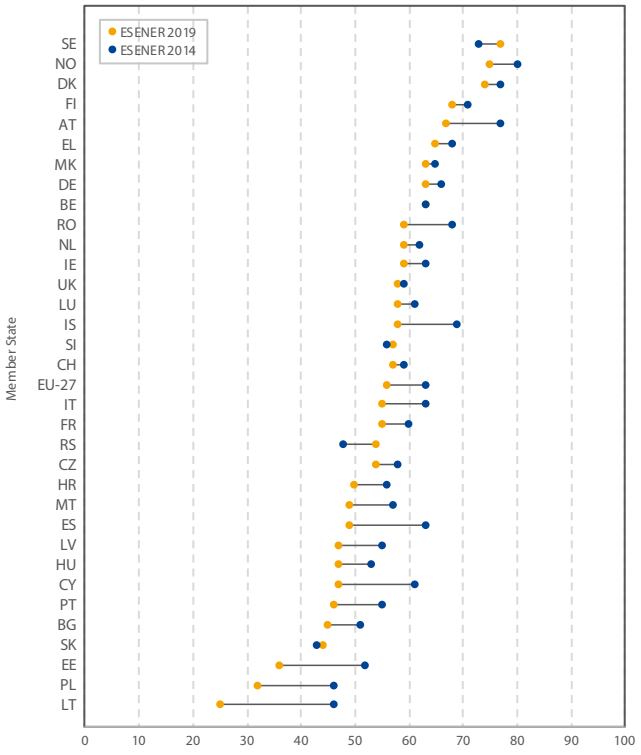
In ESENER 2014 and ESENER 2019, respondents were asked whether employees had a role in the design and set-up of measures to address psychosocial risks. Unfortunately, for the EU-27, employee involvement has reportedly decreased since 2014, from 63 % to 56 %, and many countries experienced a slight downward trend on this measure. However, the Nordic countries reported strong results generally, including Sweden (from 73 % to 77 %), Norway (from 80 % to 75 %), Denmark (from 77 % to 74 %) and Finland (from 71 % to 68 %).

By sector, a slight general decline was likewise noted, apart from human health and social work, which maintained a similar score (from 74 % to 75 %). The sectors where employees were more frequently reported to have a role in the design and set-up of measures were public and related service sectors such as education (from 72 % to 68 %) and arts, entertainment and recreation (from 67 % to 61 %). The lowest results were noted in financial and insurance activities (from 59 % to 49 %), construction (from 55 % to 49 %) and agriculture, forestry and fishing (a drop from 58 % to 50 %), which is interesting considering the exposure

210 Base: all establishments with fewer than 20 employees.

to stress and other related psychosocial risk factors typically associated with these sectors.

Figure 41: Whether employees had a role in the design and set-up of measures to address psychosocial risks, % of establishments by country (ESENER 2010 and 2019)[211]



The 2019 results by establishment size suggest the existence of a comparatively subtle positive relationship between establishment size class and the reporting of whether employees have been involved in the design and set-up of measures to address psychosocial risks. Employee involvement was most frequently reported by large establishments (69 %), followed by medium (61 %), small (57 %), and micro enterprises (55 %). Thus, it appears employees in larger establishments benefit more from opportunities to design measures to address psychosocial risks.

In terms of the OSH training topics provided to employees, for the EU-27, 'use of dangerous substances' was most reported (from 81 % to 79 %) followed by 'emergency procedures' (from 78 % to 79 %), 'lifting and moving heavy loads (from 76 % to 75 %) and 'proper use and adjustment of their working equipment' (from 63 % to 64 %). Prevention of psychosocial risks was reported to be included in employee OSH training to a lower extent (from 34 % to 34 %) (see **Table 25**).

'Assessment of mobile or external workplaces' was first introduced as a response option during ESENER 2019 and was reported by an average of 42 % of respondents across the EU-27. It is expected that this should have changed since the COVID-19 pandemic, although the 2019 result suggests the need for improvement.

By country, certain interesting differences can be observed. While Czechia reported the highest proportion of inclusion of 'use of dangerous substances' in employee training (91 %), they simultaneously reported the lowest levels of coverage of prevention of psychosocial risks (19 %). A similar spread between country scores for the particular training topics could be observed in Germany, where 'use of dangerous substances' was reported to be almost universally covered during training (87 %), but the score for prevention of psychosocial risks (26 %) fell below the EU-27 average of 34 %.

211 Base: all establishments that confirmed introduction of relevant measures to address psychosocial risks.

Table 25: Topics on which employees have been provided with training, % establishments by country (ESENER 2019)[212]

Country	Use of dangerous substances	Emergency procedures	How to lift and move heavy loads	Proper use and adjustment of their working equipment	Assessment of mobile or external workplaces	How to prevent psychosocial risks
EU-27	79	79	75	64	42	34
AT	88	76	72	70	32	31
BE	66	70	68	58	28	31
BG	66	76	78	67	41	29
CH	78	68	68	59	28	27
CY	64	69	67	65	57	29
CZ	91	61	83	63	42	19
DE	87	82	71	67	29	26
DK	82	71	78	69	32	43
EE	76	89	76	63	34	25
EL	67	69	66	69	60	38
ES	87	87	90	82	66	45
FI	75	89	71	79	40	45
FR	59	61	61	36	33	25
HR	80	88	74	72	63	29
HU	83	75	73	66	41	35
IE	88	90	94	81	60	47
IS	80	70	70	63	27	43
IT	83	95	88	80	75	49
LT	78	70	79	56	39	25
LU	73	68	56	53	33	22
LV	78	83	91	59	49	34
MK	85	40	65	62	40	31
MT	72	79	72	70	45	32
NL	69	67	65	48	29	27
NO	85	92	86	82	49	48
PL	75	76	78	51	47	39
PT	74	83	77	69	50	31
RO	78	71	75	59	57	43
RS	66	86	78	76	56	41
SE	80	87	79	70	34	46
SI	85	87	83	79	50	42
SK	74	73	79	69	43	31
UK	90	94	92	80	64	52

The ESENER results broken down by sector (see **Table 26**) indicate that in both 2014 and 2019, 'use of dangerous substances' was the most frequently covered employee topic training overall. It should be noted that this question was only asked to those workplaces reporting the presence of chemical or biological substances, and hence it is expected that a majority of them would take measures. The highest scoring sectors for this factor were water supply, sewerage and waste management (from 89 % to 92 %), human health and social work (from 87 % to 85 %) and administrative and support service activities (from 88 % to 85 %).

In both 2014 and 2019, training on how best to lift and move heavy loads was more frequently reported in mining and quarrying (from 90 % to 95 %), water supply, sewerage and waste management (from 86 % to 91 %) and human health and social work (from 84 % to 83 %). Again, this question was only asked to

212 Base: all establishments apart from 'use of dangerous substances', which concerned those that had identified the risk of chemical or biological substances in their establishment; 'how to lift and move heavy loads', which concerned those that identified the risk of lifting or moving people or heavy loads'; and 'assessment of mobile or external workplaces', which concerned those with employees at home or working outside the establishment.

those establishments indicating a risk of lifting or moving people or heavy loads.

'Assessment of mobile or external workplaces' was most often reported to be a part of employee training in water supply, sewerage and waste management (69 %), electricity, gas, steam and air conditioning (65 %) and construction (58 %). It was least frequently reported by respondents in education (31 %) and information and communication (32 %), sectors where one would expect a high degree of home working since the COVID-19 pandemic.

In both 2014 and 2019, training on prevention of psychosocial risks occurred most frequently in human health and social work (from 54 % to 60 %), education (from 51 % to 54 %) and financial and insurance activities (from 44 % to 41 %). However, some of the sectors reporting the lowest scores were linked to poor psychosocial working environments including construction (from 29 % to 25 %), agriculture, forestry and fishing (33 % to 29 %) and professional, scientific and technical activities (from 28 % to 30 %).[213] [214]

Table 26: Topics on which employees have been provided with training by the respective establishment, % establishments by sector (ESENER 2019)[215]

Sectors	Use of dangerous substances	Emergency procedures	How to lift and move heavy loads	Proper use and adjustment of their working equipment	Assessment of mobile or external workplaces	How to prevent psychosocial risks
EU-27	79	79	75	64	42	34
Accommodation and food service activities	84	83	76	72	38	39
Administrative and support service activities	85	83	81	68	52	41
Agriculture, forestry and fishing	84	82	80	74	54	29
Arts, entertainment and recreation	82	80	70	61	36	35
Construction	78	81	83	74	58	25
Education	76	87	64	52	31	54
Electricity, gas, steam and air conditioning supply	76	91	78	67	65	32
Financial and insurance activities	55	82	58	62	35	43
Human health and social work activities	85	91	83	69	42	60
Information and communication	68	73	65	60	32	32
Manufacturing	81	84	82	74	47	31
Mining and quarrying	83	91	95	82	34	34
Other service activities	77	75	74	61	38	39
Professional, scientific and technical activities	76	67	76	59	36	30
Public administration and defence; compulsory social security	79	76	72	66	44	41
Real estate activities	72	69	67	58	39	34
Transportation and storage	76	82	81	71	53	35
Water supply; sewerage, waste management and remediation activities	89	89	91	73	69	41
Wholesale and retail trade; repair of motor vehicles and motorcycles	83	79	78	66	43	31

213 Boschman, J. S., Van der Molen, H. F., Sluiter, J. K., & Frings-Dresen, M. H. W. (2013). Psychosocial work environment and mental health among construction workers. Applied ergonomics, 44(5), 748-755. https://www.sciencedirect.com/science/article/abs/pii/S0003687013000173?via%3Dihub

214 Lunner Kolstrup, C., Kallioniemi, M., Lundqvist, P., Kymäläinen, H. R., Stallones, L., & Brumby, S. (2013). International perspectives on psychosocial working conditions, mental health, and stress of dairy farm operators. Journal of agromedicine, 18(3), 244-255. https://www.tandfonline.com/doi/abs/10.1080/1059924X.2013.796903

215 Base: all establishments in the EU-27 apart from 'use of dangerous substances', which concerned those that had identified the risk of chemical or biological substances in their establishment; 'how to lift and move heavy loads', which concerned those that identified the risk of lifting or moving people or heavy loads'; and 'assessment of mobile or external workplaces', which concerned those with employees at home or working outside the establishment.

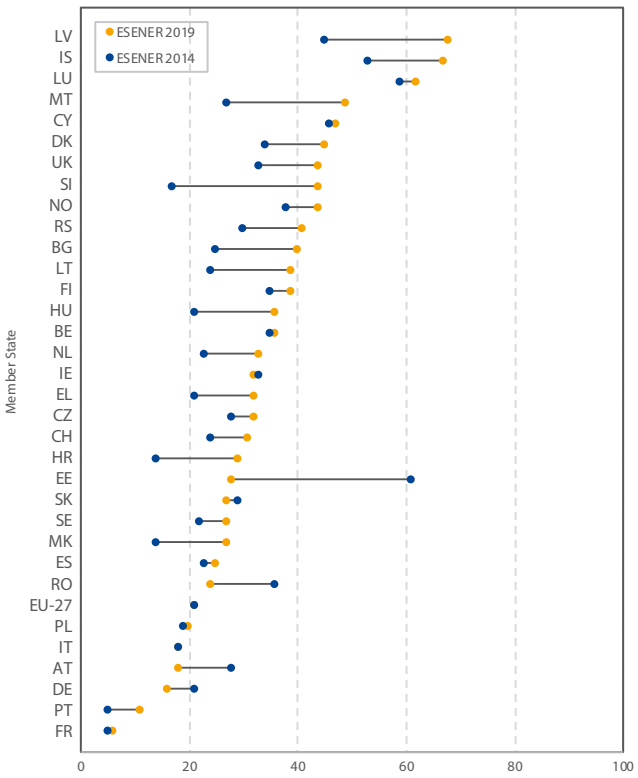
As a follow-up question on the issue of employee OSH training, respondents were asked 'whether any part of the training was also provided to employees in different languages' (see **Figure 42**).

The average proportions reported in the EU-27 remained identical between 2014 and 2019 – during both survey waves, the option 'yes' was chosen by 21 % of respondents. For both 2014 and 2019, it appears that OSH-related training was most frequently provided to employees in different languages in Latvia (from 45 % to 68 %), Iceland (from 53 % to 67 %) and Luxembourg (from 59 % to 62 %). Provision of training in multiple languages was least commonly reported by establishments in France (from 5 % to 6 %), Portugal (from 5 % to 11 %) and Germany (from 21 % to 16 %). Estonia reported a notable drop, from 61 % to 28 %.

By sector, the highest scores included mining and quarrying (from 53 % to 55 %), administrative and support service activities (from 27 % to 40 %) and electricity, gas, steam and air conditioning (from 35 % to 39 %), while a major increase was noted by financial and insurance activities (from 16 % to 35 %).

In 2019, training offered in multiple languages was least reported in water supply, sewerage and waste management, where the sectoral score has decreased quite dramatically, from 39 % of establishments in 2014 to 11 % in 2019. Other low scoring sectors included human health and social work (from 16 % to 12 %) and other service activities (from 13 % to 18 %).

Figure 42: Whether OSH-related training is provided to employees in different languages, % establishments by country (ESENER 2014 and 2019[216])



216 Base: all establishments that confirmed they had provided training and had employees with difficulties understanding the language spoken at work.

7.5 Regression analyses

7.5.1 Introduction

Employee participation was evaluated through the lens of a health and safety representative in the establishment. Two research questions were asked:

1. Which OSH factors are related to the presence of a health and safety representative in the establishment?
2. How are OSH factors associated with the election of a health and safety representative by employees (and not employers)?

The aim was to assess whether OSH factors are positively associated with the probability of having a health and safety representative and the probability that this representative is elected by employees.

The OSH factors hypothesised to be related to having a health and safety representative included reasons for addressing health and safety (fulfilling legal obligations, meeting expectations from employees, increasing productivity, concern for the organisation's reputation, and avoiding fines from labour inspectorate), and regular discussion of health and safety issues in staff or team meetings (as opposed to other forms of representation).

7.5.2 OSH factors

Three reported reasons for addressing health and safety are positively associated with the presence of a health and safety representative: increasing productivity, concern for the organisation's reputation, and avoiding fines from labour inspectorate. Expectations from employees and legal obligation are not associated with the presence of this form of employee representation – at least when analysing OSH factors alone.

In the case of health and safety representatives being elected by employees, three factors are positively associated: meeting expectations from employees, health and safety regularly discussed in staff or team meetings, and fulfilling legal obligations – all are positively associated with health and safety representatives being elected by employees. On the contrary, three other factors – increasing productivity, concern for the organisation's reputation and avoiding fines from the labour inspectorate as reasons for addressing health and safety – are negatively associated with health and safety representatives being elected by employees.

In summary, regular discussion of health and safety is positively related with both the presence of health and safety representatives and for their election by fellow employees. Other OSH factors have a more complex role. Increasing productivity, concern for the organisation's reputation and avoiding fines from the labour inspectorate may be positively associated with the presence of a health and safety representative, but negatively with the chances that this representative be elected by employees. Expectations from employees and legal obligation are not associated with the presence of health and safety representatives, but they are positively related with the chances of election by employees.

7.5.3 Accounting for the context

After the introduction of contextual factors (country, sector, size), the presence of a health and safety representative is positively associated with health and safety issues being discussed regularly in staff or team meetings. These factors are important, regardless of the context. It appears also that fulfilling legal obligation as a reason for addressing health and safety has a significant, positive association, but only in relation to the context. Other factors became insignificant; hence factors related to employers, such as increasing productivity or concern for the organisation's reputation, are less crucial than the context – country, sector and size.

When it comes to the appointment of health and safety representatives, and particularly their being elected by employees, almost all OSH factors remained significant, which means they retained their general explanatory power with regard to this OSH outcome in various contexts. The only factor which became insignificant is the organisation's reputation as a reason for addressing health and safety, which means this factor is not important when country, size or sector are taken into account.

The presence of a health and safety representative depends on whether health and safety issues are discussed in any context, and on the context itself; the country especially plays a considerable role, as the probability for reporting the presence of a health and safety representative is much higher in Germany than in any other country. The election of a health and safety representative by employees does not depend on the context, but on regular discussions on health and safety, meeting expectations from employees and fulfilling legal obligations.

Overall findings show the critical role of the discussion of health and safety within an establishment, and the fulfilment of legal obligation in selected contexts. Evidently, as shown by the Model 2 results, the country, sector and establishment size environments also carry weight for the reported presence of a health and safety representative.

8. Function of the respondent

8.1 Overview

ESENER's respondent was the person who knows best about the way safety and health risks are managed at their workplace. Additional information collected in ESENER 2019 was the respondent's function, as in ESENER 2014. There were several functions considered, including owner, manager, specialist or other employees. It is hypothesised that the function of the respondent may shape the way the questions are answered and influence the final results. To test this hypothesis, the function variable has been applied to bivariate and one of the multivariate analyses.

Overall, most of the ESENER 2019 respondents were owners of their establishments (46 %). Employees with OSH tasks constituted over 37 % of all respondents, of whom 17 % were managers or specialists with OSH tasks, and the next 20 % other employees in charge of OSH. A little over 16 % of respondents were managers without OSH tasks.

The function of the respondent is clearly connected with other characteristics of the establishment, especially size. Detailed results are presented in the Technical Annex.

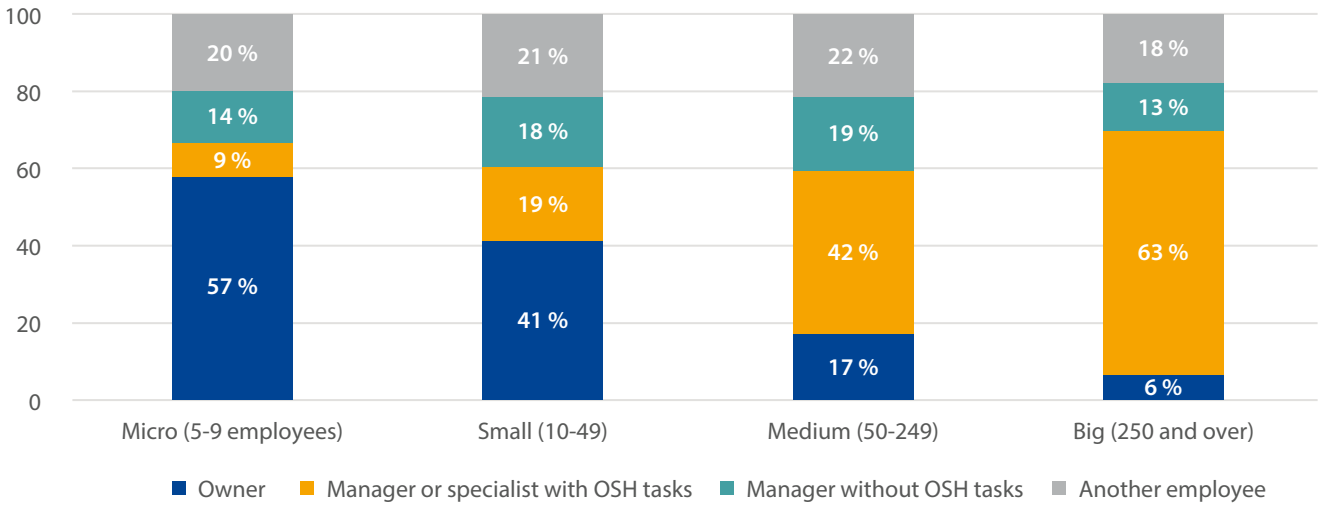
The analysis across countries shows that the share of owners varied from 24 % in Spain to 64 % in Switzerland; the share of manager or specialists with OSH tasks varied from 6 % in France to 36 % in Belgium; the share of another employee in charge of OSH varied from 2 % in Iceland to 46 % in Italy; and the share of managers without OSH tasks varied from 5 % in Italy to 31 % in Austria.

There is also great variation across sectors: the share of owners is as little as 19 % in public administration and defence and as high as 65 % in accommodation and food service; the share of manager or specialists with OSH tasks varied from 9 % in accommodation and food service to 28 % in electricity, gas, steam and air conditioning supply; the share of another employee in charge of OSH varied from 11 % in accommodation and food service to 35 % in public administration and defence; and the share of managers without OSH tasks varied from 11 % in agriculture to 21 % in water supply; sewerage, waste management and remediation activities.

Distribution of the function by size of the establishment confirms a clearly visible trend – the bigger the establishment, the more often there is a manager or specialist with OSH, and the less often the owner was a respondent. The share of owners varied from 6 % in big enterprises, to 57 % in micro establishments; the share of manager or specialists with OSH tasks varied from 9 % in micro establishments to 63 % in big enterprises; the share of another employee in charge of OSH varied from 17 % in big enterprises to 21 % in small enterprises; and finally, the share of managers without OSH tasks varied from 13 % in big enterprises to 19 % in medium enterprises (see **Figure 43**).

These findings show great heterogeneity in respondent's function across countries and sectors. If the function has an influence on respondents' answers, it might be reflected in the multivariate analysis, which is presented in **Section 8.2**.

Figure 43: Respondent's function variations by establishment size (in %)



8.2 Example of regression model

Bivariate analyses (above) suggest that the respondent's function is highly correlated with the characteristic of the establishment, especially its size. To confirm this assumption, we decided to add the respondent's function to one of the regression models (Model 2) and identify any changes in the results. The objective of this exercise was to understand how the function of the respondent influences the relationship between OSH and contextual factors and the fact that the risk assessment is carried out regularly in the establishment.

Two models were compared:

- Model 1, accounting for OSH and contextual factors;
- Model 2, using all variables from Model 1, and supplemented by the function of the respondent.

The only difference between these models was the use of the function of the respondent variable. When introduced to the model, the reference category for the function of the respondent was 'owner'. It means that other categories were compared to the owner.

The inclusion of the function of the respondent to the models examining the relationship between OSH and contextual factors and OSH-dependent variables did not change this relationship. The results of Model 2 were as follows:

- All OSH factors remain significant with the same sign, and the change of odds ratio was not greater than 6 %.
- No changes in the significance and the direction of establishment size influence, although the odds ratio for big enterprises dropped by 51 %.
- No changes in the significance and the direction of sectors influence, and the changes in odds ratio were not greater than 14 %.
- There were two changes in the significance of country influence, although the magnitude of those changes was small.

This means that adding the function of the respondent to our multivariate analysis has very little influence on the relationship between OSH and contextual factors and OSH outcomes. Whether the respondent was an owner or OSH specialist, our conclusions described in the previous sections do not change.

Analysing the influence of the function of the respondent variable was fairly obvious: if the respondent was a manager or specialist with OSH tasks, the probability of carrying out risk assessments regularly was 64 % higher compared to if it was an owner, and 11 % and 8 % lower (compared to the owner) when it was another employee in charge of OSH or a manager without OSH tasks, respectively.

It may be concluded that the inclusion of the respondent's function to multivariate modelling does not change the results described in the previous section. This is due to the fact that the function is closely related to the characteristics of the establishment already used in the regression models (country, sector and size). Therefore, the contextual factors used across all regressions is this report were properly selected and the addition of another variable – the respondent's function – does not bring any new insights.

9. Conclusions and policy pointers

9.1 Introduction

This section provides a series of conclusions on the ESENER 2019 results and those of related research activities. Some policy pointers are also provided, which are to be interpreted as areas for further discussion.

European law aims to support the introduction of measures to encourage improvements in OSH through the implementation into national legal frameworks of the EU Framework Directive on Health and Safety and supporting legislation.

Building on the experience of prior waves, ESENER 2019 gathered evidence to clarify whether such measures and related building blocks that support safety culture have been adopted by establishments in Europe. The survey therefore plays a key role in supporting policy-making and research on OSH, and is frequently referenced by European Commission as a key data-source.[217]

Although the limitations of any survey must be acknowledged[218], by covering several aspects of OSH management, ESENER 2019 offers unique insights into the steps taken in the bid to ensure a secure and safe working environment. In doing so, an extensive range of topics were covered, including among others the identification and elimination of new and emerging risks, the managerial commitment to the working environment, the consultation and participation of workers, and the provision of good information.

When one considers the overall findings, it is self-evident that actions to support OSH require ongoing prioritisation. Although it is not possible for a survey like ESENER to validate legal compliance or the quality of the safety culture in establishments, the results show clear divergence on the focus on the different types of risks and the measures adopted. The divergence in results may be justified for different reasons, but at the same time, the approach to OSH management can be linked to the size of the establishment, the sector and country context, as well as the presence of a health and safety representative.

The results are also relevant in highlighting the need for better OSH, considering the technological changes in the economy, the growing focus on the importance of the psychosocial work environment in supporting overall wellbeing and productivity, and in light of the COVID-19 pandemic that resulted in transformed working practices, some of which are likely to remain. Moreover, risks around the management of OSH are likely to intensify with, for example, the expansion of supply chains to include smaller organisations that have comparatively more informal working practices and allocation of responsibilities, and the introduction of novel business models.

To that end, it is pertinent to reflect on some of the key challenges identified. ESENER again confirmed that risks potentially resulting in MSDs are among the most highly identified. 'Repetitive hand or arm movements' and 'prolonged sitting' are recognised as endemic in around 60 % of establishments – and this acknowledgement is growing. Yet, paradoxically, the use of measures to 'improve working lives', including the introduction of 'ergonomic equipment', decreased slightly.

Our multivariate findings showed that the identification of safety, ergonomic and chemical risks and the use of OSH services by the establishments are correlated. This shows that the degree of reporting of risks is positively associated with the use of such services. Risk identification also improves if establishments have appointed a health and safety representative and consider that fulfilling the legal obligations is an important reason for managing OSH.

Policy pointer

Increasing awareness of health and safety and new and emerging risks continues to be necessary, especially among MSEs. Large companies would benefit from greater awareness of the OSH risks endemic to their supply chains and the relationship with their own reputation. Awareness-raising of risks should be linked to signposting of support and example concrete actions that can mitigate risks. Linking risk awareness and OSH management to the relevant legal obligations could help promote positive responses. Risk awareness can be improved if employee representatives are engaged in OSH management activities – consulting them directly or promoting employee involvement may further improve the level of risk awareness.

Psychosocial risks, in particular 'having to deal with difficult customers, patients and pupils', also remains a key risk factor many establishments. While respondents to ESENER may consider 'external persons' to be the most significant problem, the internal methods of working are less frequently acknowledged,for example'long or irregular working hours' and 'poor communication or cooperation within the organisation'[219].

At this point in time, establishments in the EU-27 do not seem to prioritise psychosocial risk management in their OSH management systems. For example, there has not been an increase in measures to manage psychosocial risks in workplaces,

217 Strategic Framework on Health & Safety at Work (2021-2027): https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12673-Health-&-Safety-at-Work-EU-Strategic-Framework-2021-2027-_en

218 As in similar surveys, it is likely that the better performing enterprises would agree to be interviewed in ESENER.

219 This may also be partly due to the profile of the respondent, who will often feel a responsibility for the management of OSH in the workplace. Hence, it may not be that surprising to point to external rather than internal causes.

such as the reorganisation of work, or interventions if excessively long hours are worked.

Our multivariate analyses showed that psychosocial risks present in establishments were lower among those establishments using an occupational health doctor or an expert for accident prevention – thus suggesting that OSH professionals can help to identify or reduce psychosocial risks upfront, as opposed to what was the case with other risk factors. The same is true of other measures that have been introduced, such as a procedure to deal with possible cases of threats, abuse or assault, and a plan to prevent work-related stress.

On the other hand, employee involvement and legal obligations are correlated with a higher number of psychosocial risks, confirming again, that those two factors are crucial in risk identification and addressing mitigating measures. It is worth noting that the country context is critical in the identification of psychosocial risks, pointing to the importance of national legal frameworks and culture.

Policy pointer

Where Member States have focused on addressing psychosocial risks, and considering the need to reduce all risks in the workplace, establishments would benefit from a stronger focus on the psychosocial working environment. Where relevant, inspectorates can play a role in ensuring coverage of the psychosocial working environment during visits to establishments.

Professional advice, encouraging adoption of key measures, and methods of engaging employees will likely enhance psychosocial risk management in establishments.

The results of ESENER 2019 suggest that Framework Directive 89/391/EEC has maintained the foundations for OSH management. As with the results of prior waves, about three-quarters of EU-27 establishments conduct risk assessments regularly. This implies that the approach is well established on the whole and has potentially provided a stable approach in securing a safer working environment.

However, while most large organisations conduct risk assessments regularly, smaller organisations, especially micro establishments, are less likely to do so. Use of less formalised OSH management practices in smaller organisations is common across the ESENER results, suggesting that there are alternative ways (in some cases, weaknesses) in the management of the working environment for establishments of this size.

Since carrying out fieldwork for ESENER 2019, a further concern is the possible OSH management response to the recent transformation of the working environment under COVID-19, given that a quarter of companies reported not conducting risk assessments regularly. The main reason given for not conducting risk assessments was that the 'risks are already known': this was most frequently mentioned by establishments in sectors facing serious health and safety risks such as mining and quarrying, and agriculture, fishing and forestry. Moreover, many risk assessments do not entirely cover all relevant work premises such as homes, nor all persons at risk from hazards in the working environment.

The multivariate analysis showed that the chance for regular risk assessment increases when a health and safety representative is present in the establishment. To improve coverage of workplaces at home in regular risk assessments, it is also important that employees be involved in OSH measures' implementation – this shows that employees play a key 'bottom-up' function in ensuring the completeness of OSH management activities.

Policy pointer

To improve the health and safety culture, the focus must be on 'hard-to-reach' establishments that do not conduct risk assessments regularly. Challenging the notion that the 'risks are already known' is key to changing behaviours.

The OSH response to COVID-19 should be used to further embed the practice of regular risk assessments in organisations, and to ensure that all relevant locations and persons at risk are in scope.

The primary suggestion for improving OSH management (such as covering all workplaces in risk assessments), is to broaden employee involvement, for example through the presence of health and safety representatives or the involvement of employees in the design of measures following risk assessments.

The establishments' methods of employee participation not only help identify risks, but also support the adoption of appropriate measures to mitigate risks.

By comparing the findings of previous waves, ESENER 2019 has shown that there has been less engagement with public institutions as regards OSH. This is demonstrated through the reduction in inspectorate visits across the EU-27, and in the retreat in obtaining advice from inspectorates and official OSH institutions. Hopefully, since the COVID-19 pandemic, establishments have taken advantage of the updated guidance and other support offered by inspectorates and other public organisations.

Policy pointer

The resourcing of national labour inspectorates should be carefully considered in light of the ESENER results. Many organisations do not complete risk assessments regularly, especially MSEs, and sectors that may be considered as having 'low safety' risks are sometimes less committed and introduce fewer measures. The benefits of providing advice alongside checks of compliance are likely to promote risk identification and foster health and safety cultures.

Reassuringly, in terms of the level of commitment shown across the EU-27, there has been a slight increase to over 60 % in top management discussions on OSH, and to about 70 % of establishments where team leaders or line managers continue to receive training. Yet, it is a concern that the 'persons most knowledgeable about OSH' in establishments as selected for interview under ESENER are now less likely to receive training, and OSH is discussed regularly in team meetings only in about a third of establishments.

Our multivariate analysis highlighted the importance of OSH commitment. The regular discussion on health and safety issues at top management level, as well as the training on managing health and safety in their teams undertaken by team leaders and line managers are positively related to the adoption of other OSH practices, such as regular risk assessments and the appointment of a health and safety representative.

Policy pointer

The commitment to OSH needs to be strengthened to enhance day-to-day management. Top management should be engaged on ways they can develop more dynamic safety cultures, for example, through regular team discussions on OSH. There is a risk of the person who knows most about OSH in the establishment becoming less qualified; promotion of training generally needs to be far better established.

As expected, digital technologies are a key feature of the EU-27 workplace, with almost 86 % of companies confirming use of personal computers at fixed workplaces, and 77 % of laptops. It should be stressed that there are further technologies with potential OSH risks in use (albeit to a much lower extent), such as systems controlling the content or pace of work, the monitoring of worker performance, and wearable devices and robots that may interact with workers. These trends may not have been fully captured by ESENER 2019, considering the rapid transition to home working and remote monitoring of staff since the COVID-19 pandemic in 2020.

However, in 2019, only about a quarter of companies discussed the OSH impact of such technologies in the workplace.

Policy pointer

OSH management clearly needs to stay apace with digitalisation trends, given the likely risks for the working environment. This is also pertinent considering the significant transition to home working and adoption of new business models. Clearly, OSH services, guidance and inspections can play a role in alerting establishments of their duties to ensure a safe work environment.

Our multivariate analysis also showed that employee representation (health and safety representatives) plays a role in the discussion of possible impacts of digital technologies. Therefore, engaging employees directly can also be a good solution for managing emerging digital risks.

Complying with OSH legal obligations can be challenging for some organisations; the complexity of OSH rules was considered a key barrier in fulfilling OSH duties for about 40 % of establishments, but there are remarkable differences across countries.

Simplification of OSH rules may not be possible if it reduces the possibility to safely control all risks in the working environment. Therefore, solutions are needed to support establishments to fulfil their obligations, especially micro and small organisations. Among other things, this could include online risk assessment procedures, guidance, OSH advice and helplines.

Policy pointer

Methods to ease compliance with OSH management should be viewed as key in boosting compliance, especially for MSEs, for example online methods designed to allow users to complete risk assessments and update them as needed.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: https://europa.eu/european-union/contact_en

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by email via: https://europa.eu/european-union/contact_en

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications at: https://op.europa.eu/en/publications. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu

Open data from the EU

The EU Open Data Portal (http://data.europa.eu/euodp/en) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

Print: ISBN 978-92-9479-675-2, doi:10.2802/413156, TE-RO-22-006-EN-C • PDF: ISBN 978-92-9479-674-5, doi:10.2802/881291, TE-22-006-EN-N

The European Agency for Safety and Health at Work (EU-OSHA) contributes to making Europe a safer, healthier and more productive place to work. The Agency researches, develops and distributes reliable, balanced and impartial safety and health information and organises pan-European awareness-raising campaigns. Set up by the European Union in 1994 and based in Bilbao, Spain, the Agency brings together representatives from the European Commission, Member State governments and employers' and workers' organisations, as well as leading experts in each of the EU Member States and beyond.

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

Santiago de Compostela 12, 5th floor
48003 Bilbao
Spain
Tel: (+34) 944 358 400
Email: information@osha.europa.eu

https://osha.europa.eu

Publications Office
of the European Union