

Improving working conditions in occupations with multiple disadvantages





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Abbreviations used in the report

Cedefop	European Centre for the Development of Vocational Training
ČSÚ	Czech Statistical Office
CVVM	Institute of Sociology of the Czech Academy of Sciences
EL.STAT	Hellenic Statistical Authority
ETUC	European Trade Union Confederation
EU LFS	European Union Labour Force Survey
EWCS	European Working Conditions Survey
GUS	Central Statistical Office [Poland]
Horeca	hotel and restaurant sector
HSE	Health and Safety Executive [UK]
IGA	Health and Work Initiative [Germany]
ISCO	International Standard Classification of Occupations
ISPV	Average Earnings Information System [Czech Republic]
ISTAT	National Institute of Statistics [Italy]
NACE	Statistical Classification of Economic Activities in the European Community
NFA	National Research Centre for the Working Environment [Denmark]
NGO	non-governmental organisation
NWCS	Netherlands Working Conditions Survey
OMD	occupations with multiple disadvantages
ONS	Office for National Statistics [UK]
WHO	World Health Organization

Country groups and codes

Country groups

EU15 15 EU Member States prior to enlargement in 2004

EU28 Current 28 EU Member States

Country codes

The order of the countries follows the EU protocol based on the alphabetical order of the geographical names of countries in the original language.

BE	Belgium	LT	Lithuania
BG	Bulgaria	LU	Luxembourg
CZ	Czech Republic	HU	Hungary
DK	Denmark	MT	Malta
DE	Germany	NL	Netherlands
EE	Estonia	AT	Austria
IE	Ireland	PL	Poland
EL	Greece	PT	Portugal
ES	Spain	RO	Romania
FR	France	SI	Slovenia
HR	Croatia	SK	Slovakia
IT	Italy	FI	Finland
CY	Cyprus	SE	Sweden
LV	Latvia	UK	United Kingdom

Executive summary

Introduction

Occupation is a critical element in the type of working conditions experienced during a person's working life, with knock-on effects for their health and well-being, income, working time, job security and career prospects. Based on data from the European Working Conditions Survey 2010 and the EU Labour Force Survey 2013, this report explores the working conditions of workers – particularly the medium-to-low skilled and unskilled – in occupations that are found to have low levels of job quality as measured by four key indicators: earnings, prospects, working time and intrinsic job quality. While the term 'disadvantaged' is quite new in work-related studies and policies, it reflects the reality of a considerable proportion of jobs in these occupations.

Supplemented by information from across all 28 EU Member States submitted by Eurofound's network of European correspondents, the report presents examples of initiatives, policies and measures at national level aimed at improving overall working conditions in these disadvantaged occupations.

Policy context

A key priority of the European Union's employment strategy and Europe 2020 is to create more and better jobs in Europe, while improving their quality and ensuring better working conditions. The Commission's 2010 *Agenda for new skills and jobs places* an emphasis on skills development to foster job quality and productivity. The improvement of working conditions can ensure a longer working life and more sustainable work and employment, with positive effects on participation in the labour market and on company productivity.

To achieve economic growth and job creation, the working conditions of all workers need to be improved, through higher standards of occupational health, safety and well-being at work, as well as enhanced opportunities for skills development and employment prospects. As workers in occupations with multiple disadvantages are at risk of social exclusion, job insecurity and health problems, improving the employment and working conditions of this category of workers can contribute to achieving more sustainable work and a more inclusive labour market.

Key findings

Occupations with multiple disadvantages include personal service workers (waiters, bartenders and cooks), sales personnel (shop salespersons, cashiers and ticket clerks), plant and machine operator jobs (assemblers, machine operators and drivers) and elementary occupations (mining, construction and manufacturing labourers, refuse workers and food preparation assistants).

Most workers in these occupations are disadvantaged in terms of being subject to high job strain, exposure to health risks and difficulties in accessing training. They also experience more job insecurity and poorer career prospects than in other occupations.

Experiencing multiple disadvantages can have a detrimental effect on the careers of these workers and ultimately on their participation in the labour market. According to the research, a high proportion of workers in most of these occupations reported that they would not be able to work when they were 60 years old.

There is a clear concentration of these occupations in medium-to-low skilled occupations in the service and manufacturing sectors, and low-skilled to unskilled occupations in various sectors. Two occupations in particular – drivers and refuse workers – endure very poor conditions in most areas, with negative impacts on work-life balance, ability to make ends meet and, above all, health status.

Some occupations with multiple disadvantages are dominated by a specific social group: for example, a high proportion of women work as cashiers and ticket clerks, young workers as waiters, and people of foreign origin as food preparation assistants.

The majority of the policies and initiatives designed to improve working conditions in occupations with multiple disadvantages are aimed at sector level (negotiated through social dialogue and collective bargaining), although there are a few examples targeted at specific occupations: for example, berry pickers, miners, domestic cleaners and drivers.

Over half of the measures identified in the research (54%) are aimed at improving working conditions related to intrinsic job quality – such as skills, autonomy, social and physical environment, risk prevention and work sustainability – while 37% relate to earnings, 25% to working time and 20% to prospects.

The study identified transversal initiatives and policies targeting broader groups of occupations or even the entire workforce, aimed at attaining minimum quality levels for all occupations in one or several job quality domains. These cross-cutting initiatives have been developed by public authorities (in the form of legislation), social partners or third parties (non-governmental organisations) and include the following: setting or raising of minimum wages, reducing the duration of working hours or limiting the presence of unsocial working hours, fostering skills development and preventing social or physical environmental risks.

The research pointed to the need to foster the development of policies in specific occupations: for example, initiatives in relation to working time in the hotels, restaurants and catering sector and job strain in manufacturing. One important issue for policymaking is tackling undeclared work or illegal employment, prevalent in several disadvantaged occupations.

Policy pointers

- Issues for further research include the relationships between occupations with multiple disadvantages and the prevalence of informal economy practices.
- A qualitative assessment of existing policies to improve the working conditions in these occupations should be further developed.
- Future policy debates on working conditions both at EU and national level and in social dialogue should take the occupational perspective into account.
- Initiatives from sectoral social dialogue to address the occupational perspective could provide a suitable framework for developing improvements to working conditions since they can address the issue from a holistic or multilevel standpoint.
- Governments and national-level social partners (under intersectoral agreements) should develop initiatives to address the poor working conditions of all workers, regardless of their occupation or membership of a trade union.
- As transversal policies normally target all workers and focus on minimum standards, they can contribute to improving the quality of work of employees in occupations with multiple disadvantages in one or several aspects of working conditions. In some cases, they may address issues that are not tackled directly through specific sectoral or occupational policies.
- Given that social policies target certain disadvantaged groups in society based on inequalities in relation to gender, income, housing and health and the fact that disadvantages are concentrated in some occupations, a mainstreaming policy for these occupations could be considered at different levels.

- Improving the job quality of workers in these occupations would contribute to the aims of growth and job creation in Europe, and help meet the challenge of increasing inequalities in societies, including reducing the risk of unemployment. The occupational approach can be a major element in fostering inclusiveness in the labour market and sustainable work.

Introduction

The working conditions of an individual during their life course are largely determined by their occupation. The study of working conditions from an occupational perspective provides a meaningful indication of the typical work environment in specific jobs or occupations, and can identify differences which will have significant implications for the well-being of workers. A situation in which workers in certain occupations suffer poor conditions in different aspects of their job poses questions for the sustainability of their careers. Policymakers and/or organisations can develop initiatives to avoid the unwanted consequences of those disadvantages such as health problems, in-work poverty or work–family conflicts.

From a sociological perspective, the type of work provides one of the best single indicators of the overall life situation of workers. It is a key cause and consequence of relative position with respect to stable inequalities or social stratification (Ritzer, 2007). Different occupations are therefore not only associated with variations in employment and working conditions, but also (and, in part, because of that) with inequalities in society. In principle, occupations not only determine different monetary rewards or authority and position in society, but also influence possibilities for organising an individual's time, the extent to which they enjoy a healthy environment and their opportunities for professional development.

Various studies have addressed the issue of inequalities between occupations and changes in the structure of occupations in terms of wages or level of educational attainment (see, for example: Oesch, 2013; Eurofound, 2014a). However, there are few comparative analyses looking at the multidimensional perspective of the working conditions of the job or specific occupations at European level. When the various dimensions of working conditions of an occupation are of poor quality, the occupation is said to be 'disadvantaged'. This term is more frequently used in sociological analysis and social policies in the context of deprivation of certain social groups or categories of individuals such as ethnic groups, gender differences, poor people and the homeless. This report looks at the specific working conditions of occupations from a multidimensional perspective and similarly these are referred to as 'occupations with multiple disadvantages'.

Research approach

Eurofound's report, *Occupational profiles in working conditions: Identification of groups with multiple disadvantages*, shows that there is an accumulation of disadvantages in relation to four job quality areas (earnings, working time, prospects and intrinsic job quality)¹ in certain major occupational groups (Eurofound, 2014b). It confirmed that differences between occupations are often related to the level of skills required to carry out the task. Thus, disadvantages are accumulated differently according to the position in the occupational structure. The only area that is not clearly associated with the position in the occupational structure is working time quality.

In the present study, the employment and working conditions analysis delves deeper into the occupational level to identify the characteristics of more specific occupations. The analysis in this report is mainly developed at the 3-digit level of the International Standard Classification of Occupations (ISCO) called minor groups. When this was not possible due to availability of data or sample size requirements, information is provided either at a 2-digit level (sub-major groups) or a 1-digit level (major groups) (ILO, 2008). To contribute further to policymaking, the report also tries to be more specific in relation to what are the conditions that make those occupations disadvantaged. In relation to working time, for example, differences are shown in indicators such as long hours, part-time and irregular time.

¹ See Annex I of this report for an explanation of the job quality indices used and which are described in the report, *Trends in job quality in Europe* (Eurofound, 2012a).

To tackle those disadvantages, policy initiatives to improve the working conditions of certain occupations can be developed by different actors or institutions in the labour market. Several contextual factors related to specific country situations seem to play a role as regards the type of actor – for example, government, social partners or non-governmental organisations (NGOs) – or the working conditions area that they try to improve. When workers from certain occupations are organised in trade unions and social dialogue is embedded in the policymaking process of a country, it is more likely that social partners will develop policies by means of agreements. In most European countries, representation of workers is articulated by sector and/or company level. This aspect has implications for the type of policies existing in the various countries. Governments are the other relevant actors, especially for regulating minimum standards – mainly in relation to working time and health and safety – but also in some countries in relation to skills development and other working conditions.

There are limitations to the extent to which the working conditions of specific jobs and occupations can be improved. These limitations are determined by the characteristics of the organisation of the production system, which can have implications for health risks or working time arrangements. When these constraints exist it is more difficult to develop policies to improve working conditions. For a policy to be successful, it has to consider the source and nature of the disadvantages. For example, although it is not the focus of this report, labour market segmentation in some countries could be one of the origins of the divide between multiple disadvantaged occupations and not being disadvantaged in some aspects of the job.

EU policy

At EU level, regulations exist, for example, on protecting workers in terms of working time and health and safety, and also in relation to the rights of workers on fixed-term contracts. However, the analyses show that some workers are still exposed to risky conditions. The findings of this report are relevant in the context of meeting the challenges set by the European Employment Strategy and the Europe 2020 strategy (European Commission, 2010a). The initiative, *An agenda for new skills and jobs*, is how the European Commission is helping the European Union reach its employment target and reduce poverty and social exclusion (European Commission, 2010b). Identifying poor job quality aspects and their multidimensional component, as well as mapping relevant policies and identification of possible areas to be improved, can contribute to reducing exits from the labour market and attract people to it. Therefore, a contribution can be made to the Europe 2020 target of 75% of 20–64 year-olds to be employed in 2020. Moreover, certain conditions of people at work like low income, risky health environment and lack of opportunities for skills development or work–life balance pressures could be associated with situations of poverty and social exclusion.

This report explores the working conditions of workers, particularly the medium-to-low skilled and unskilled, in occupations that accumulate multiple disadvantages. Considering these conditions and taking into account the relevance of the occupational perspective for the overall well-being of the worker, the report identifies examples of policies that can improve those conditions and make work in these occupations more sustainable. Therefore, the purpose of this study is twofold:

- to map disadvantages in terms of working conditions related to specific occupational groups to provide policymakers with specific knowledge to design policies and initiatives to improve the working conditions of such occupations;
- to map existing initiatives, programmes and services in EU Member States.

Structure of the report

Chapter 1 presents the findings of an analysis of data from the European Working Conditions Survey 2010 and the European Labour Force Survey 2013. It contains a comparative analysis of occupations with multiple disadvantages and all other occupations in relation to specific working conditions.

Chapter 2 complements these findings with national-level information obtained from contributions from Eurofound's network of correspondents from the 28 Member States and Norway. The occupations identified by the statistical analysis in Chapter 1 as having multiple disadvantages are associated with poor working conditions in many EU countries. In addition, a small number of other occupations have been identified by the national contributions as having various disadvantages in specific countries.

Chapter 3 presents examples of policies and initiatives carried out mainly by social partners and governments at EU and national level with the aim of improving the working conditions of workers in occupations with multiple disadvantages. Because of the sectoral approach of most initiatives, the chapter is structured by groups of occupations normally belonging to the same economic sector. Even though the collection of initiatives does not represent an exhaustive list of all those present in European countries, where possible a 'policy gap analysis' has been developed to identify areas of job quality with less coverage by policies for specific occupations or groups of occupations.

Finally, Chapter 4 derives conclusions about the situation and future of occupations with disadvantages, offering possible explanatory arguments. A reflection on the contribution of present policies and implications for workers and society in Europe is included.

Annex I explains the methodology used in this report. Annex II contains a graph showing the distribution of disadvantaged occupations across sectors. Annex III, which is available on request from Eurofound, contains a table summarising the various policies identified in the contributions from the network of correspondents.

Overview of working conditions in occupations with multiple disadvantages 1

This chapter describes the working conditions of workers in occupations with multiple disadvantages (OMD) in Europe. The analysis is based on the fifth European Working Conditions Survey (EWCS2010) and the European Union Labour Force Survey carried out in 2013 (EU LFS). Describing the specific working conditions of OMD enables the extent to which they are disadvantaged and in what aspects to be determined. This information is not only relevant for policymakers and the public, but can also contribute to the development of effective initiatives to improve the working conditions of the selected occupations.

The chapter begins by focusing on the occupations identified as OMD, highlighting their distribution across the occupational structure and sectors. This part of the analysis is completed by examining the evolution of OMD in the occupational structure – in terms of understanding future conditions. This is followed by a description of the sociodemographic characteristics of workers in OMD and a look at specific aspects of their working conditions such as characteristics of working time and work–life balance, income situation, employment type, job insecurity and prospects, training provision, and health and well-being risks and outcomes. The sustainability of work for OMD is also discussed, with the findings being presented in comparative terms between the specific occupations and all other occupations. Finally, occupational profiles are developed to illustrate the conditions of work and employment in OMD and the importance of considering the national context is explained through comparative country analysis.

Selection of OMD, distribution and trends

The OMD examined in this report were selected using data from the EWCS2010 based on the variation of indices of job quality across occupations.

Job quality indices

The occupations listed in Table 1 have relatively poor working conditions compared with other occupations in three out of four job quality indices – earnings, working time, prospects and intrinsic job quality (see Annex I) – built using indicators related to each area (see Eurofound, 2012a).

- The earnings index captures the level of monetary reward through the construction of a harmonised monthly earnings variable.
- The prospects index refers to a person's needs for employment: continuity, enhancement, job security and prospects for advancement in their job.
- The intrinsic job quality index refers to the social and physical environment, including skills and job discretion (autonomy) and work intensity.
- The working time index is closely related to whether the job in the occupation allows for a good balance between a person's working life and private life.

The application of the job quality indices to occupations at the ISCO-08 3-digit level sought to select OMD. It was assumed that a given occupation had poor working conditions in a given aspect if it ranked in the bottom tercile of the distribution of all occupations. Table 1 shows how the occupations selected as OMD score in the individual indices. For example, cooks on average have a relatively low job quality in relation to earnings, intrinsic job quality and working time quality, but not for prospects.

Note that when an occupation is defined as OMD, it means that on average, workers have poorer conditions in three or four of the job quality areas. However, this does not necessarily mean that all workers in these occupations are in jobs with multiple disadvantages. At the same time, some jobs with multiple disadvantages may be present in other occupations.

Table 1: Job quality areas where workers in OMD have low scores

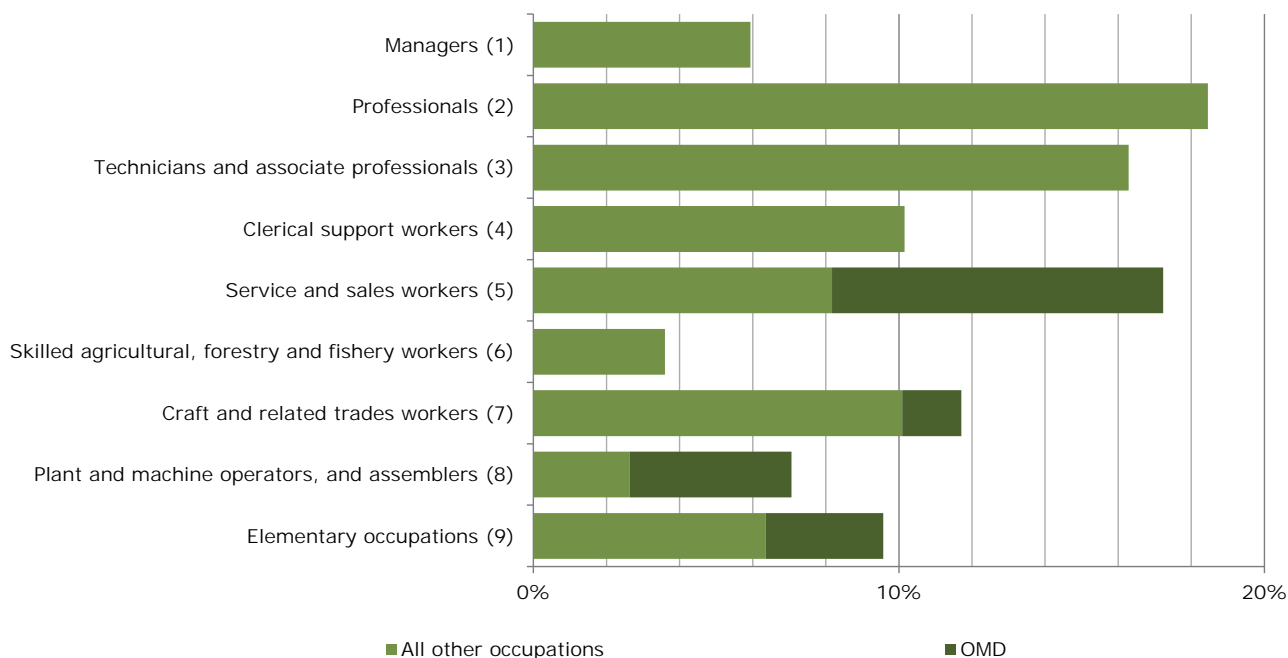
Occupation	ISCO-08 3-digit code	Earnings	Prospects	Intrinsic job quality	Working time quality
Cooks	512				
Waiters and bartenders	513				
Shop salespersons	522				
Cashiers and ticket clerks	523				
Food processing and related trades workers	751				
Wood treaters, cabinet-makers and related trades workers	752				
Garment and related trades workers	753				
Machine operators	814–818				
Assemblers	821				
Car, van and motorcycle drivers	832				
Mobile plant operators	834				
Agricultural, forestry and fishery labourers	921				
Mining and construction labourers	931				
Manufacturing labourers	932				
Food preparation assistants	941				
Refuse workers	961				

Note: Table cells shaded in yellow indicate a low job quality score.

Distribution of workers in OMD between the ISCO main occupational groups

OMD are not equally distributed between ISCO’s nine main categories (Figure 1). So what occupations are OMD and in what proportion are they included in the major occupational groups?

Figure 1: Distribution of workers between ISCO main groups and share of workers in OMD in the EU28, 2013 (% of all workers)



Notes: 1-digit level ISCO-08 codes are shown in brackets after the name of the main occupational group. No data are available for Bulgaria, Malta, Poland and Slovenia.
Source: *EU LFS 2013*

A high proportion of workers in the group ‘service and sales workers’ are in OMD, although this group are not at the bottom of the occupational structure. Service and sales workers normally require the completion of secondary education, which may include a significant component of specialised vocational education and on-the-job training. Some occupations require completion of vocation-specific education after completion of secondary education. Cooks, waiters and bartenders are workers who provide personal services related to catering and hospitality, preparing and serving food and beverages. Sales workers (shop salespersons, cashiers and ticket clerks) sell and demonstrate goods in wholesale or retail shops. They may record and accept payments for goods and services purchased, and may operate small retail outlets. Some operate cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods and services. Supervision of other workers may be included for the whole group of ‘service and sales workers’ (ILO, 2012).

The workers in OMD in the broad occupational group of ‘plant and machine operators, and assemblers’ represent 62% of the workers in that group. These workers operate and monitor industrial machinery and equipment on the spot or by remote control, drive and operate vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures. The skills required normally correspond to secondary education or vocational training.

The third broad group with OMD is ‘elementary occupations’. It would have been expected that more occupations in this group would have been selected as having multiple disadvantages. Workers in these occupations perform simple routine tasks which may require the use of hand-held tools and considerable physical effort. They need skills at a lower level than do ‘service and sales workers’ or ‘plant and machine operators, and assemblers’, and include occupations in different trades. Refuse workers collect process and recycle waste from buildings, streets, gardens and other public places, or keep streets and other public places clean. Food preparation assistants (includes fast-food preparers and

kitchen helpers) prepare and cook to order a small variety of pre-cooked food or beverages, clear tables, clean kitchen areas and wash dishes. Another occupation selected as OMD from the group ‘elementary occupations’ is mining and construction labourers, who perform simple and routine manual tasks in mining, quarrying, civil engineering and building operations. The last occupation of this broad occupational group is agricultural, forestry and fishery labourers. They perform simple and routine tasks in the production of crops and livestock, the cultivation and maintenance of gardens and parks, the exploitation and conservation of forests, and the conduct of aquaculture and fisheries operations.

Finally, the last broad group where OMD are found is ‘craft and related trades workers’. The OMD included in this group are food processing, woodworking, garment and other craft and related trades. The workers treat and process agricultural and fishery raw materials into food and other products, and produce and repair goods made of wood, textiles, fur, leather or other materials. Like service workers, plant and machine operators, these occupations require a secondary level of education and supervision of other employees is possible.

As shown in Figure 1, OMD are concentrated in the middle and lower ISCO codes. No OMD are identified in other ISCO 1-digit categories (managers, professionals, technicians and associated professionals, and clerical support workers), which require higher skill levels, or for skilled agricultural, forestry and fishery workers.

Distribution of workers between sectors

Thus, workers in OMD are mainly in the mid-to-low or low skill level of occupations, but in which sectors? As shown in Chapter 3, the majority of initiatives developed by social partners or as a result of social dialogue are implemented at sectoral level. This indicates that future actions to improve working conditions should take into account the sectors where these occupations are found.

The percentage of workers in OMD of total workers varies between sectors (Table 2). By far, the highest proportion of OMD can be found in accommodation and food service activities (61%), followed by wholesale and retail trade, and the repair of motor vehicles and motorcycles (46%). When interpreting these results, it is important to bear in mind that this is a global overview and that differences in the proportion of OMD may occur at subsector level.

Table 2: OMD workers as a percentage of all workers in a sector, EU28

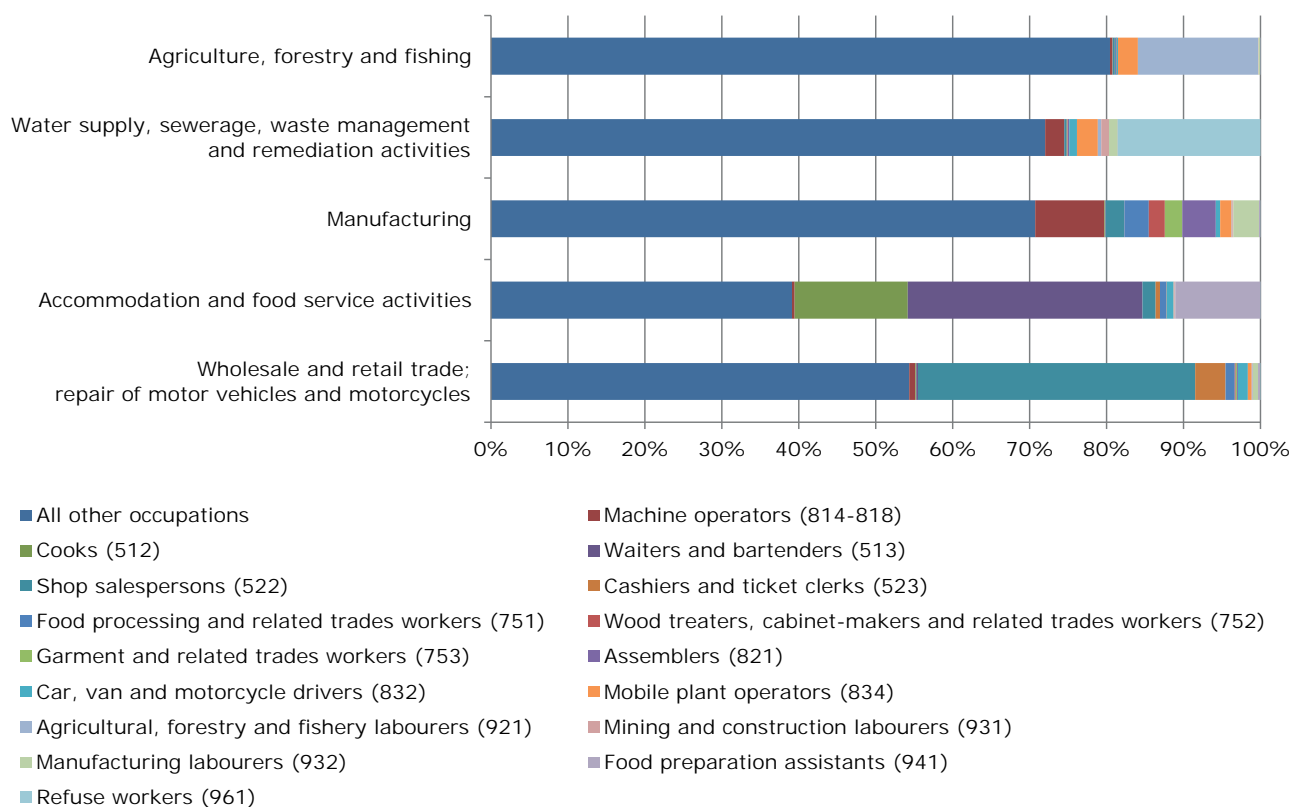
Accommodation and food service activities	61%	Construction	12%	Public administration and defence; compulsory social security	4%
Wholesale and retail trade; repair of motor vehicles and motorcycles	46%	Other service activities	8%	Human health and social work activities	4%
Manufacturing	29%	Arts, entertainment and recreation	7%	Education	2%
Water supply, sewerage, waste management and remediation activities	28%	Administrative and support service activities	7%	Information and communication	2%
Agriculture, forestry and fishing	20%	Real estate activities	5%	Professional, scientific and technical activities	1%
Transportation and storage	16%	Electricity, gas, steam and air conditioning supply	5%	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	1%
Mining and quarrying	13%	Activities of extraterritorial organisations and bodies	4%	Financial and insurance activities	1%

Note: No data are available for Bulgaria, Malta, Poland and Slovenia.

Source: *EU LFS 2013*

Figure 2 shows the occupations in the sectors with a higher percentage of workers in OMD. In the ‘Accommodation and food service activities’ sector are mainly waiters and bartenders, followed by cooks and food preparation assistants. As expected, the vast majority of OMD in the ‘Wholesale and retail trade’ sector are shop salespersons followed by cashiers and ticket clerks. In the ‘Manufacturing’ sector are mainly machine operators and assemblers, whereas in the ‘Water supply, sewerage, waste management and remediation activities’ sector, refuse workers is the most prevalent occupation among the OMD. As expected, a large proportion of agricultural labourers work in the ‘Agriculture, forestry and fishing’ sector. See Annex II for full information about the distribution of all OMD across all economic sectors.

Figure 2: Distribution of OMD across selected sectors (%)



Notes: ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia. Source: *EU LFS 2013*

The proportion of OMD is expected to be higher in countries with:

- more employment in activities related to the sectors shown in Figure 3;
- higher share of workers in relatively low skill levels or low value-added work within any economic sector.

The country distribution of OMD is presented at the end of this chapter.

Employment evolution

As discussed above, OMD are mainly mid to low skilled occupations in the hotel and restaurant (Horeca) and commerce sectors, and low skilled jobs in various economic sectors. It is also of interest to look at the employment evolution of these occupations.

Changes in occupational structure and trends might be related to the changing nature of the occupations due to several factors, including technological and labour market changes and overall changes in the economic structure. In the 21st century, the reduction of some manufacturing occupations in Europe continues, while high skilled occupations have experienced an extraordinary growth. With the exception of clerical workers, the numbers in service-related occupations have also increased. These changes can be related to the way work is performed and sometimes to the reduction of employment due to technological changes or other processes related to changes in the structure of the economy (for example, globalisation).

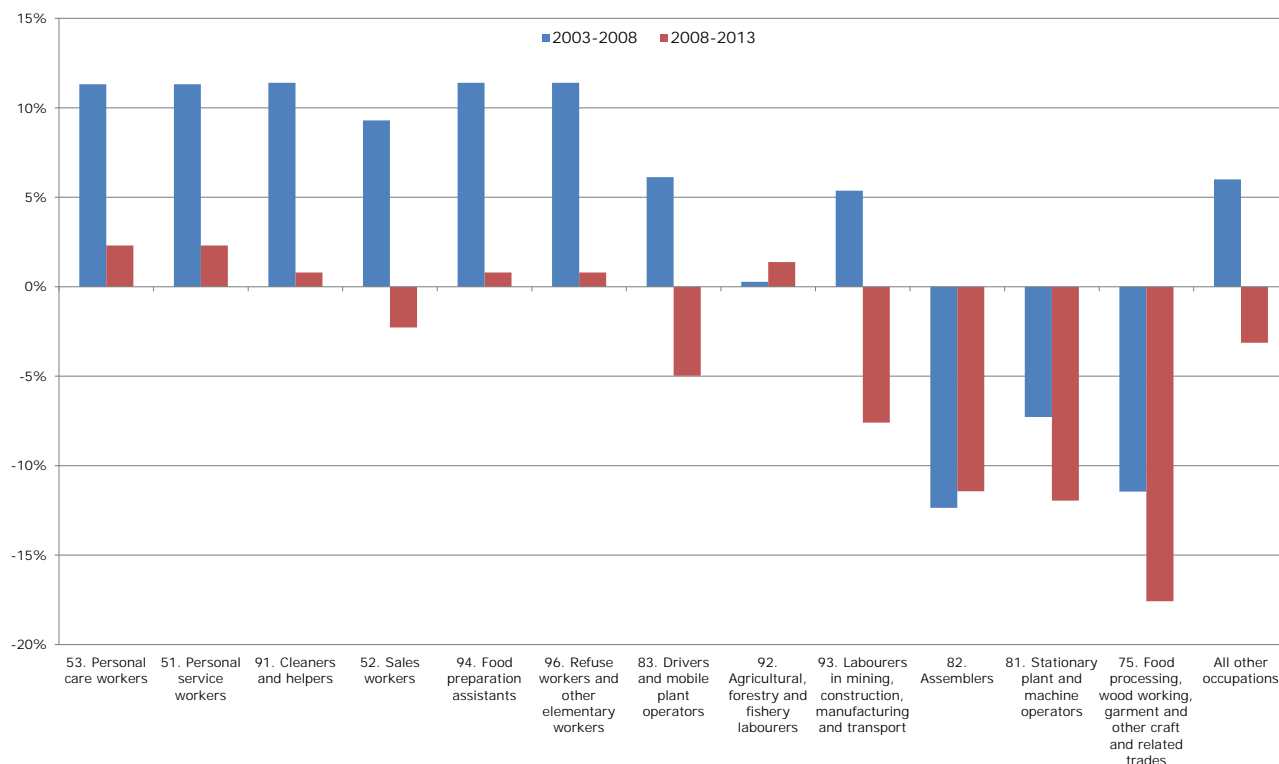
Some literature points to a trend of upgrading of the occupational structure in Europe (Wilson, 2007; Cedefop, 2010; Oesch, 2013; Eurofound, 2014a). This means there are increasingly more jobs in the upper occupational groups than in the mid and low skilled occupational groups. However, this is not a common trend in all countries and there is some evidence indicating that this upgrading is being combined with polarisation, that is, growth in high and low skill jobs (for example, the UK). There has been some hollowing out of the occupational structure, with loss of employment share among agricultural and fishery workers, craft workers and clerks, and other intermediate level jobs. From the sectoral point of view, there are notably declining shares of those employed in primary and manufacturing sectors and a growth of employment in the services sector.

EU LFS data from 1995 to 2014 confirm some upgrading/polarisation of the occupational structure, mainly driven by an increase in professionals and technicians (48%). Some increase has also been experienced by elementary occupations (12%) and service workers (39%), which are occupational groups containing several OMD. A strong decline is observed for craft-related workers (30%). These figures support upgrading of the workforce with some decline in middle occupations and some growth in low skilled occupations in Europe.

But what has happened with OMD? Figure 3 shows the changes in the share of workers during the past decade in the sub-major occupation groups (2-digit ISCO). However, the data presented provide only an approximate picture of developments in OMD as these groups are broader than the OMD referred to in this report. The information is provided for the period from 2003 to 2008 and the period from 2008 to 2013 (that is, before and after the financial and economic crisis).

Figure 3 suggests a recent growth of OMD in service-related occupations (waiters and bartenders, cooks and food preparation assistants, shop salespersons, and cashiers and ticket clerks) and other OMD identified in this study (care workers, cleaners and helpers, refuse workers). However, OMD in the manufacturing sub-major occupational groups (assemblers, machine operators and craft-related workers) declined before and after the crisis. The economic cycle appears to be a major driver of employment prospects of drivers, mobile operators and labourers.

Figure 3: Change (%) of workers in ISCO sub-major occupational groups which include OMD, 2003–2008 and 2008–2013



Notes: OMD in sub-major occupation groups (2-digit ISCO) with a low score in the job quality indices. Two occupations identified in Chapter 2 – Personal service workers (51) and Cleaners and helpers (91) – are included to show their trends.

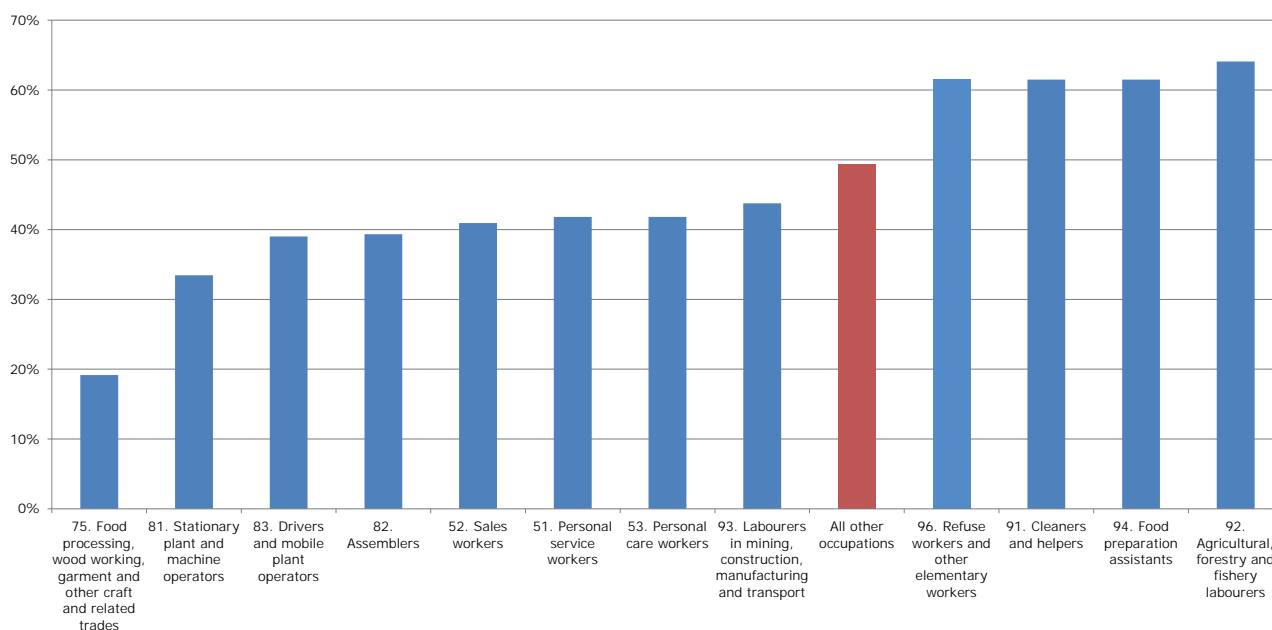
Source: EU LFS data from 2003, 2008 and 2013

Projections until 2025 by the European Centre for the Development of Vocational Training (Cedefop) seem to confirm recent trends for Europe showing employment growth of occupational groups in high skill occupations such as technicians and associated professionals (ISCO-3), professionals (ISCO-2) and legislators, senior officials and managers (ISCO-1), but also in mid to low skilled service workers and shop and market sales workers (ISCO-5) and elementary occupations (ISCO-9) (Cedefop, 2015). However, craft and related trades workers (ISCO-7) and clerks (ISCO-4) decline.

This trend suggests that the process of upgrading of the workforce with some polarisation at the very bottom of the occupational structure will continue. More specifically, according to the EU Skills Panorama (European Commission, 2014), some activities with a high share of OMD (hotels and catering, retailing and construction) will grow until 2025. Other OMD and high growth will be assemblers; they saw a decline during the crisis but an increase is predicted. Elementary occupations, including refuse workers and food preparation assistants, are also expected to grow. Similar trends are expected by labourers in mining, construction and manufacturing.

However, it is necessary to take account of the replacement demand (that is, the replacement of workers who have retired or changed occupation) when assessing the future demand for workers. Figure 4 shows the requirement of workers until 2025 as a percentage of employment in 2013 for the sub-major groups with OMD. It shows a higher percentage for the total requirement for workers in elementary occupations, but also a major requirement for OMD in service occupations. Some of these occupations might undergo changes in the skills required in the future. Moreover, their low scores in the job quality indices might make it difficult to fill vacancies. Special attention should also be given to the ageing of workers in these occupations.

Figure 4: Future requirement of workers until 2025 for major occupational groups with OMD as a percentage of employment in 2013



Notes: Total requirement includes new jobs created and replacement demand. ISCO-2 code of occupational group is given.
Source: *Cedefop data based on the EU LFS.*

A European Parliament report on labour market shortages in the EU includes the following OMD in its list of the top 10 occupations for which there is evidence of recruitment difficulties – referred to as ‘bottleneck occupations’ – at EU level (European Parliament, 2015, Table 4):

- personal service workers;
- sales workers;
- drivers and mobile plant operators;
- food processing, wood working, garment and other.

Conclusions

Despite the general upgrading of the workforce across Europe, employment is still increasing in some occupational groups with OMD such as those in commerce (shop sales and cashiers) and in Horeca (food preparation assistants), and some elementary occupations (food preparation assistants). Shortages of workers in OMD are mostly found in service-related jobs with multiple disadvantages such as cooks, waiters and shop salespersons). Therefore, there will be a growing demand for some OMD, which will need to take into account the skills requirements as well as the working conditions so as to make the jobs in these occupations attractive to potential recruits.

Sociodemographic characteristics of workers

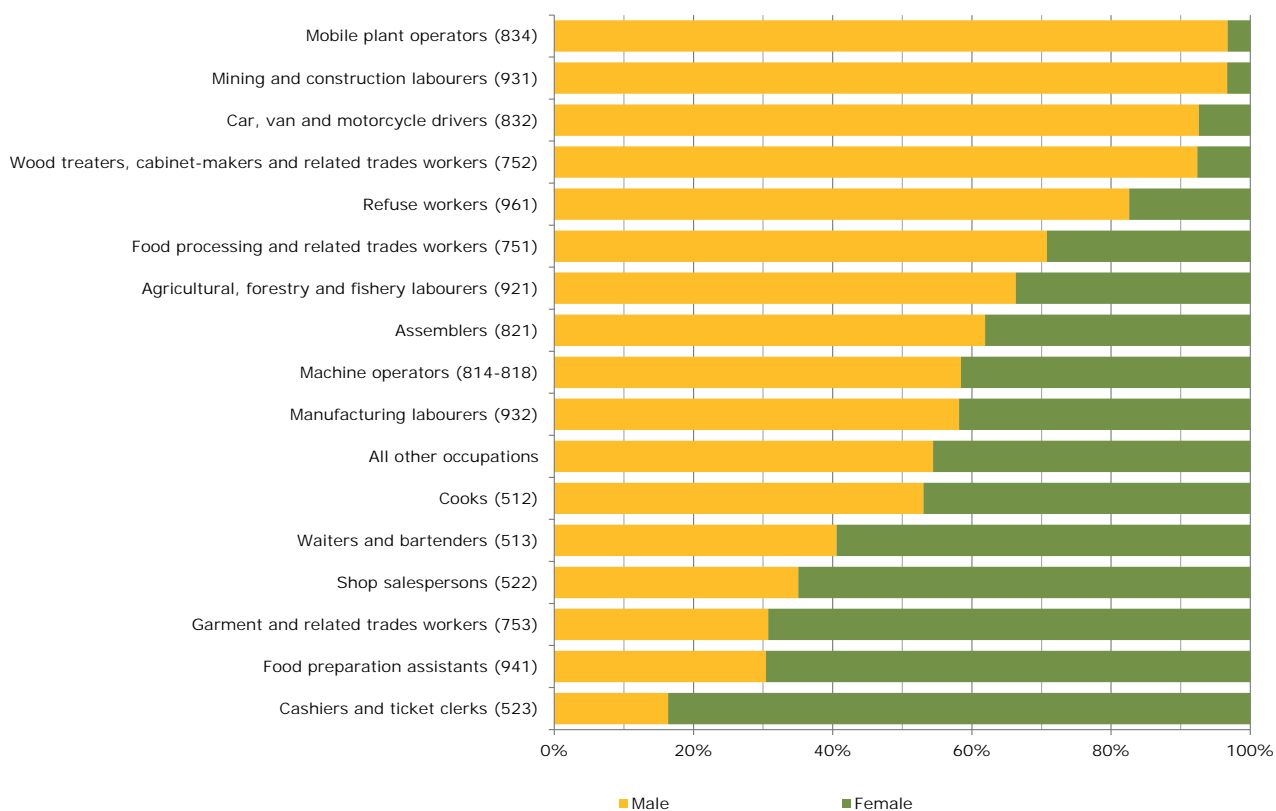
The occupations classified as having multiple disadvantages form a diverse group in terms of the composition of workers in them. This section provides an insight into the characteristics of workers in OMD. Because different groups of workers are affected by different working conditions and needs, knowing the sociodemographic composition of OMD can help policymakers to improve their working conditions.

Gender

The EWCS2010 found that only a small proportion of workers (22% of women and 17% of men) work in gender-mixed occupations, that is, occupations where the proportion of either gender exceeds 60%.

However, when considering exclusively all OMD together, women and men are equally represented since the share of male to female workers is 53% to 47%. Nonetheless, there are wide differences in terms of gender composition between OMD (Figure 5). Strong gender segregation is found in mobile plant operators, mining and construction labourers, drivers, wood workers and refuse workers (male dominated) and in cashiers and ticket clerks (female dominated); this reflects the segregation in the labour market indicated above. Cooks appear to have the most balanced gender composition with 53% of men. Other OMD that could be classified as gender mixed are waiters and bartenders, manufacturing labourers and machine operators.

Figure 5: Gender composition of workforce in OMD, EU28



Notes: ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia.
Source: *EU LFS 2013*

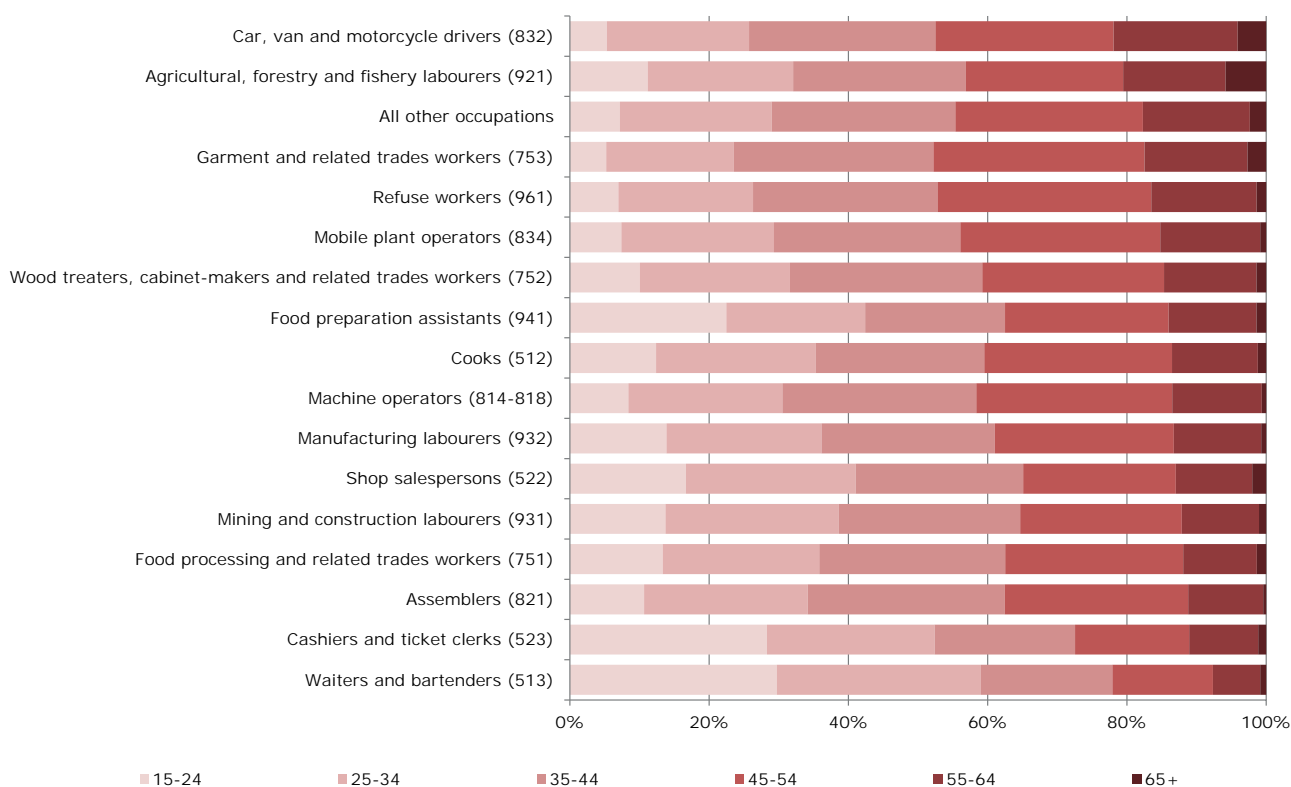
Age

In the current context of demographic ageing, age is a relevant variable. In occupations with a higher proportion of older workers, the issue of replacing skills and workers may arise.

The overall OMD demographic composition is younger than the rest of occupations, with the exception of agricultural, forestry and fishery labourers (22% are 55+ years-old and 4% are 65+ years-old) and car, van and motorcycle drivers (21% are 55+ years-old and 6% are 65+ years-old).

Figure 6 displays the age composition of workers in OMD across the EU28. The proportion of workers who are 24 years-old or younger is the highest in waiters and bartenders (30%) and cashiers and ticket clerks (28%). The young age of these occupations also raises the issue of how far they can provide sustainable work for some workers over their life course. Given that these are among the OMD with a higher share of workers with higher levels of educational attainment, it can be concluded that some are young qualified workers who will move to other jobs before they reach middle age. Their retention could be a challenge in the context of declining numbers of young people entering the workforce. In the case of waiters, restaurants and other catering outlets might suffer staffing problems due to fewer potential young workers in the future due to demographic change. In addition, some OMD with older workers are also demanding jobs. Therefore, when looking at the age composition of an occupation, it is important to consider the characteristics of the job.

Figure 6: Age composition of workers in OMD, EU28



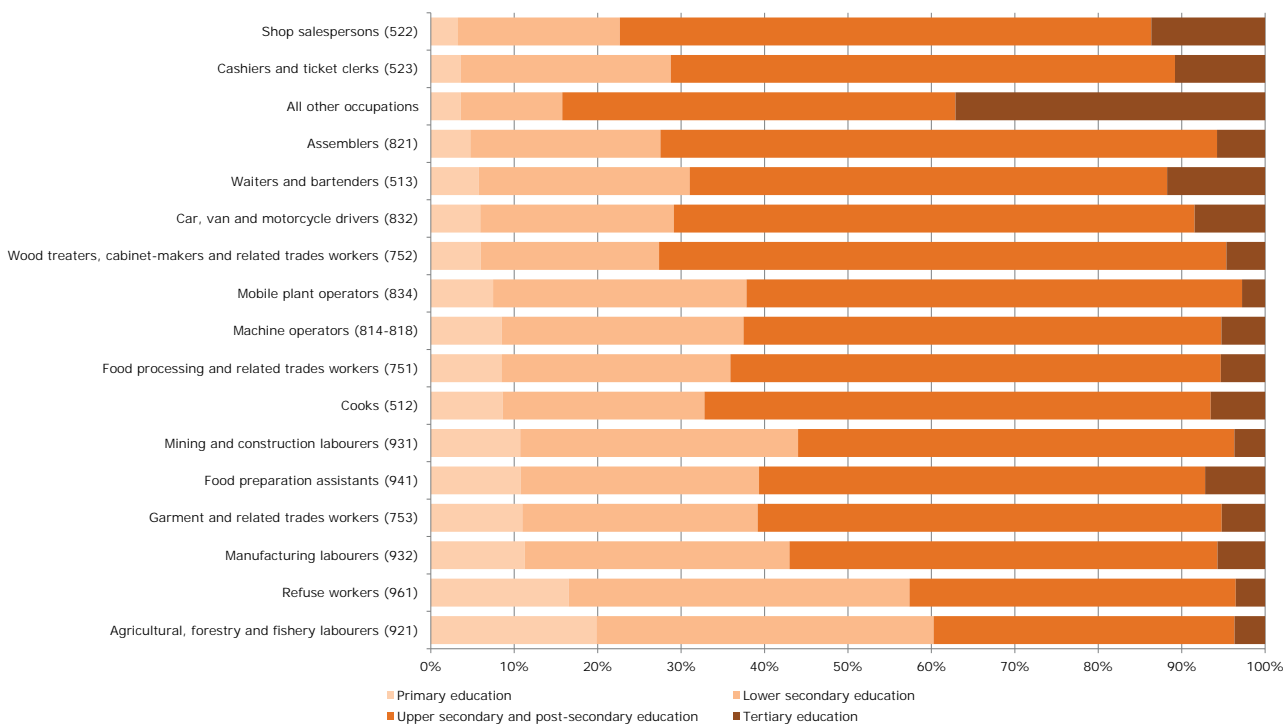
Notes: ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia.
Source: *EU LFS 2013*

Level of educational attainment

Education is a key variable for workers in OMD because it provides them with greater prospects of career development and the possibility of moving to jobs which are not OMD. However, the majority of OMDs have a higher proportion of workers with only primary education compared with all other occupations (4%). The highest proportion can be found among agricultural, forestry and fishery labourers (20%) (Figure 7). However, the proportion of workers with only primary education is lower than in all other occupations for shop salespersons (3%) and cashiers and ticket clerks (4%) – occupations that typically require secondary education according to ISCO definitions.

In general, workers in OMD have achieved lower levels of educational attainment. This has implications for their probability of accessing better jobs. None of the OMD has a proportion of workers above all other occupations having completed upper secondary or tertiary education. The generally lower level of educational attainment of OMD is itself a disadvantage for career development.

Figure 7: Level of educational attainment of workers in OMD, EU28



Notes: According to highest level of education or training successfully completed. ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia.

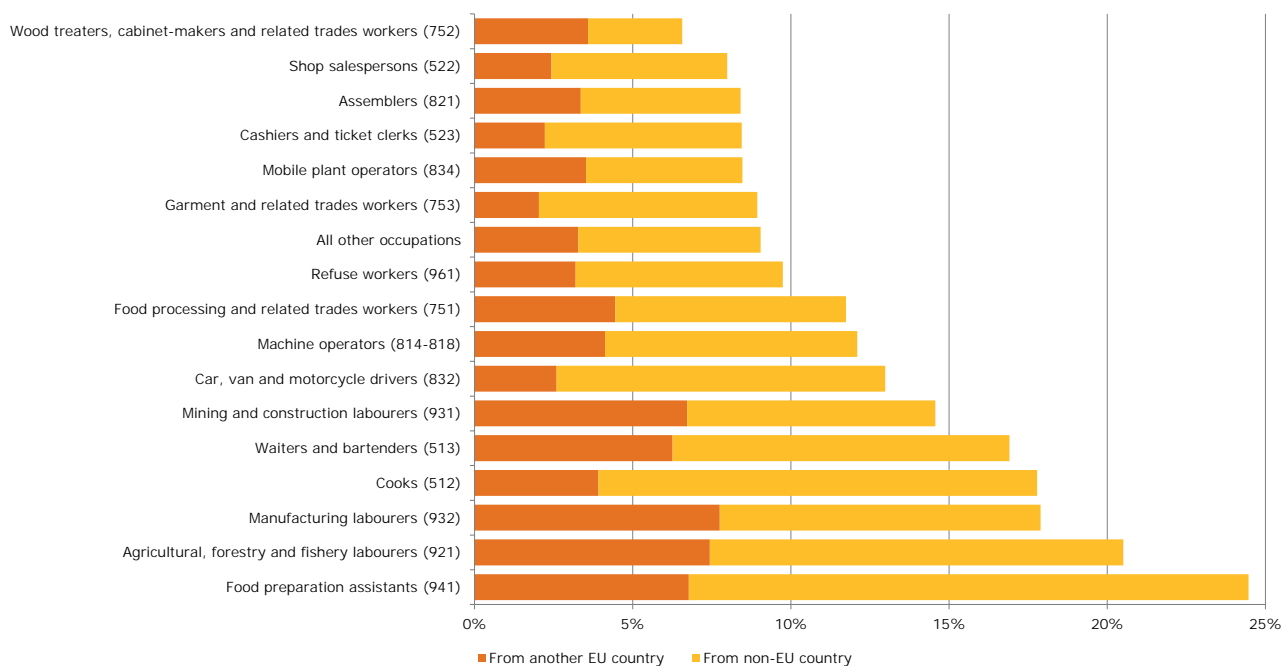
Source: *EU LFS 2013*

Share of foreign workers

Another characteristic of many OMD is the relatively high share of foreign workers. These workers are most often found as food preparation assistants (24%) and agricultural, forestry and fishery labourers (21%) (Figure 8). More than 15% of manufacturing labourers, cooks, waiters and bartenders are foreign workers. Thus, a number of OMD have a higher share of foreign workers compared with all other occupations; this is particularly the case for OMD in the hotels and restaurants and agriculture sectors. In these occupations, initiatives for the improvement of working conditions should take this fact into account.

About two-thirds (64%) of foreign workers in all other occupations are workers from countries outside the EU (Figure 8). Similarly, workers from outside the EU form the majority of foreign workers in most OMD. The high proportion of workers of foreign origin in some OMD could be related to the fact that some of jobs might not be wanted by nationals or need certain skills.

Figure 8: Proportion of foreign workers in each OMD in the EU28, 2013



Notes: ISCO-3 code is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia.
Source: *EU LFS 2013*

Conclusions

In very broad terms, relatively more people with a low level of educational attainment and young people are found in OMD than in all other occupations. In some OMD, there are also more foreign workers. Some OMD are highly segregated in terms of gender composition, with a higher share of women being found in occupations such as cashiers and ticket clerks. As described below, these are occupations that are relatively disadvantaged in relation to short hours/low income, atypical working hours, work–life balance issues and a poor social environment including high levels of stress. Chapter 2 shows that the gender variable interacts with others, leading to certain poorer conditions than in other occupations.

Working time and work–life balance

The job quality index on working time was one of the indices used to determine OMD for this study. This section examines the specific time dimensions for each selected OMD. Work–life balance is included as a variable related to the organisation and duration of working time.

Working time plays a crucial role in the health and well-being of workers. The Eurofound report, *Organisation of working time: Implications for productivity and working conditions* (Eurofound, 2013a), shows the positive or negative impact of specific working time schedules on work–life balance and health. For this reason, working time is one of the most important areas of EU employment policy intervention. For workers, working hours have a direct impact on standard of living, work–life balance and the overall sustainability of working life. For employers, working time is a key element in the assessment of costs and productivity.

This section looks at how OMD score in terms of working time duration, irregular and atypical working time and work–life balance.

Working time duration

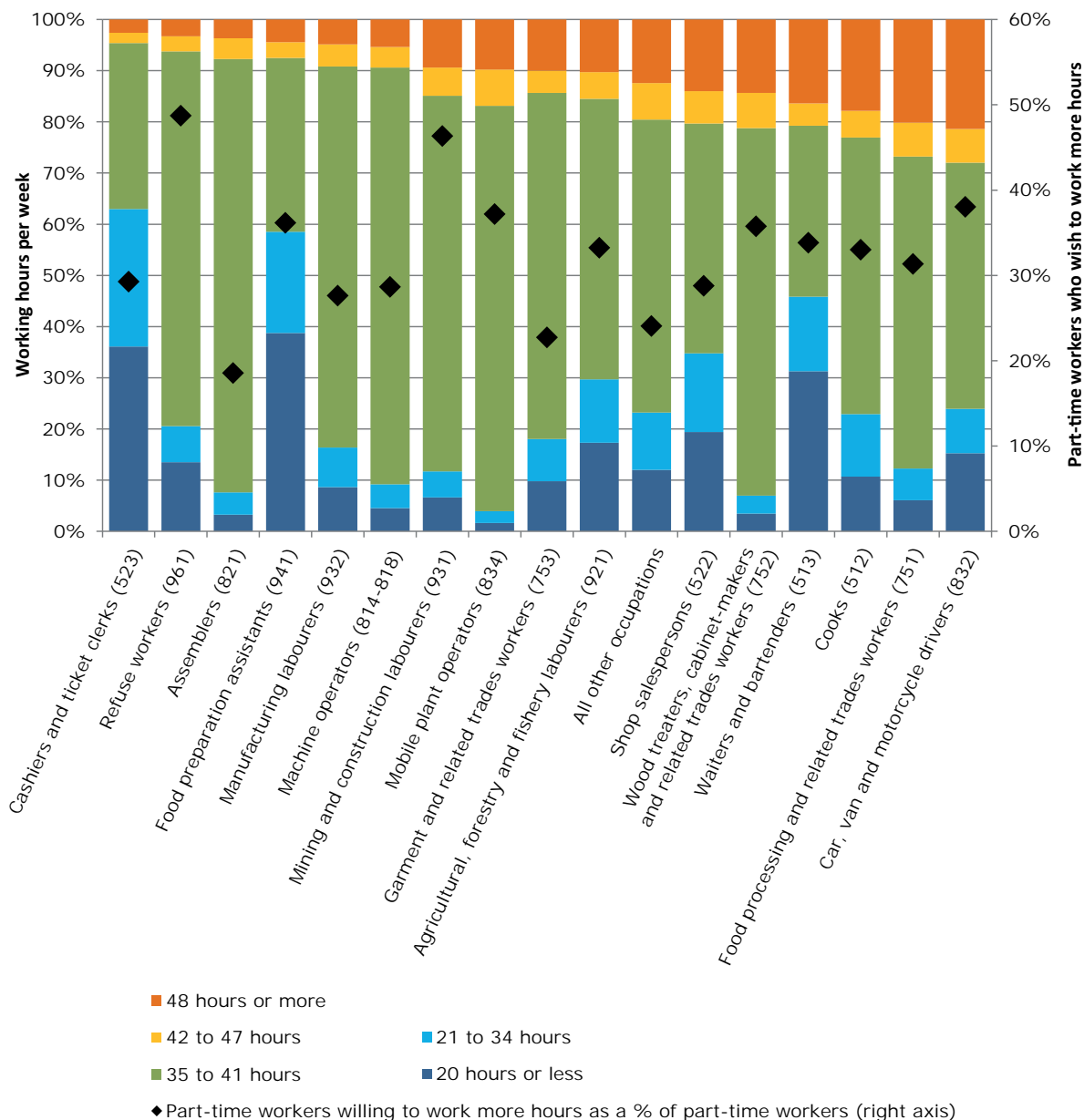
The Working Time Directive (2003/88/EC) lays down provisions for a maximum 48-hour average working week, including overtime, to protect workers from adverse health and safety risks. There is a statistical association between working longer than 48 hours per week and the relative probability of reporting a negative impact of work on health (Eurofound and EU-OSHA, 2014).

However, one in eight workers (12%) in the EU28 in 2010 still admitted to usually working more than 48 hours per week. Although this proportion is lower in the majority of OMD, some have long working hours exceeding the EU28 average.

Car, van and motorcycle drivers and food processing and related trades workers most often report working long hours (21%), followed by food processing and related trades workers (20%), cooks (18%) and waiters (16%) (Figure 9). Long hours in OMD are therefore mainly in those with a high proportion of workers in the Horeca sector and among drivers.

Usual working times exceeding 48 hours per week are the least prevalent in OMD among cashiers and ticket clerks and refuse workers (both 3%). However, they have a high share of workers working less than 20 hours (36%). Food preparation assistants (39%) form the highest proportion of workers who work 20 hours per week or less (Figure 9).

Figure 9: Weekly working time (left axis) and percentage of part-time workers who wish to work longer hours (right axis) in each OMD, EU28



Notes: Part-time workers are defined as those working 34 hours per week or less. ISCO-3 code for occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia. Source: EU LFS 2013

The proportion of workers working part time appears to be positively related to the proportion of women in the occupation. Part-time employment is covered by the Part-time Work Directive (97/81/EC), implementing the Framework Agreement on part-time work, which was signed by the social partners in 1997 (Eurofound, 2009). The literature indicates that part-time work has both positive and negative consequences. Among the positive effects is the possibility of combining work and private life commitments, increasing especially the female employment rate and generally enabling parents to spend more time with their children while remaining in employment. However, employees working part time have on average lower earnings and fewer possibilities for progressing in their career. Moreover, some results

suggest that the quality of part-time jobs is on average lower, although job satisfaction of part-time workers is on the whole similar to that of full-time workers (Eurofound, 2009).

An interesting aspect is whether a person works part time voluntarily or because they cannot find another suitable job. Working part time (34 hours a week or less) is not always the worker's choice but rather a necessity due to the unavailability of a full-time job – called 'involuntary part-time'. A quarter (26%) of EU28 workers who worked part time expressed a wish to work more hours (Figure 9). Occupations with a high proportion of workers in this situation are mainly male-dominated groups such as refuse workers (49%), mining and construction labourers (46%), drivers (38%) and mobile plant operators (37%). This applies to both men and women working in these occupations.

The only female-dominated occupation reaching a high proportion of workers dissatisfied with working part time is food preparation assistants (36%), although this is influenced by the fact that there are fewer opportunities to work full time (60% of food preparation assistants work part time). Male workers report involuntary part-time work more often (31%) than females in all occupations (24%), with the only exception being cashiers and ticket clerks.

Irregular and atypical working hours

Another important aspect of working time is whether the work takes place within or outside standard working hours. Since the 1980s, most industrial societies have experienced a trend towards the diversification, decentralisation and individualisation of working time patterns. This has been driven by companies' needs for greater adaptability in order to meet market constraints and by major changes in the gender division of labour (Eurofound, 2012b).

Irregular working time is understood as working hours that are allowed to vary between days and/or weeks. Irregular working time, along with overtime and part-time jobs, allows employers flexibility in regulating the working time. However, research indicates that greater irregularity in time schedules increases the probability of reporting difficulties with work–life balance and to a lesser extent of reporting that work has a negative impact on health. At the same time, autonomy in organising time seems to ease these negative effects (Eurofound, 2012a).

The index of irregular working hours used in this study (see box) is based on whether workers work the same number of hours every day and every week, the same number of days every week and whether they have fixed starting and finishing times. Car, van and motorcycle drivers, agricultural, forestry and fishery labourers, and waiters and bartenders prove to have the most irregular working hours among the OMD. Assemblers and machine operators have the most regular working times (Table 3).

Besides working on an irregular basis, workers may work atypical working hours such as nights or weekends. The extent to which an occupation has atypical working times was measured by an index of atypical working hours (see box) summarising night work, evening work and work during the weekends.

Occupations with a more irregular working pattern do not necessarily experience more atypical working hours (Table 3). There are large differences between the OMD with respect to atypical working time. Waiters and bartenders are by far the most affected. Cooks and food processing and related workers, food preparation assistants, drivers, shop salespersons and cashiers and ticket clerks belong to occupations suffering from atypical working hours, but their working times appear to be less atypical than those of waiters and bartenders. The least atypical working times among the OMD are observed in the case of wood treaters, cabinet-makers and related trades workers, and garment and related trades workers.

The **index of irregular working hours** was based on responses to EWCS2010 questions Q37A (Do you work the same number of hours every day?), Q37B (Do you work the same number of days every week?), Q37C (Do you work the same number of hours every week?) and Q37D (Do you work fixed starting and finishing times?). The variables Q37A, Q37B, Q37C and Q37D were given a value of '0' if the answer to these questions was 'yes' and a value of '1' if the answer was 'no'. For observations with known values for at least three of the questions, the index was calculated as follows:

$$index = 100 \frac{\text{Mean}_{individual} (Q37A+Q37B+Q37C+Q37D)}{\text{Mean}_{EU28} (Q37A+Q37B+Q37C+Q37D)}$$

The **index of atypical working hours** was based on responses to EWCS2010 questions Q32 (Normally, how many times a month do you work at night, for at least 2 hours between 10.00 pm and 05.00 am?), Q33 (How many times a month do you work in the evening, for at least 2 hours between 6.00 pm and 10.00 pm?), Q34 (How many times a month do you work on Sundays?) and Q35 (How many times a month do you work on Saturdays?). The scores of Q32 and Q33 were maximised at a value of 30 (to control for months with 31 days) and the scores of Q34 and Q35 at a value of 4 (to control for months with five weekends). For observations with known values for at least three of these questions, the index was calculated as follows:

$$index = 100 \frac{\text{Mean}_{individual} \left(\frac{Q32}{30} + \frac{Q33}{30} + \frac{Q34}{4} + \frac{Q35}{4} \right)}{\text{Mean}_{EU28} \left(\frac{Q32}{30} + \frac{Q33}{30} + \frac{Q34}{4} + \frac{Q35}{4} \right)}$$

Table 3: Index of irregular working hours and index of atypical working hours, EU28

Occupation	Index of irregular working hours	Index of atypical working hours
All other occupations	103	92
Machine operators (814-818)	55	85
Cooks (512)	86	187
Waiters and bartenders (513)	116	237
Shop salespersons (522)	78	154
Cashiers and ticket clerks (523)	93	155
Food processing and related trades workers (751)	73	179
Wood treaters, cabinet-makers and related trades workers (752)	88	51
Garment and related trades workers (753)	70	51
Assemblers (821)	48	73
Car, van and motorcycle drivers (832)	153	166
Mobile plant operators (834)	74	82
Agricultural, forestry and fishery labourers (921)	128	123
Mining and construction labourers (931)	81	59
Manufacturing labourers (932)	48	63
Food preparation assistants (941)	96	156
Refuse workers (961)	46	65

Notes: A higher value of the index means more irregular or atypical working hours, as appropriate. The average index of irregular working hours of all occupations in the EU28 is 100. ISCO-3 code of occupational group is given in brackets.

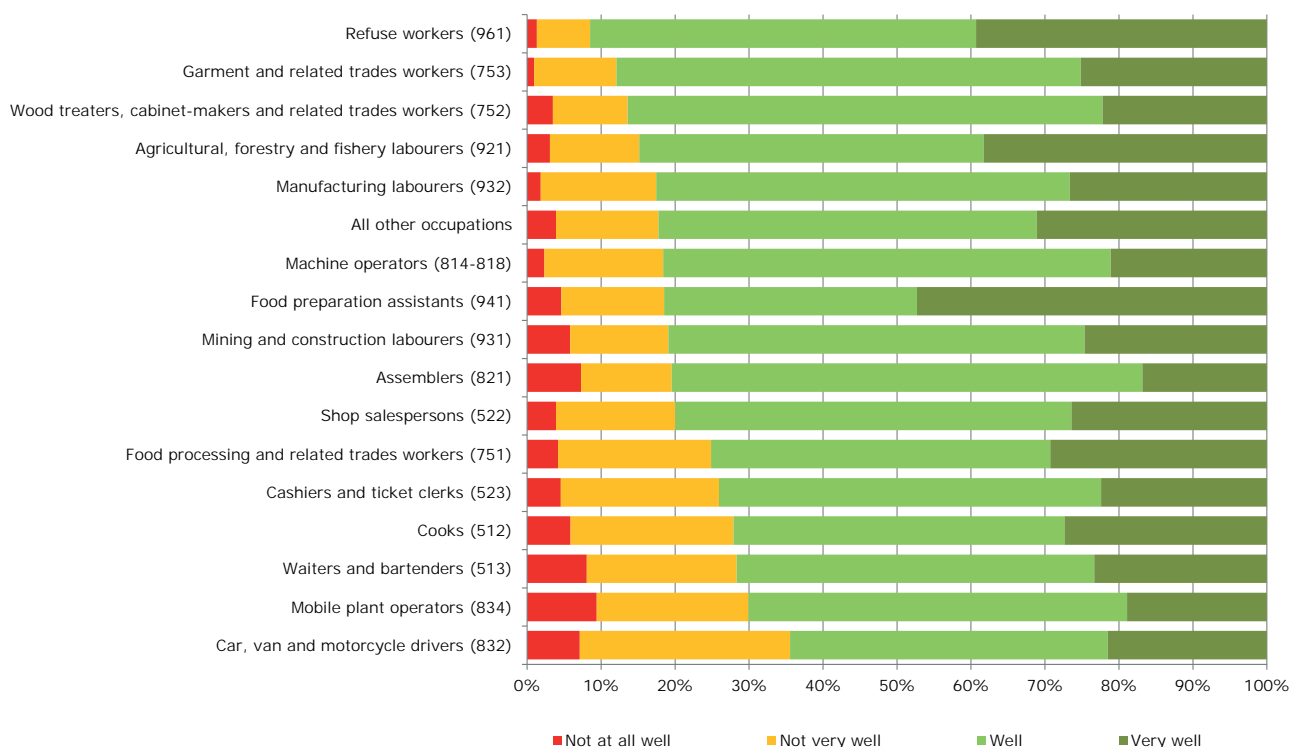
Source: EWCS2010

Work–life balance

Working hours are fundamental for work–life balance, that is, the balance between work and private life commitments. Given the variation in gender roles, conditions in a given occupation may lead to different outcomes for men and women. At the same time, variations appear along an individual’s life course.

More than eight out of ten European workers find that their working hours fit (very) well with their family or social commitments outside work. Among the OMD, refuse workers (91%) and garment and related trades workers (88%) most often say that they have a (very) good fit between their work and family or social commitments. The relatively worst work–life balance can be found among car, van and motorcycle drivers (64%), mobile plant operators (70%) and waiters and bartenders and cooks (both 72%) (Figure 10). These occupations have a high percentage of workers in irregular and atypical hours and/or who work long hours. Arguably, improvements in the duration and organisation of working time would improve the work–life balance in these occupations.

Figure 10: Workers’ perception of how well their working hours fit in with their family or social commitments outside work in the EU28, 2010



Note: ISCO-3 code of occupational group is given in brackets.
Source: EWCS2010

Conclusions

Car, van and motorcycle drivers and waiters and bartenders are OMD with a high share of workers with poor quality in relation to all indicators analysed: long hours, involuntary part-time, irregularity of working hours, atypical working time, and poor outcome in relation to work–life balance. It appears that occupations in Horeca and commerce have a high proportion of workers working atypical hours. Jobs with short working hours like those of cashiers or food preparation assistants are mainly occupied by women, which can have implications for other working conditions such as career development and income.

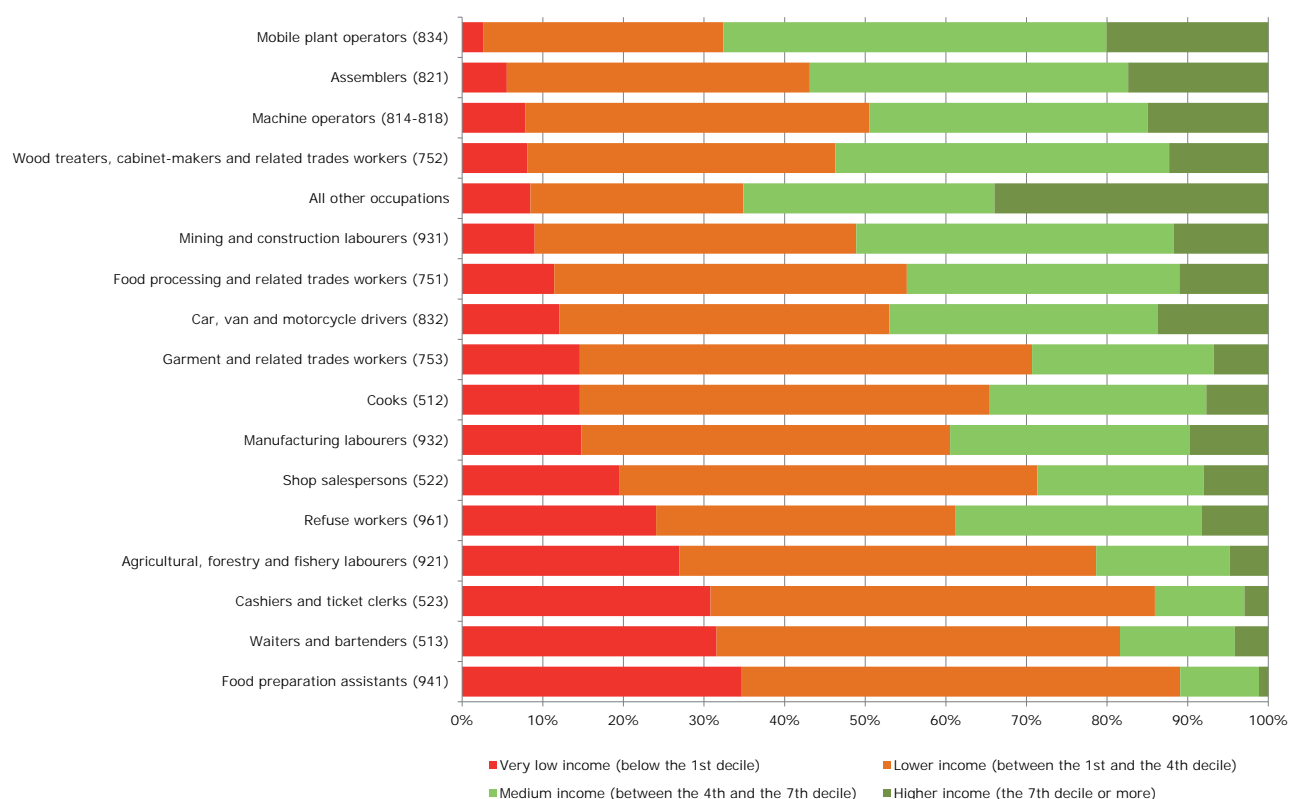
Income distribution

The effort of work has to be compensated for by a fee or a wage. Wages and salaries are important forms of compensation that employees get for their work. The self-employed determine the price of their services or products, which in turn establishes the income they will obtain from their work. Wages, earnings and/or income from work are a part of quality of work and employment. This section provides a glimpse into the income distribution of workers in OMD and whether they feel well-paid for the job they do and have sufficient earnings to make ends meet.

About 7% of employees in all other occupations have an income below the first decile in their country, meaning that their income is very low (Figure 11). A number of OMD have higher proportions of such workers, which means they are in a higher risk of in-work poverty. Mobile plant operators (3%) and assemblers (6%) have the lowest proportion of employees with a very low income among OMD (Figure 11). The highest proportion (above or just below 20%) of workers with a very low income can be found in some of the elementary occupations (food preparation assistants, agricultural labourers and refuse workers) as well as among waiters, cashiers and ticket clerks, and shop salespersons.

At the opposite side of the income distribution, 34% of workers in all other occupations have higher incomes (that is, at or above the seventh decile) (Figure 11). This proportion of higher incomes is not achieved by any OMD. Again, mobile plant operators and assemblers have the most advantageous position among OMD, with the highest proportion of workers earning higher incomes.

Figure 11: Income distribution for each OMD in the EU28, 2012



Notes: Income is measured as monthly (take home) pay from the main job. ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia.

Source: *EU LFS 2013*

An interesting perspective on the issue of income can be obtained when looking at workers' own assessment of whether they feel well paid for the job they do. About half of refuse workers (50%), car, van and motorcycle drivers (46%) and cashiers and ticket clerks (45%) believe they are not well paid for the work they do. For comparison, the proportion is about 30% in the case of all other occupations and even lower among mobile plant operators (27%), wood treaters, cabinet-makers and related trades workers (29%) and mining and construction labourers (30%).

When considering income figures, however, it is important to bear in mind that many other variables, apart from occupation, influence a person's final income. For example, occupations with many part-time workers may score lower because part-time workers receive income over a relatively shorter period of time.

This section aims to describe the income of workers in OMD relative to income in all other occupations. However, although income and the financial security/vulnerability of workers are closely related, the data presented allow only limited conclusions to be made about the income security/vulnerability of workers in OMD. When examining the financial security or vulnerability of workers, further factors such as household composition, social security systems or income composition in terms of variable pay need to be taken into account.

This assessment also looked at the share of workers reporting that they lived in a household with 'difficulty or great difficulty' to make ends meet. The results show this is the case for more than 20% of workers in all elementary occupations (ISCO-9), cashiers and ticket clerks and surprisingly machine operators. Apart from machine operators, the results suggest that low income has a strong influence on whether the household can make ends meet. The percentage for all other occupations is 11% of workers reporting 'difficulty or great difficulty' making ends meet.

Conclusions

It seems that certain disadvantages influence others. In general, those occupations with a lower level of educational attainment or those working shorter hours (also involuntarily) receive lower income. Examples are food preparation assistants and cashiers and ticket clerks. There is a high proportion of migrant workers among food preparation assistants, and a high proportion of cashiers and ticket clerks are women. Income is also a variable which can have consequences for opportunities to develop skills and access to health services in some countries, which in the end might influence the work ability of the worker in the long term.

Professional and employment status, career prospects and job insecurity

This section discusses the prevalence of permanent employment, temporary employment contracts, self-employment and family workers in the OMD. A worker's perception of their job security/insecurity and possibilities for career development is influenced by whether they have a temporary contract or a contract for an indefinite period. National labour market regulation and the institutional context can influence these aspects as well.

The proportion of employees with a permanent job or work contract of unlimited duration varies considerably across the OMD (Figure 12). By far the lowest proportion of workers with permanent jobs was recorded in the case of agricultural, forestry and fishery labourers (32%). This compares with 75% for all other occupations, 69% for mining and construction labourers, 68% for three groups (refuse workers, wood treaters, cabinet-makers and related trades workers, and car, van and motorcycle drivers) and 66% for waiters and bartenders. The highest proportion of employees with permanent jobs was found in machine operators and assemblers (both 86%) and cashiers and ticket clerks (84%).

In economies where permanent workers have high levels of employment protection, temporary employment contracts provide a device for enhancing labour market flexibility, since companies can regulate employment by adjusting temporary contracts (Eurofound, 2012c). Although temporary employment offers less employment security to the workers, it may serve as a route to a permanent job.

Just over a tenth (14%) of workers in the EU have temporary contracts (Eurofound, 2012c, Table 1). Among the OMD, agricultural, forestry and fishery labourers have by far the highest proportion of employees with temporary contracts (38%) (Figure 12). Other OMD that have more than double the EU average of temporary contract workers are refuse workers (28%), mining and construction labourers (24%) and waiters and bartenders (21%). However, garment and related trades workers, car, van and motorcycle drivers (both 6%) and wood treaters, cabinet-makers and related trades workers (9%) and shop salespersons (10%) have a lower proportion of temporary contracts than the EU average.

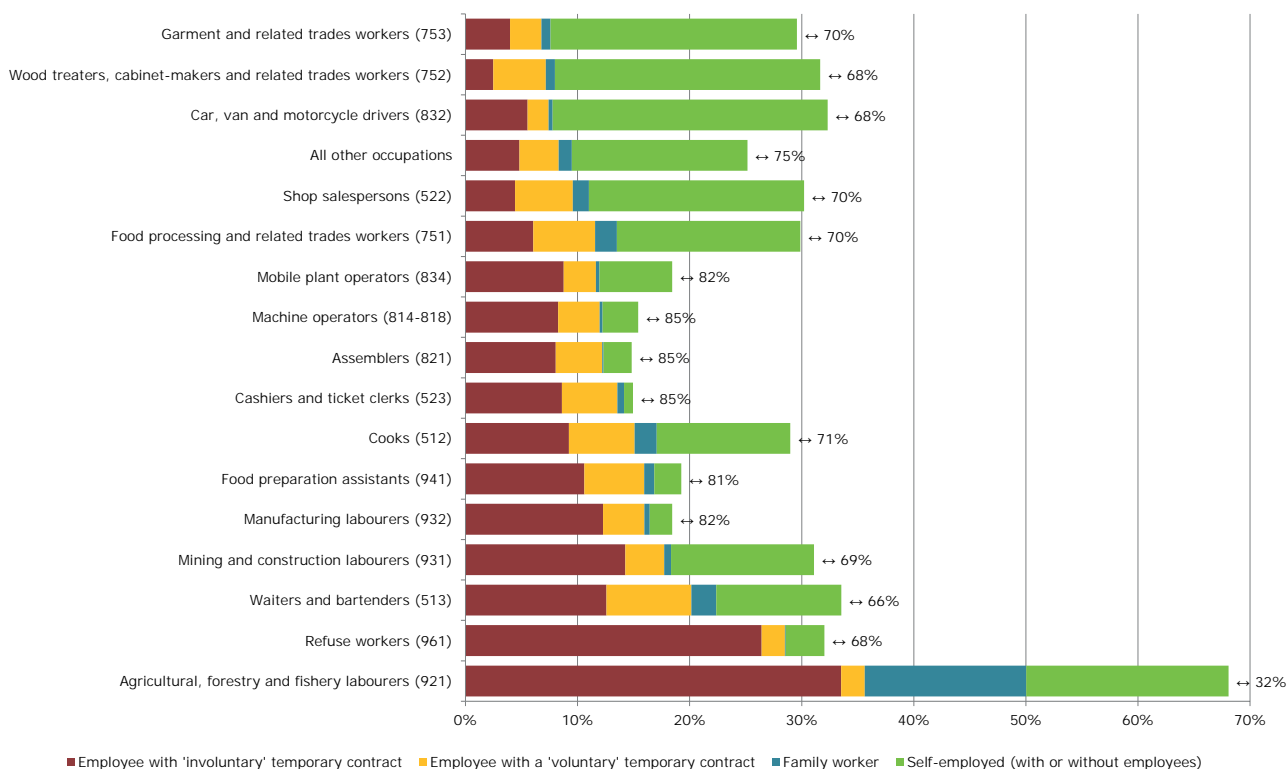
The majority of employees (58%) with temporary contracts in OMD did not opt to work in a temporary position, but were forced to do so because they could not find a permanent job. The proportion of involuntary temporary workers in temporary employment is the highest among agricultural, forestry and fishery labourers, and refuse workers (90% and 88% of temporary workers, respectively). On the other side of the scale are wood treaters, cabinet-makers and related trades workers and shop salespersons, among which less than half (34% and 45%, respectively) of temporary workers are involuntarily temporary.

Almost one in six (15%) of EU workers is self-employed with or without employees (Eurofound, 2012c, p. 26). It is usually assumed that the main characteristic of self-employment is an entrepreneurial way of working characterised by autonomy of decision-making in organising work and hiring people, financial independence and related responsibility and constraints. The highest proportion of self-employed among OMD can be found in the case of car, van and motorcycle drivers (26%) and wood treaters, cabinet-makers and related trades workers (25%). However, almost no self-employed can be found among cashiers and ticket clerks and manufacturing labourers (both 1%) (Figure 12).

A specific category of workers are family workers. Family workers are people who help another member of the family to run an agricultural holding or other business, provided they are not considered as employees. The only OMD which has a substantial proportion (15%) of family workers are agricultural, forestry and fishery labourers. For all other OMD, the proportion of family workers did not exceed 2% (Figure 12).

Both agricultural labourers and refuse workers are OMD that combine both high proportions of temporary work and on an involuntary basis.

Figure 12: Composition of workers in OMD according to the type of employment contract, EU28



Notes: Only workers' first (main) jobs are included. The percentage at the end of the bar shows the proportion of workers who have a permanent job. Employees with 'involuntary' temporary contract refers to those who are employed in a temporary job because they could not find a permanent contract. Employees with 'voluntary' temporary contract includes those who do not want a permanent job, are in a probation period or have a contract covering a period of training (for example, apprentices, trainees and research assistants). ISCO-3 code of occupational group is given in brackets. No data are available for Bulgaria, Malta, Poland and Slovenia. Source: *EU LFS 2013*

Another disadvantaged situation is not having an employment contract. Among all workers in OMD, 9% have no contract whereas this figure is only 4% among all other occupations. The implications of not having a contract differ from country to country, but it can lead to difficulties in proving an employment relationship and ensuring protection of workers' rights. The findings of the EWCS2010 show that waiters and bartenders, mining and construction labourers, agricultural labourers, food preparation assistants and drivers are OMD with more than 10% of workers with no contract.

Situations like temporary employment or having no contract can be a source of job insecurity. In OMD, more than 30% of food preparation assistants, manufacturing labourers, refuse workers and mining and construction labourers reported that they might lose their job in six months. Also, a considerable proportion of machine operators and assemblers had that feeling.

Although workers in manufacturing do not have a high proportion of jobs with temporary contracts, they may be threatened by restructuring processes in some contexts linked to off-shoring or the economic crisis. Career prospects exist when a job offers good prospects for career advancement; this in turn is linked to employment status. The lower share of workers reporting that their job offers good prospects for career advancement are drivers, labourers in agriculture and manufacturing, machine operators and cashiers and ticket clerks (less than 16% for all these occupations). All OMD present a higher proportion of workers in jobs with poor career prospects in comparison with the rest of occupations.

Conclusions

Working involuntarily on a temporary contract for a long time can damage a worker's career prospects. Indeed, for many Europeans, temporary employment may become a trap. Research shows that still holding a temporary contract after two years constitutes a severe handicap for moving from low pay (European Commission, 2012b). OMD in general have poorer career prospects.

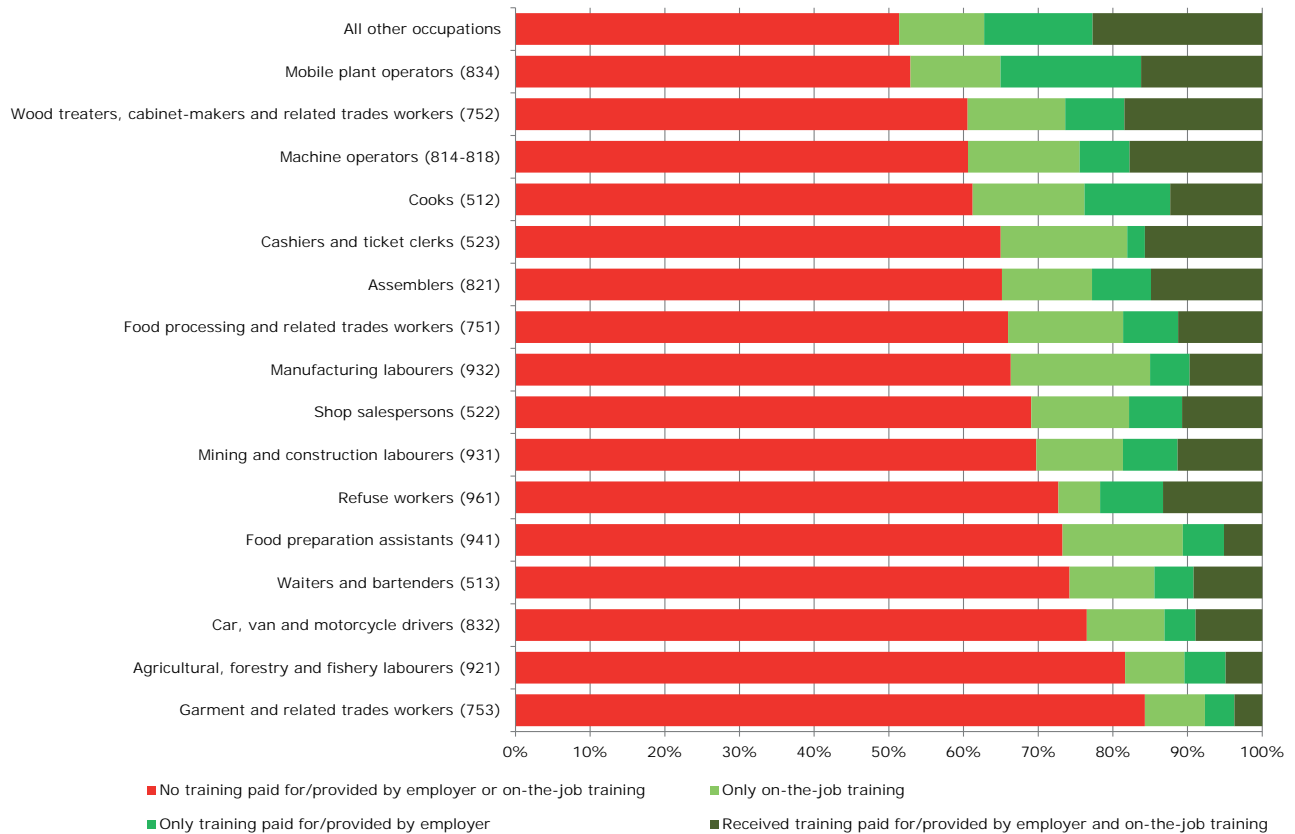
Access to training and skills development is an aspect that has a strong influence on career development. Given that most OMD are in the mid to low or low rank of skills in the occupational classification, the role of training is essential for these workers to achieve promotion and better working conditions.

Training provision

Training is one aspect of intrinsic job quality. The European Commission Communication, *An agenda for new skills and jobs*, highlights the need for people to have the skills of the future for a competitive Europe. One way is participation in lifelong learning through the provision of training (European Commission, 2010b).

Half (50%) of employees in the EU did not receive any training paid for by their employer or on-the-job training in the 12 months preceding the EWCS2010. Each single OMD had, compared with the average for all other occupations, a lower proportion of employees who received training provided by their employers (or by themselves if they were self-employed) and/or on-the-job training in the 12 months preceding the survey (Figure 13). The occupations with the lowest proportions of employees who participated in such training activities were garment and related trades workers (16%) and agricultural, forestry and fishery labourers (18%). Mobile plant operators, however, had the least disadvantaged position among the OMD in terms of training, with 47% receiving training provided by their employers (or by themselves if they are self-employed) and/or on-the-job training – a proportion which is very similar to the average for all other occupations (51%). At the same time, mobile plant operators had the highest proportion of employees receiving training paid for/provided by their employers (35%). The occupations with the highest proportion of on-the-job training were machine operators, cashiers and ticket clerks (both 33%) and wood treaters, cabinet-makers and related trades workers (32%).

Figure 13: Proportion of employees who in the previous 12 months underwent training to improve their skills and/or on-the-job training in the EU28, 2010



Notes: Paid for by their employer or by themselves if self-employed. ISCO-3 code of occupational group is given in brackets.
Source: *EWCS2010*

Analysis of the EU LFS 2013 data also shows that OMD participate less in work-related training outside the workplace than all other occupations. The results could indicate not only fewer opportunities for training in general, but also that because of past experiences some workers in OMD are less interested in training or they might feel they do not need further training for their occupation.

Conclusions

Training is one of the key elements for career development. Many workers in OMD are low skilled and for them training is essential, not only for advancing within the occupation or sector of activity, but also for moving to other jobs with better conditions. The findings suggest that workers in OMD have less access to work-related training, which combined with being on a temporary contract, could cause workers in most OMD to be less likely to progress in their career.

Health and well-being: risks and outcomes

The European treaties, legislation and policy measures recognise the importance of preserving the health and safety of workers, protecting their health and maintaining their well-being. The Framework Directive on Safety and Health at Work (89/391/EEC) forms a key document in this respect (European Commission, 1989). The directive obliges employers to implement preventive measures to guard against occupational accidents and diseases, both from physical and psychosocial risks.

A person's occupation tends not to change many times throughout the life course compared with the job performed. A person can change jobs within the same occupation more often than they change occupations. The occupational analysis remains essential in order to look at health risks throughout the life course.

Health risks

Table 4 shows the values of indices of physical risks for OMD. These indices were constructed to summarise a number of questions posed to workers in the EWCS2010 and cover workers' exposure to ergonomic risks, biological and chemical risks, and ambient risks. In general, most OMD are exposed to physical risks to a larger extent than all other occupations.

Occupations with the highest exposure to the three types of risks are wood treaters, cabinet-makers and related trades workers, mining and construction labourers, and refuse workers. Manufacturing labourers are particularly exposed to ergonomic risks, while machine operators, agriculture workers, assemblers and food processing workers are highly exposed to both ergonomic and ambient risks. Mobile plant operators are mainly exposed to ambient risks. Certain OMD (drivers, shop salespersons and cashiers and ticket clerks) are relatively not very much exposed to physical risks. As expected, physical risks are mostly reported by workers in occupations within manufacturing sectors.

Table 4: Index of exposure to ergonomic risks, biological and chemical risks, and ambient risks per occupation in the EU28, 2010

	Index of exposure		
	Ergonomic risks	Biological and chemical risks	Ambient risks
Car, van and motorcycle drivers (832)	94	82	92
All other occupations	96	101	97
Shop salespersons (522)	103	77	77
Cashiers and ticket clerks (523)	106	82	88
Waiters and bartenders (513)	112	78	91
Food preparation assistants (941)	114	105	108
Garment and related trades workers (753)	116	97	102
Mobile plant operators (834)	120	97	166
Cooks (512)	120	97	117
Food processing and related trades workers (751)	130	91	138
Assemblers (821)	133	115	143
Agricultural, forestry and fishery labourers (921)	133	102	151
Machine operators (814-818)	134	113	154
Refuse workers (961)	137	141	172
Manufacturing labourers (932)	138	104	127
Wood treaters, cabinet-makers and related trades workers (752)	145	137	147
Mining and construction labourers (931)	146	120	169

Notes: The value of the index equal to 100 is the EU28 average in 2010. A higher value of an index means that a particular occupation is on average more exposed to the risk concerned. ISCO-3 code of occupational group is given in brackets.

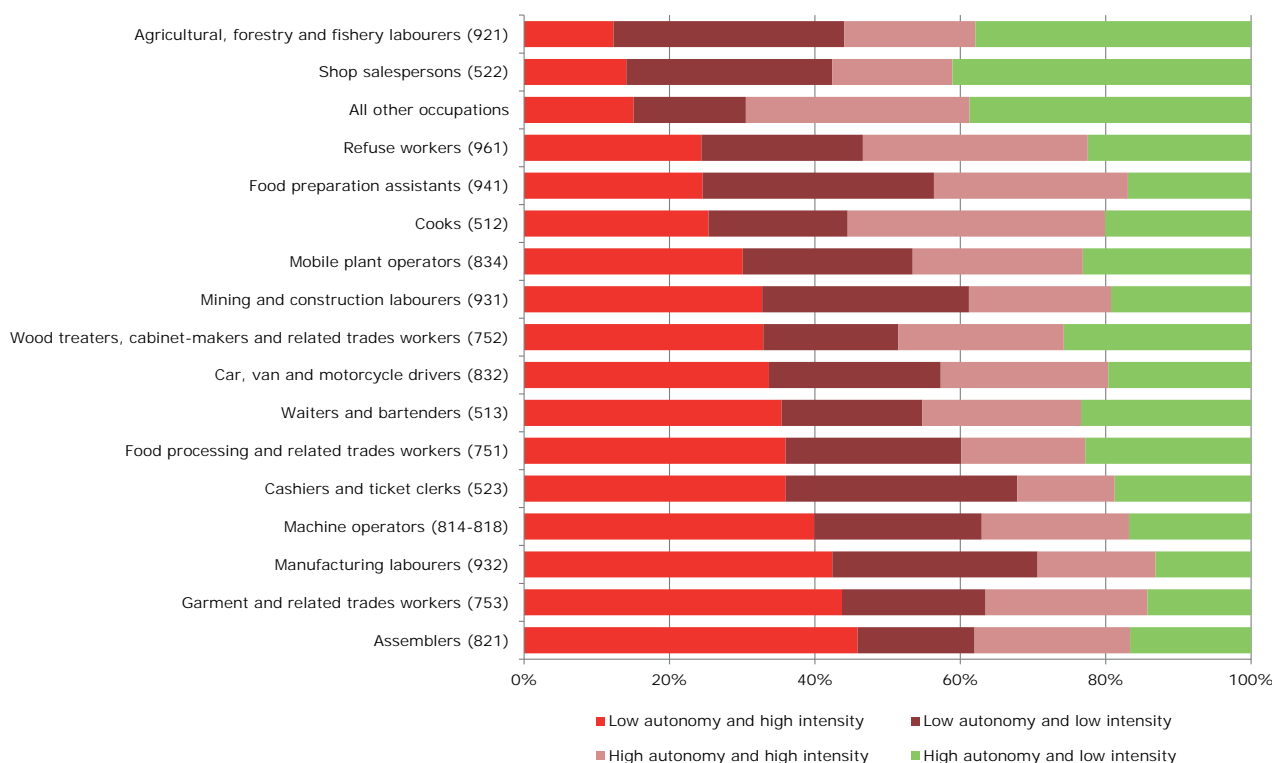
Source: *EWCS2010*

However, occupations which do not experience a high exposure to physical risks may still be exposed to psychosocial risks such as having high levels of work intensity (Figure 14) or a poor social environment (Table 5).

The job demand and job control model of Robert Karasek explains stress at work and links it to the interaction of psychological demands from work with the degree of control or decision latitude of the workers (Karasek, 1979). The model hypothesises that job strain (work-related stress) is highest when workers are put under high work demands while being limited in the extent to which they control the way in which they carry out their job.

In terms of high strain jobs (that is, those with low autonomy and high intensity), assemblers, garment and related trades workers, manufacturing labourers and machine operators are among the occupations with a relatively high proportion of workers in that situation. Other occupations in relatively high strain jobs are cashiers and ticket clerks, waiters and bartenders, drivers, and food processing and related trades workers (Figure 14). Cooks is an occupation with high work intensity, but a high proportion of them also report a high level of autonomy, which can contribute to diminishing to some extent the potential damaging effects of high intensity.

Figure 14: Job autonomy and work intensity in each OMD in the EU28, 2010



Notes: Distribution into groups is based on indices of job autonomy and work intensity as used in the overview report of EWCS2010 (Eurofound, 2012c). The indices range between 0 and 100 and are constructed by calculating the average value of a number of variables. The **work intensity index** is based on questions Q45a and Q45b, asking whether the respondents' work involves working at very high speed and to tight deadlines, and Q51g asking whether the respondent has enough time to get the job done. Cases having a work intensity index <50 are considered as having low intensity, while cases with work intensity index ≥50 are considered to have high intensity. The **job autonomy index** is based on questions Q50a, Q50b and Q50c asking whether respondents can change the order of their tasks, methods of work and speed or rate of work, question Q51e on having a say in the choice of working partners, and Q51f on being able to take a break when desired. Cases having a job autonomy index of ≤50 are considered as having low autonomy while cases with a job autonomy index of >50 are considered to have high intensity. ISCO-3 code of occupational group is given in brackets.

Source: EWCS2010

Overall, the index of good social environment seems to be poorer among cashiers and ticket clerks, drivers, refuse workers, food preparation assistants and waiters and bartenders (Table 5). This means that these OMD might be more affected by a lack of support and/or adverse social behaviours such as violence and harassment more than other occupations. A gender difference is also seen with, for example, female waiters reporting a worse social environment than their male counterparts.

Some OMD are in a high psychosocial risk exposure environment based on the various indices. Cashiers and ticket clerks, drivers, waiters and bartenders, manufacturing labourers and food preparation assistants are OMD with relatively higher exposure to high intensity, low autonomy and a poor social environment compared with other occupations.

Table 5: Proportion of workers who work in a good social environment (%) in the EU28, 2010

	Men	Women
Cashiers and ticket clerks (523)	*	70
Car, van and motorcycle drivers (832)	71	*
Refuse workers (961)	75	*
Manufacturing labourers (932)	76	77
Food preparation assistants (941)	77	80
Waiters and bartenders (513)	78	74
Shop salespersons (522)	78	78
Cooks (512)	79	83
All other occupations	79	78
Assemblers (821)	79	77
Machine operators (814-818)	79	78
Food processing and related trades workers (751)	79	82
Mining and construction labourers (931)	80	*
Agricultural, forestry and fishery labourers (921)	81	78
Wood treaters, cabinet-makers and related trades workers (752)	81	*
Mobile plant operators (834)	81	*
Garment and related trades workers (753)	86	82

Notes: The index of good social environment summarises the social support and absence of abuse in the workplace. It is based on questions Q51A (help and support from colleagues), Q51B (help and support from manager), Q58A (manager provides feedback on ones work), Q58B (manager respects one as a person), Q58C (manager is good at resolving conflicts), Q58D (manager is good in planning and organising the work), Q58E (manager encourages one's participation in important issues), Q77E (respondent has very good friends at work), Q70A (one is subject to verbal abuse), Q70B (one is subject to unwanted sexual attention), Q70C (one is subject to threats and humiliating behaviour), Q71A (one was subjected to physical violence in the past 12 months), Q71B (one was subjected to bullying/harassment in the past 12 months) and Q71C (one was subjected to sexual harassment in the past 12 months) in the EWCS2010.

* No index is presented because the sample size was less than 50.

ISCO-3 code of occupational group is given in brackets.

Source: *EWCS2010*

The proportion of workers in high strain jobs in most OMD is higher than in all other occupations. But in terms of social environment, the average for all other occupations ranks in the middle. The list of occupations with the highest exposure to psychosocial risks differs to some extent from the list of occupations with the highest exposure to physical risks (Table 6). More service-related occupations are subjected to psychosocial risks, whereas more manufacturing-related occupations have a high exposure to some physical risks. Nevertheless, a typical manufacturing occupation, such as assemblers, appears to be exposed to a relatively high degree to both types of risks.

Table 6: Occupations with a relatively high exposure to health risks

Psychosocial risks	Physical risks
<ul style="list-style-type: none"> • Cashiers and ticket clerks (JS, SE) • Drivers (JS, SE) • Waiters and bartenders (JS, SE) • Manufacturing labourers (JS, SE) • Food preparation assistants (JS, SE) • Assemblers (JS) • Refuse workers (SE) 	<ul style="list-style-type: none"> • Wood treaters, cabinet-makers and related trades workers • Mining and construction labourers • Refuse workers • Machine operators • Mobile plant operators • Agricultural workers • Assemblers

Notes: Psychosocial risks: exposure to high job strain (JS) and poor social environment (SE). Physical risks: index 40% higher than EU average in any type of physical risk.

Information about health and safety contributes to the prevention of physical and psychosocial risks. Workers in OMD appear to be less informed about the health and safety risks related to the performance of their jobs than those in all other occupations. About one in five garment and related trades workers (20%), for example, perceives themselves as being not well informed. However, the percentage of not well-informed workers in the case of wood treaters, cabinet-makers and related trades workers (5%) and cooks (5%) is considerably lower than that for all other occupations (10%).

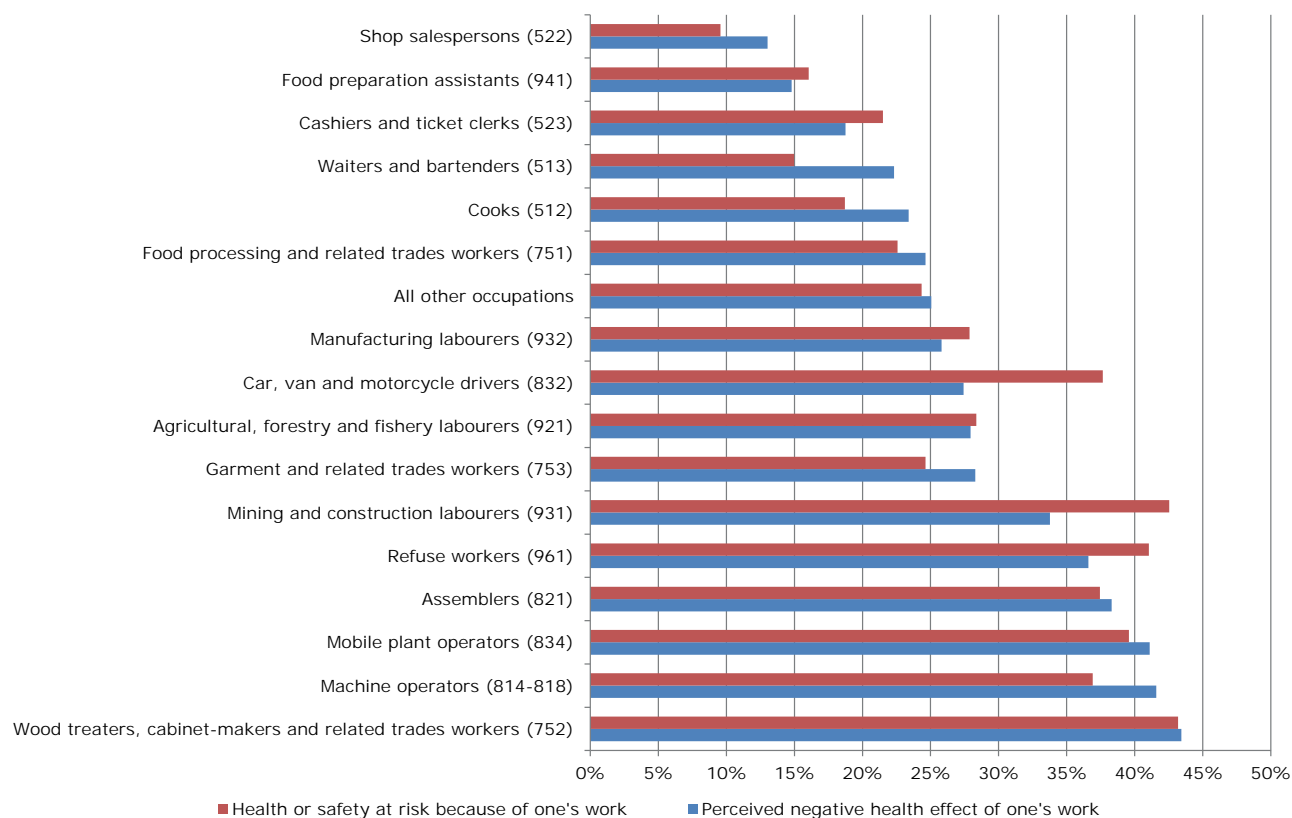
Health outcomes

Exposure to physical and psychosocial risks may have direct consequences for the health of workers. Moreover, some aspects such as monetary reward and promotion possibilities (Siegrist, 1996) or job insecurity and irregular working hours (Eurofound and EU-OSHA, 2014) influence the health of workers in relation to work.

A quarter (24%) of workers in all other occupations think their health is at risk because of their work (Figure 15). While this percentage is lower in some OMD such as shop salespersons (10%) or waiters and bartenders (15%), it is considerably higher in other OMD. The occupations that are perceived to be most risky for workers' health among OMD are wood treaters, cabinet-makers and related trades workers, mining and construction labourers (both 43% of workers working in these occupations) and refuse workers (41%). They are also occupations with a high exposure to physical risks (Table 6).

A related indicator is the effect of work on health. It is not by chance that machine operators, assemblers, mobile plant operators, mining and construction labourers report higher perceived negative effects of work on health (38% or more). All of them are on the list of high exposure to physical risks (Table 6). One in four workers (25%) in all other occupations shares this opinion (Figure 15). However, some OMD such as shop salespersons (13%) and food preparation assistants (15%) have even lower proportions of workers experiencing negative health effects because of their jobs.

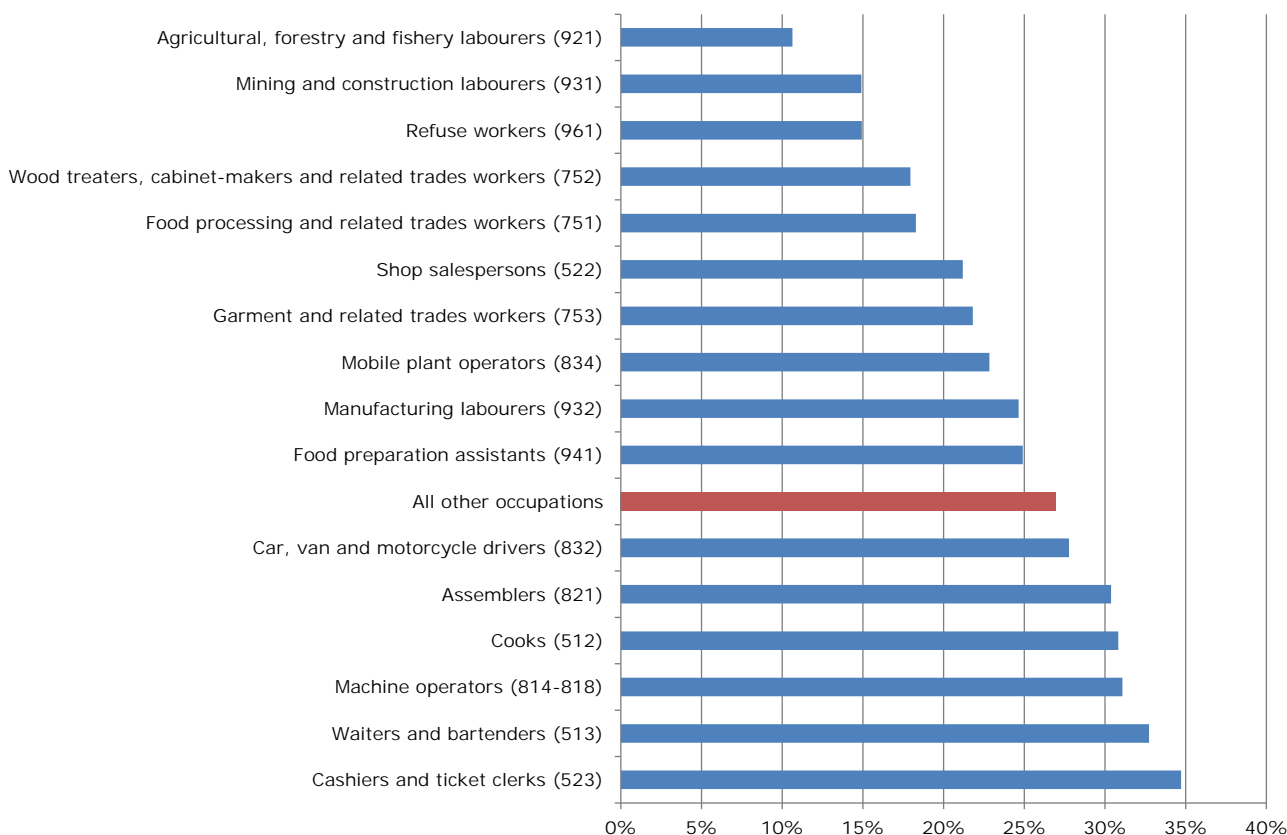
Figure 15: Proportion of workers who think their health or safety is at risk because of their work, or who think their work affects their health negatively in the EU28, 2010



Note: ISCO-3 code of occupational group is given in brackets.
Source: EWCS2010

According to the report, *Psychosocial risks in Europe: Prevalence and strategies for prevention* (Eurofound and EU-OSHA, 2014), social environment aspects (for example, dealing with angry clients, the need to hide feelings and adverse behaviour) and work intensity are strongly associated with the level of stress. Three OMD with a poor social environment (cashiers and ticket clerks, waiters and bartenders, and drivers) have a stress level higher than all other occupations (Figure 16). Three OMD with a high work intensity (machine operators, cooks and assemblers) have a higher stress level than all other occupations. In these OMD, the share of workers reporting stress is higher than in all other occupations. However, this is not the case for the other OMD. This could be interpreted that the social environment can be as good or as bad in occupations included in the ‘all other’ category as in these OMD.

Figure 16: Percentage of workers reporting that they experience stress at work always or most of the time, 2010



Note: ISCO-3 code of occupational group is given in brackets.
Source: EWCS2010

Presenteeism refers to a phenomenon whereby ‘employees go to work despite feeling so sick that they should have stayed at home’ (Heponiemi et al, 2010, p. 830). Presenteeism can have serious negative consequences for health as well as loss of productivity (Eurofound, 2012a).

When questioned for the EWCS2010, about 38% of workers in all other occupations admitted they had worked when sick in the past 12 months. Quite surprisingly, with the exception of cashiers and ticket clerks (45%), the proportion of workers who had worked when sick is lower in all OMD. The lowest proportions were seen in mobile plant operators and wood treaters, cabinet-makers and related trades workers (both 23%).

Conclusions

Machine operators and assemblers seem to suffer from both psychosocial risks due to high work intensity and physical risks, especially ambient and ergonomic risks, with negative consequences on their stress levels and general health. The social environment can affect OMD and workers in all other occupations to the same extent. Among OMD, cashiers and ticket clerks, waiters and bartenders, and drivers are negatively affected by their social environment.

Sustainability of work

With the average age of the population rising, people aged 55–64 years-old make up an increasing share of workers in Europe. This demographic shift, as well as ongoing threats to the sustainability of national welfare and pension systems, has increased pressure for reforms to encourage longer careers (Eurofound, 2013b). However, workers who face the most difficult conditions and have frail health will either leave a job that places demands on their health or leave the labour market completely (Eurofound, 2012a).

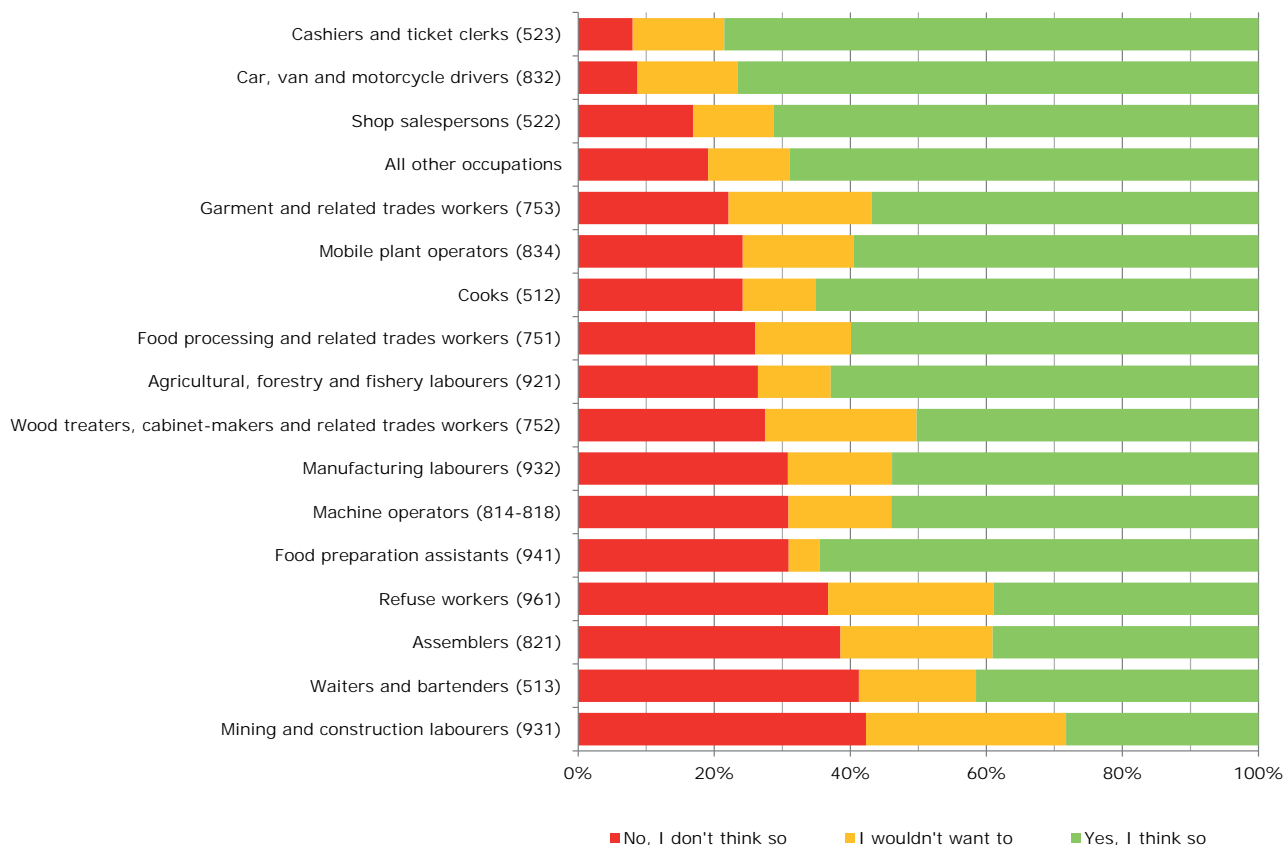
Understanding the role that work has on a person's career is an important dimension for meeting the EU2020 target of high employment as it will impact, for example, on whether someone will retire early or continue working until they reach retirement age. Some of the working conditions referred to before are related to being able to work such as work–life balance, job insecurity, and in general high exposure to physical and psychosocial risks (Eurofound, 2012a; Eurofound and EU-OSHA, 2014).

Various factors affect the complex relationship between employment and working conditions and sustainability of work. Apart from the working environment, aspects like employment and pension's policy, level of income or health status also play a role (Eurofound, 2013b, 2013c). As noted above, a high proportion of OMD have a relatively low income which may incentivise participation in the labour market depending, for example, on the characteristics of the employment or pension system.

Health status is clearly a variable related to being able to work. The occupational dimension is a relevant perspective for studying the sustainability of working life, since many workers are in the same occupation for a large part of their working life.

The reasons for not being able to work at 60 years-old can differ from one occupation to another. However, most OMD have a lower proportion of workers aged 45 years-old or more who think that they will be able to do the same job they are doing at the age of 60 years-old than those in all other occupations (69%) (Figure 17). All OMD together have 55% of workers who feel that they are going to be able to work in their job when they are 60 years-old. Among workers in OMD aged more than 45 years-old, by far the lowest proportion (28%) are mining and construction labourers followed by refuse workers and assemblers (both 39%) and waiters and bartenders (42%). However, cashiers and ticket clerks (79%), car, van and motorcycle drivers (77%) and shop salespersons (71%) have a higher proportion than the average of all other occupations (68%).

Figure 17: Proportion of workers (%) aged 45 or more who think they will be able to do the same job when they are 60 years-old in the EU28, 2010



Note: ISCO-3 code of occupational group is given in brackets.
Source: EWCS2010

Differences between OMD and other occupations

Previous sections discussed various characteristics of the working conditions of workers in OMD. Not surprisingly, in each aspect some occupations were more disadvantaged than others. For some working conditions, OMD scored even better than the average of all other occupations, but it is not the case for most conditions. This section summarises the information provided above to give a more general view of the working conditions in individual OMD. Figure 18 shows the relative position of each OMD in comparison with the rest of the OMD and all other occupations. The relative position was determined on the basis of a score that was calculated as follows:

$$Score = \frac{\text{proportion}_{\text{occupation}} - \text{proportion}_{\text{all else occupations}}}{\text{standard deviation (average proportions of all OMD and average of all other occupations)}}$$

There are some aspects of working conditions in which the average score in most OMD is lower than in the whole workforce and all other occupations (that is, areas where they have poor conditions). These aspects are:

- perception of not being well paid for the job and low income;
- involuntary part-time or temporary contract;
- high job strain (low autonomy and high work intensity);
- lack of training provision by employer;
- exposure to physical or psychosocial risks.

Having a low income increases the risk of in-work poverty. Moreover, the feeling of not being well paid for the job can lead to stress or health problems according to Siegrist (1996). According to his model, a crucial job factor for health consequences is the degree to which the workers are rewarded for their efforts. Clearly, other common conditions can have implications for the health of workers such as job strain (Karasek, 1979) and exposure to physical risks. Involuntary situations regarding part-time and temporary contracts are factors related to job insecurity and career prospects.

Analysis of EWCS2010 data shows that:

- all OMD (except drivers) have a higher share of workers reporting job insecurity;
- there is a lower share of workers with career prospects in all OMD without exception than in all other occupations.

The interaction between the disadvantages in OMD can be quite damaging for the workers. The combination of job insecurity, physical risks, job strain, low salaries and lack of training or some of them can interact, with negative consequences for workers' career development, and health and income in the long term. In practical terms, this means that some workers in some occupations (for example, waiters and bartenders, food processing workers, drivers, refuse workers and labourers) are relatively more likely to be in a spiral of poor working conditions. On a positive side, only half of OMD are affected by a high share of workers working long hours and only three OMD have a high proportion of workers with irregular schedules. Moreover, the social environment overall is not necessarily worse than in all other occupations.

Figure 18: Comparative performance of OMD compared with all other occupations for each aspect of working conditions



Notes: ‘All other occupations’ are represented by the middle dotted line. ISCO-3 code of occupational group is given in brackets. The size of the bar is determined by the distance of the occupation’s mean in a given indicator from the average of all other occupations (measured by the standard deviation of the means of all OMD). The red bar means that, in that particular aspect, the occupation has a worse average value than all other occupations. The larger the red bar is, the more disadvantaged the occupation is on average compared with other OMD. Analogically, the green bar means that the occupation has a more advantageous average than all other occupations and this advantage is larger with increasing size of the green bar. For example, in terms of long working hours (48 hours or more), agricultural, forestry and fishery labourers are slightly more advantaged compared with all other workers. However, this advantage is even bigger in the case of assemblers.

Source: EWCS2010 and EU LFS 2013

Occupation and health status

The relationship between work and health is complicated to study and measure. Workers’ health is affected by their work, lifestyle, activities outside work, and other factors such as genetic predisposition. These all interact with the broader environmental and economic context. In addition, a number of health problems are caused by more than one factor.

Regulation of the working environment, including collective bargaining, may impact on work and working conditions. Furthermore, differences in employment structure between countries can also affect worker exposure to risks as well as health outcomes (Eurofound, 2012c). However, there are some studies which attempt to show the relationship between a job or occupation and general health status (Murray, 2007).

This section first compares psychosocial health and well-being between OMD and all other occupations and then analyses the impact of an occupation on the perception of workers’ own health. The World Health Organization (WHO)

Well-being Index (WHO-5) assesses various aspects related to mental well-being including positive mood (good spirit, relaxation), vitality (being active and waking up fresh and rested) and general interest (being interested in things). The answers are measured by a score reaching values from 0 to 25. Values below 13 indicate poor mental well-being and are reported as ‘mental health at risk’.

The highest proportion of employees in OMD whose mental well-being is at risk can be found in refuse workers (32%), garment and related trades workers (31%) and machine operators (30%). Some 19% of workers in all other occupations report poor well-being (Table 7).

Table 7: Percentage of workers whose mental health is at risk (WHO-5) in the EU28, 2010

Food processing and related trades workers (751)	15%	Cashiers and ticket clerks (523)	24%
Waiters and bartenders (513)	16%	Car, van and motorcycle drivers (832)	24%
Shop salespersons (522)	18%		
Mobile plant operators (834)	18%	Food preparation assistants (941)	25%
All other occupations	19%	Assemblers (821)	25%
Manufacturing labourers (932)	22%	Cooks (512)	26%
Mining and construction labourers (931)	23%	Machine operators (814-818)	30%
Agricultural, forestry and fishery labourers (921)	23%	Garment and related trades workers (753)	31%
Wood treaters, cabinet-makers and related trades workers (752)	23%	Refuse workers (961)	32%

Note: ISCO-3 code of occupational group is given in brackets.

Source: *EWCS 2010*

A regression analysis has been used to analyse differences in workers’ own assessed health in OMD. The results obtained from a generalised ordered logit model² show that, in many cases, occupation maintained a significant effect even after controlling for workers’ age, sex and country; these occupations are shown in Figure 19. Shops salespersons and waiters and bartenders were found to be the only two OMD where workers are more likely to report better health than all other occupations. Machine operators, garment and related workers, assemblers, car, van and motorcycle drivers and refuse workers assessed their general health as being worse than all other occupations even after controlling for some attributes of the workers. Refuse workers appear to have the worst position (higher relative probability of reporting bad health) and is the occupation with the highest percentage of workers reporting bad or very bad health (10%). The lowest percentage is reported by waiters (only 1%).

² The assumptions of ordered logistic regression, namely the proportional odds assumption, were not met and therefore a generalised ordered logit model was used in STATA (*gologit2* command). See Williams (2006) for more information on this model. The independent variable was EWCS2010 Q68 recoded into three categories – (very) good, fair and (very) bad. The dependent variables were age, sex, occupation category and country. The proportional assumption was not relaxed for any explanatory variable. The final model included 36,402 observations and as a whole was statistically significant compared with the null model with no predictors (the likelihood ratio chi-square was 1597.63 and p value was 0.0000).

Figure 19: Results of regression analysis of workers' assessment of own health

Compared with all other occupations, OMD workers are more likely to report:



Note: ISCO-3 code of occupational group is given in brackets.
Source: EWCS2010

Physical working conditions and employment conditions are associated with social inequalities in health (Benach et al, 2010). The analysis for this report showed that a higher proportion of workers in most OMD (3.4%) reported ‘bad’ or ‘very bad’ health status than in all other occupations (2.7%). The survival effect also has to be considered; some workers in very bad health will leave employment and are therefore not included in the analysis. As mentioned before, health is one of the main aspects linked to the sustainability of work in a life course perspective and also of being able to work until retirement age.

Summary of specific disadvantages and future prospects

Most OMD are disadvantaged in relation to certain working conditions. This section offers a snapshot of specific disadvantages and future prospects for the various OMD considered in this report. The information is based on:

- the analysis of EWCS2010 and EU LFS 2013 data presented above;
- the EU skills panorama web page (European Commission, 2014);
- the report, *Labour market shortages in the European Union* (European Parliament, 2015).

The description provided for each OMD (ISCO-3 code) should be understood as a relative position in terms of the percentage of workers and in comparison with other OMD and all other occupations.

Cooks (512) and waiters and bartenders (513)

OMD in accommodation and food service activities are affected more than all other occupations by involuntary part-time work, long hours, low income (except cooks) and atypical work (being very atypical in the case of waiters and bartenders). Overall, waiters and bartenders seem to be more disadvantaged than cooks, especially in relation to the psychosocial work environment. However, waiters in relation to the health outcomes at work present better results than the rest of the OMD. Probably it has to do with their country distribution (higher share in the EU15) and the younger composition of the workforce.

This group of workers grew during the past decade, mainly before 2008. However, some decline is forecast for the future. Nevertheless, job openings until 2025 are expected mainly in Spain and Sweden. A higher percentage of workers in these two OMD is found in Spain.

Shop salespersons (522) and cashiers and ticket clerks (523)

Shop salesperson is the OMD with the largest number of workers in all countries and appears to be the OMD with generally better working conditions. Poor conditions are related to income and provision of training. Shop salespersons report better health than the average, which can be linked to the small proportion of workers exposed to high strain jobs and physical risks. However, cashiers and ticket clerks have quite a different situation. Apart from the lack of provision of training for a significant proportion of workers, it is an occupation with a high percentage of high strain jobs and low income (lower than in the case of shop salespersons). It is the OMD with a worse social environment and in general poorer career prospects than shop salespersons.

This group of workers grew during the past decade. Recruitment difficulties will take place for some occupations and technological changes will shape the role of these workers. The country with the largest share of shop salespersons is Greece. For cashiers and ticket clerks, it is Denmark and the Netherlands. These occupations are facing bottlenecks. Countries expected to have a high proportion of job openings are France and Greece.

Craft-related workers: food processing and related trades workers (751), wood treaters, cabinet-makers and related trades workers (752) and garment and related trades workers (753)

Food processing, wood treaters and garment workers are all exposed to physical risks more than the rest of the OMD in this group and have a relatively high proportion of workers in high strain jobs. Wood treaters are among the workers with poorer reported health. In relation to other conditions such as atypical and long working hours and work–life balance, food processing has a higher proportion of workers with poor conditions than the other OMD in this group. They also report more difficulties in accessing training and higher job strain. Overall, it is the occupation with the worst working conditions of this group.

These occupational groups have declined over the long term and the pattern is set to continue. However, there are recruitment difficulties for some jobs within these occupations. Some workers are highly skilled and food processing workers have to meet stringent health and hygiene standards. A high proportion of garment workers are in Portugal and Romania. There are higher proportions of wood treaters in the Baltic states and food processing workers in Greece, Ireland and Lithuania. In general, for the whole group of occupations, job openings until 2015 are expected in Austria, the Baltic states and Greece. Wood and garment workers are facing bottlenecks.

Machine operators (814–818)

A major concern for this occupational group is the relatively high exposure to health risks and high strain jobs, which seems to have consequences for workers' health. However, working time related conditions (for example, irregularity and long hours) are better than for the rest of the OMD. Career prospects are relatively poor.

Employment in the occupation declined from 2003 to 2013 and this trend is set to continue. The qualification level has risen recently. A higher proportion of workers is found in some eastern European countries and Portugal. Job openings until 2025 are expected to be mainly in eastern Europe.

Assemblers (821)

The negative conditions for assemblers are very similar to those of machine operators (that is, exposure to health risks and high job strain), whereas their working time is relatively good. Training opportunities are relatively poorer than for machine operators.

Although employment has declined substantially in recent years, this trend is forecast to reverse until 2025. Countries with higher proportions of assemblers are in central–eastern Europe (Czech Republic, Hungary, Slovakia). Bigger percentages of job openings until 2025 for these workers are expected in the aforementioned countries and Belgium.

Car, van and motorcycle drivers (832) and mobile plant operators (834)

Drivers face a variety of disadvantages, including working time (for example, long and irregular hours) and the associated poor work–life balance. It is the OMD with a work–life imbalance par excellence. Drivers also experience a feeling of being badly paid for their work and little access to training. As a consequence, it is the group of workers with a high share of poor career prospects.

Mobile plant operators are mainly exposed to physical risks and high strain, with implications for their health. They also report a significant share of workers reporting poor work–life balance, but to a lesser extent than drivers.

The number of workers in these occupations has grown over the past decade (albeit with a decline during the economic crisis), but this trend is forecast to change. Countries with a high proportion of workers are the Baltic states, the Czech Republic and Romania. A higher percentage of job openings is expected in these countries and Sweden. These occupations are facing bottlenecks.

Agricultural, forestry and fishery labourers (921)

Agricultural, forestry and fishery labourers also suffer disadvantages related to working time (involuntary part-time and irregular hours). It is an occupation with a high proportion of workers working involuntarily in temporary contracts, with a lack of training and poor career prospects. They also have relatively poor income and exposure to physical risks.

This group of workers registered a small increase during the past decade and this trend will continue. The qualifications required are expected to be upgraded. Migrant workers make up a high proportion of this group. The country with the highest share of workers is Romania. A higher share of job openings until 2025 is expected mainly in this country and Slovenia.

Manufacturing labourers (932) and mining and construction labourers (931)

Mining and construction labourers have a relatively high exposure to physical risks (higher for mining than construction labourers), which makes the occupation risky in relation to health. In the workers' opinion, these types of labouring is not a sustainable job, or in other words, a low proportion of workers in these two OMD want or think they are going to be able to work in the same job when they are 60 years-old. Manufacturing labourers have a higher proportion of workers with high strain jobs. They are also considered OMD because of the low income level and prevalence of involuntary temporary work. It is an occupation with a relatively high share of workers reporting job insecurity.

These occupations grew slightly in Europe in the past decade (albeit with a decline during the economic crisis). Migrant workers make up a significant proportion of workers. Foreseen technological changes might imply a need for skills upgrading in this group. Countries with higher proportions of workers are the Baltic states, the Czech Republic, Ireland, Romania and Slovakia. Job openings until 2025 are expected mainly in Austria and the UK.

Food preparation assistants (941)

Food preparation assistants are mainly disadvantaged in relation to low income, provision of training and involuntary part-time contracts. In combination with a considerable percentage of workers in temporary contracts, it is one of the occupations with higher job insecurity. In this regard, they have similar characteristics to OMD in accommodation and

food services. However, the occupation is relatively less negatively affected by health risks than the average and has a very low percentage of workers working more than 48 hours.

At EU level, the share of workers in this occupation has increased over the past decade. A high proportion of workers is found in Denmark, Sweden and the UK. It is an occupation facing bottlenecks.

Refuse workers (961)

The occupation is multiple disadvantaged mainly because of the low income, feeling of not being paid well for the job, very high proportion of involuntary temporary contracts, job insecurity, lack of access to training, exposure to health risks and poor health status. It is one of the occupations with the most multiple disadvantages. In relation to working time, it has a relatively high proportion of workers working involuntarily part-time, although the organisation of their working time allows a rather good work–life balance.

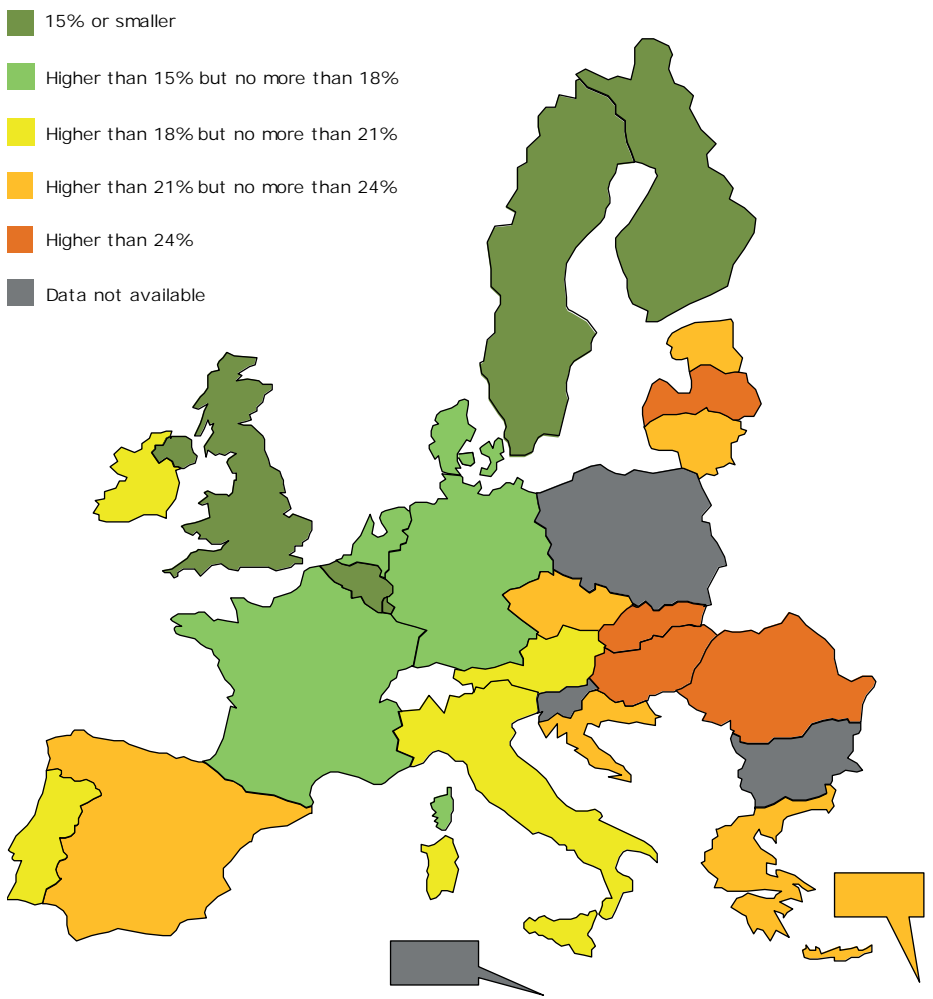
The occupation grew in Europe during the past decade. Slovakia has a very high proportion of such workers.

National context

Working conditions in general are influenced by the country in which workers live. The institutional setting, including legislation and collective bargaining, plays a role in setting the minimum standards and conditions. Moreover, a country's employment relations, general standards of living, the welfare state system and sociocultural characteristics have an impact on working conditions, so a worker in the same occupation will enjoy better conditions in one country than in another. It is therefore important to take into account the fact that the composition and the total amount of OMD in each country are different and that this affects the EU level data presented above. They differ not only in the number of workers in OMD (Figure 20) but also in the percentage of each OMD (Figure 21).

While countries in the west and the north of the EU tend to have a lower proportion of workers in OMD, a higher proportion can be found in the countries in the south and east of the EU (Figure 20). Countries with the highest proportion of workers in OMD (more than 27%) are Latvia, Romania and Slovakia, while the lowest proportion of workers in OMD (less than 15%) can be found in Belgium, Finland, Luxembourg, the Netherlands, Sweden and the UK.

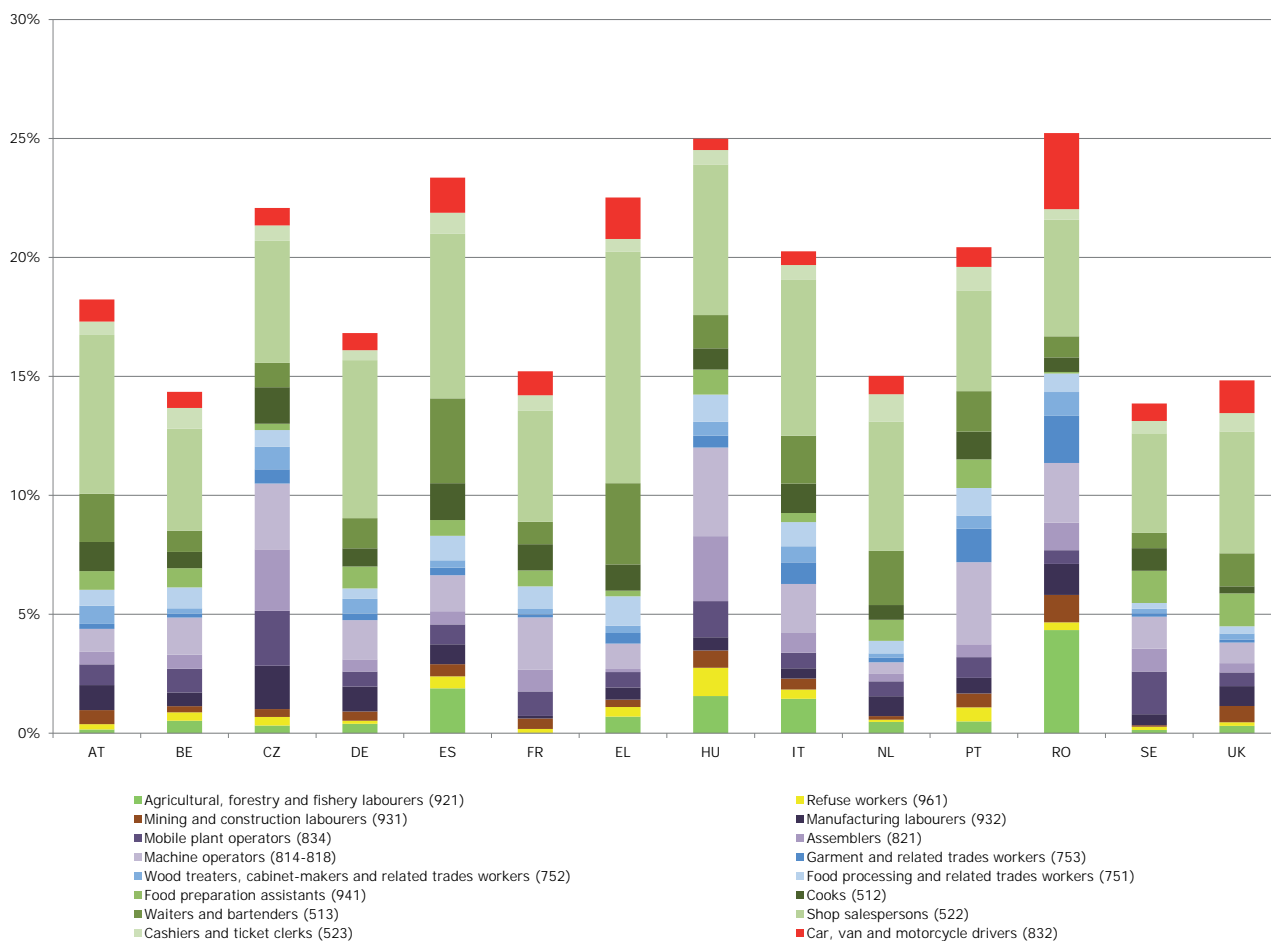
Figure 20: Share of OMD of the total population of workers in each EU28 country



Note: No data are available for Bulgaria, Malta, Poland and Slovenia.
Source: *EU LFS 2013*

Figure 21 shows the distribution of the OMD in EU countries with the largest workforce (that is, people in employment). In eastern European countries, assemblers represent up to 2.7% of the workforce whereas, for example, in Germany only 0.5%. Higher proportions of waiters and bartenders are found in Mediterranean countries; it is an important group in Spain (3.5%) while in Romania, for example, it represents only 0.9%. Spain has a large share of agricultural labourers compared with the other selected countries. In all countries, shop salespersons represent the largest OMD, while the proportion of cashiers and ticket clerks is rather small. This occupational group has a bigger share of workers in the Netherlands than in the other selected countries.

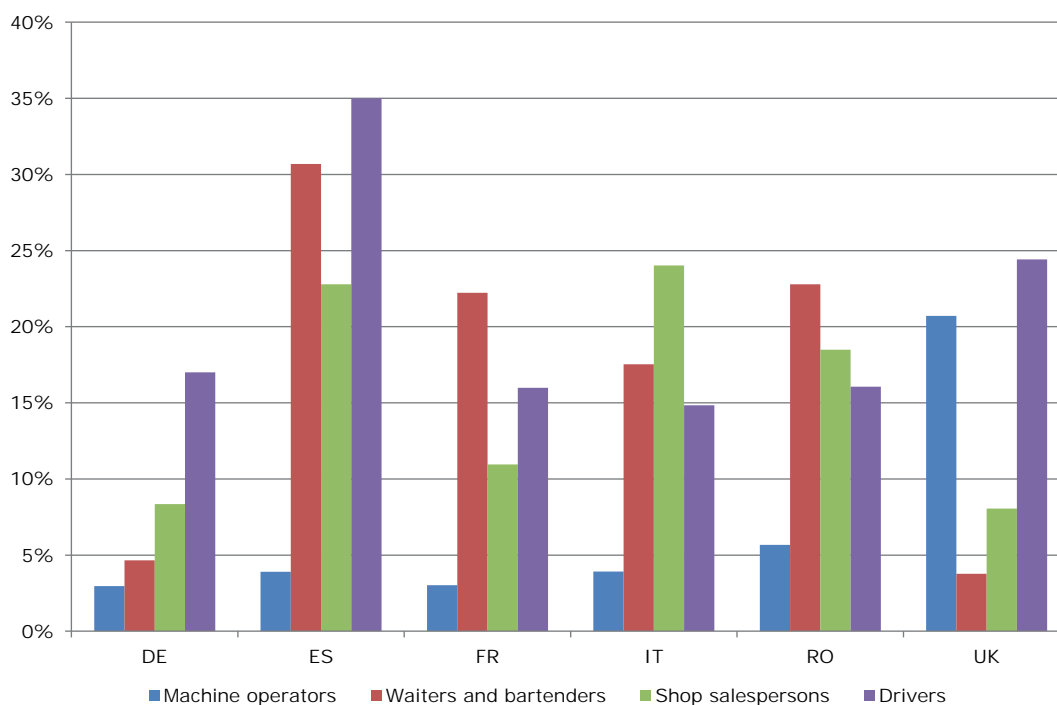
Figure 21: Distribution of OMD in selected EU countries (%)



Note: Countries with the largest numbers of people in employment.
Source: EU LFS 2013

Figure 22, which compares the share of workers working long hours (more than 48 hours) in the four OMD with the largest proportions in five different countries, confirms that the country where the worker is employed matters. For all four OMD, there are more workers working long hours in Spain than in Germany. Looking at differences between occupations, waiters and bartenders for example are the group with the highest proportion of workers working long hours in Romania, while in Germany it is drivers and in Italy it is shop salespersons. The reason why machine operators in the UK work longer hours than in any of the other selected countries could be due to the different nature of collective bargaining in the sector where they work.

Figure 22 is one example of the influence of national settings on the working conditions of specific occupations. Thus, the data presented in Chapter 1 must be interpreted in EU terms and should not always be directly translated into what is happening at national level.

Figure 22: Share of workers working long hours (%)

Note: 'Long' hours are defined as 48 or more hours per week.

Source: *EU LFS 2013*

Preamble to Chapters 2 and 3

Chapters 2 and 3 present the information provided by Eurofound's network of European correspondents. Chapter 2 includes findings based on national sources of information about the conditions of OMD in some EU countries at national level. In addition, Chapter 2 includes some OMD not covered by the statistical analysis at European level given in Chapter 1. This is because, according to the information provided by the national correspondent, they can be considered as multiple disadvantaged in the national context.

As suggested in Chapter 1, there is a cumulative negative effect in performing an occupation characterised by multiple disadvantages in different domains (low wages and salaries, low job security, high work intensity and physical demands, absence of social support by colleagues, long and/or unsocial working hours, lack of social recognition, presence of high physical hazards, lack of skills development opportunities and career prospects, and so on). Individuals who work in these types of jobs can experience declines in their health status, low self-esteem and psychological stress, as well as shorter working life prospects and worse conditions for retirement.

Chapter 1 examines working conditions for the OMD at European level. After taking into account variables such as country, age and gender, most of the OMD still have a higher probability of reporting poorer health than all other occupations. Therefore, occupation is associated with health outcomes as well as with variables affecting working conditions (for example, access to training, income and employment status). For specific variables such as working time, however, workers in the same occupation present different patterns depending on the country where they live. For this reason, research carried out for this project investigated the working conditions of OMD drawing from contributions based on national sources of information as well as policies and initiatives seeking to improve their situation.

In light of these considerations, Chapters 2 and 3 have the following objectives:

- Explore and describe the concrete associated working conditions of workers in different EU Member States in the pre-defined list (those presented in Chapter 1) of occupations characterised by multiple poor working conditions at European level.
- Detect those occupations not included in the European level list that, according to national standards, should also be regarded as OMD, as well as their associated working conditions and consequences (outcomes) in terms of working life.
- Identify and describe existing initiatives, policies and measures at national level intended to improve existing working conditions in OMD, either aimed at specifically addressing some concrete occupations or transversal ones (covering more than one specific occupation).
- Provide knowledge to inform the development of new policies or the improvement of existing policies intended to improve working conditions in OMD.

Chapter 2 contains results about the working conditions of the OMD at EU level and others identified at national level. Chapter 3 describes existing policies and initiatives developed at national level to improve the working conditions of those occupations. It concludes with a section on EU policy related to the improvement of working conditions in OMD.

National perspective 2

Chapter 1 identified, at the ISCO-08 3-digit level, occupations that can be regarded as OMD in the EU28 in the sense that they score particularly low in at least three out of the four job quality indices that correspond to the four dimensions of job quality: earnings, job and career prospects, working time and intrinsic job quality (Eurofound, 2014b).

This chapter uses information from Eurofound's network of European correspondents to consider in more detail the job quality dimensions and working conditions of the OMD listed in Table 1. The OMD are presented in groups according to their ISCO-08 2-digit code.

This national-level information also led to the identification of a small number of further occupations that are considered OMD in specific EU countries. These occupations are considered in the final section of the chapter.

Introduction

This section presents available national information for the EU28 Member States and Norway on the working conditions associated with the OMD analysed in Chapter 1 to determine if these occupations can be also considered as OMD at national Member State level. It also provides information on the possible consequences (outcomes) of these poor working conditions in terms of working life (accidents at work, health impact of work, work–life balance and so on).

Before presenting the national information it is important to stress the following points.

There is a crucial lack of national statistical data sources from the occupational perspective. Most of the national sources on employment and working conditions are intended to provide information by economic sector (NACE classification) and not by occupation (ISCO classification). Hence, an occupational perspective on working conditions is relatively rare in most Member States, at least in comparison with sectoral approaches.

The concept of OMD is new in most Member States and Norway in the sense that no comprehensive studies at national level dealing with this concept were identified during this study. This situation contrasts with the concept of 'risky' sectors, for which more information on associated working conditions is available. In addition, in Italy the concept of 'workers with disadvantages' generally refers to different target groups such as young unemployed, immigrants and people with disabilities, whereas in Belgium the most common concept that relates to 'occupations with difficulties' is those which struggle to fill vacancies due to the tough working conditions.

Notwithstanding this, relevant information by occupation can be extracted in some cases from existing national statistical data sources. This information is complemented by special ad hoc national surveys and studies conducted for some specific sectors or occupations characterised by tough working conditions.

Finally, the financial and economic crisis is likely to have resulted in poorer working conditions for most sectors and occupations. This especially applies to low skilled workers – see, for instance, the experience of Ireland (Loftus, 2012).

Main occupations identified

Personal service workers (ISCO-08 51): Cooks, waiters and bartenders

Information from different European countries confirms that both cooks (ISCO-08 512) and waiters and bartenders (ISCO-08 513) can be defined as OMD. This is exemplified by their low salary levels, higher prevalence of unsocial working hours and overtime practices, poor future prospects and high exposure to physical risks and stress levels.

In Cyprus, hourly wage levels among waiters and bartenders in the Horeca sector are lower than the national average. This occupation is also characterised by a high prevalence of temporary working contracts linked to the holiday period and a high accident rate. The Cypriot Horeca sector is characterised by a high proportion of migrant workers, which adds an element of discrimination and disadvantage in terms of social benefits and employment rights (Antoniou, 2010). Similar results can be found in other EU Member States such as Spain (Cartagena, 2012).

In the Czech Republic, the average wages of cooks, waiters and bartenders were 60% less than the average national hourly wage in 2013 according to the country's Average Earnings Information System (ISPV). In a study by the Institute of Sociology of the Czech Academy of Sciences (CVVM), 72.2% of these occupational groups reckoned they were paid less than they deserved, 28.1% believed there was a high possibility of losing their job, 13.9% claimed to have high levels of stress and 21.6% worked for more than 50 hours per week; these figures compared with 58.5%, 24%, 9.3% and 13.4%, respectively, for the whole Czech workforce. Meanwhile, Czech cooks, waiters and bartenders seem to be particularly disadvantaged in terms of possibilities for continuous training (3.3% and 2% of them participated in some form of training compared with 11% for the average worker) according to data from the Czech Statistical Office (ČSÚ). Czech waiters and bartenders are also exposed to overtime practices and a high number are on fixed-term contracts. These poorer working conditions may explain why waiters and bartenders are one of the occupational groups with the greatest difficulty in filling vacancies in the Czech Republic (Aktualne, 2014). An important element within this occupational group is the high level of illegal employment in the Horeca sector. For example, inspections in 2012 by the State Labour Inspection Office detected a total of 4,717 illegally employed persons of whom 866 (that is, one in five) worked in the restaurant and catering sector. The working conditions of those working illegally are not regulated by law.

Information from Bulgaria confirms the large extent of the grey economy and the use of illegal forms and employment practices in Horeca occupations.

In Denmark, both occupational groups are characterised by lower gross earnings per hour than the national average – DKK 164.5 and DKK 153.7 (€22.0 and €20.6 as at 16 July 2015), respectively, compared with DKK 237.7 (€31.85) for the national average in 2012. They also suffered from a higher prevalence of variable working hours, the need to work at high speed and a higher accident rate according to data from Statistics Denmark and the Danish National Research Centre for the Working Environment (NFA).

In France, 48.9% of cooks in 2010 reported working at least 10 Sundays per year while 52.5% worked at least 20 Saturdays per year (compared with only 16.5% and 24.5% for the national average, respectively). Meanwhile, 97% and 58.3% of national workers reported postural constraints and exposure to heat, respectively (compared with 74.3% and 20%, respectively, for all French workers), as well as higher than national average figures for exposure to noise pollution and biological agents. Some 63% of cooks in France reported high levels of stress at work compared with the national average of 37.1% (Amira, 2014).

Greek data from the Hellenic Statistical Authority (EL.STAT) show a higher prevalence of part-time and temporary work contracts than the corresponding national averages.

In Germany, 22% and 46% of male and female cooks, respectively, as well as 39% of female waiters, expect to earn low wages. They also suffer from a higher prevalence of night/weekend work, poor prospects of staying in their occupation until retirement age and a high prevalence of part-time work (46% of workers in the restaurant sector are marginal part-time workers) (Destatis, 2012; Burr et al, 2013; Wittig et al, 2013).

Italian evidence shows that cooks suffer from higher levels of involuntary part-time contracts and overtime practices than the corresponding national averages according to the National Institute of Statistics (Istat). Hence, 72.1% of Italian cooks and 75.1% of Italian waiters and bartenders working part time reported an involuntary situation in 2013, whereas this ratio was 61.6% for the national average. Meanwhile, 84.1% of cooks and 70.9% of waiters and bartenders usually worked overtime.

In Slovenia, existing information shows that working conditions for national workers in the Horeca sector as a whole can be labelled as tough. For instance, cooks are confronted with a higher prevalence of unpaid overtime practices, fixed-term employment contracts, unsocial working hours during weekends and public holidays, and lower than the average hourly wage levels, as well as a higher prevalence of illegal work (Ankele et al, 2012). It is not therefore strange that, as in the Czech Republic, the Horeca sector in Slovenia has a major problem attracting cooks due to the occupation's poor working conditions.

In the Netherlands, data from the Netherlands Working Conditions Survey (NWCS) for 2011–2013 show that cooks, waiters and bartenders report particularly poorer working conditions in a wide array of domains, including earning and existing job prospects, as well as poorer job quality and working time indicators. For example, the average age people think they will be able to continue working in their current job is 57 years-old for cooks and 53.7 years-old for waiters and bartenders, whereas the national average is 62 years-old. Also, 15.9% of Dutch cooks felt 'burnt out' and 25.6% identified major difficulties in combining work and family activities (compared with 12.7% and 8.9% for the national average, respectively). The number of accidents and health-related complaints for cooks is nearly double the corresponding national averages. This finding is also revealed in data from the Central Statistical Office (GUS) of Poland (GUS, 2014a).

Similarly, Swedish cooks, waiters and bartenders are confronted with disadvantageous conditions in terms of earnings, job prospects and job quality elements (skill use and discretion, social environment, physical environment, work intensity) (Swedish Work Environment Authority, 2014).

In the UK, the occupations of cooks, waiters and bartenders are characterised by lower average wage levels – average hourly wages of £7.50 (€10.67 as at 16 July 2015) for cooks and £6.10 (€8.68) for waiters and bartenders, compared with a national median hourly wage in 2012 of £11.28 (€16.04). There is also a higher prevalence of part-time working practices and unsocial working hours (28.8 hours on average for cooks and 20.5 hours for waiters and bartenders) according to the Office for National Statistics (ONS) (ONS, 2013). The prevalence of low wage levels for cooks, waiters and bartenders is confirmed by studies in Belgium (Statistics Belgium, 2012), Poland (GUS, 2014b) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012).

Sales workers (ISCO-08 52): Shop salespersons, cashiers and ticket clerks

A relatively wide array of literature and statistical evidence shows that shop salespersons (ISCO-08 522) and cashiers and ticket clerks (ISCO-08 523) can be labelled as OMD.

Information from countries such as Austria (Eichmann and Saupe, 2014), Bulgaria (data from Eurostat), Denmark (data from Statistics Denmark), Finland (data from Statistics Finland), Poland (GUS, 2014b), Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) and the Netherlands (data from NWCS 2011–2013) identifies both occupational groups as low-income occupations, that is, hourly wage levels are 54%–70% of the national average.

In the Czech Republic, information from the ISPV confirms that shop salespersons, cashiers and ticket clerks are characterised by lower than average hourly wage levels (around 60% of the national average), with 57% of workers in these OMD suggesting they are paid less than they deserve. In a CVVM study, responses from Czechs in these OMD suggest a higher prevalence of stress levels at work (18.4% of them identified with this problem compared with a national average of 9.3%), a much higher prevalence of temporary and part-time work, and a lower involvement in further training activities (around 5% compared with 11% for the national average).

In France, available information shows that a large share of shop salespersons, cashiers and ticket clerks report working at least 20 Saturdays per year (75% in all cases compared with a national average of 24.5%), a lack of 48 consecutive hours rest per week (49.7% and 60.7% compared with a national average of 14.8%), as well as a higher exposure to manual handling of loads, flexible working hours that may change from day to day, and difficult situations with customers (Amira, 2014; Dares, 2014).

In Germany, available data for shop salespersons show that 16.8% and 42.9% of the male and female sales staff, respectively, are low earners compared with 11% and 26% for the national average, respectively. In addition, up to 38.2% of sales staff report their work as being beneath their qualification level (national average of 16.7%) and 41% of retail workers have a marginal part-time contract (data from the Health and Work Initiative (IGA); Wittig et al, 2013; Schmidt et al, 2012; Bispinck and WSI-Tarifarchiv, 2014). Data from Istat show a high prevalence of part-time work among shop salespersons also in Italy.

In Greece, the occupation of shop salesperson is characterised by a high proportion of employees working part time and on a temporary basis, as well as low wage levels (employees who earn up to €699 per month make up a third of this occupational group) according to data from EL.STAT.

As far as Sweden is concerned, studies show that sales workers can be regarded as disadvantaged, especially when it comes to the physical and social environment. For instance, approximately 25% of this occupational group indicate they have been exposed to threats and violence at work, while a third of all such employees claim they have suffered pain severe enough for medical diagnosis because of their work; this problem was more acute among women and workers with many years' service (data from the Commercial Employees' Union; Balogh et al, 2011).

In the UK, evidence from several studies shows that retail trade occupations are characterised by a culture of long hours, poor work–life balance, lack of facilities for workers or poor communication levels between management and the shop floor (Brandwood et al, 2007). Meanwhile, another study carried out for the food retail sector suggests that most shop assistants were engaged in low skilled work, where median pay rates fell below or were just on the low pay threshold. The study found that most assistants were dissatisfied with aspects of their employment, typically the inconvenient working hours, the physically demanding nature of the work or the limited career prospects (especially for part-time workers, usually female workers) (Mason and Osborne, 2008). Finally, both occupational groups have very low wage levels; the median hourly wage is £6.75 (€9.60) for shop salespersons and £7.01 (€9.97) for cashiers and ticket clerks, compared with £11.28 (€16.04) for the national average (ONS, 2013).

Food processing, wood working, garment and other craft-related workers (ISCO-08 75): Food processing and related trades workers, wood treaters, cabinet-makers and related trades workers, and garment and related trades workers

According to existing national information, the occupations of food processing and related trades workers (ISCO-08 751), wood treaters, cabinet-makers and related trades workers (ISCO-08 752) and garment and related trades workers (ISCO-08 753) cannot be characterised as OMD in all Member States.

In the Czech Republic, these three occupational groups have lower hourly wage levels and fewer further training opportunities than the corresponding national averages (less than 5% of workers in these occupations are engaged in training activities compared with the national average of 11%). The prevalence of long working hours, and fixed-term and part-time contracts is in line with or below the national average, with the exception of longer working hours for wood treaters, cabinet-makers and related trades workers and a greater prevalence of part-time jobs among garment and related trades workers according to the ISPV and a study by CVVM.

Similarly, wage levels in these occupations are less than 60% of the national average in countries such as Bulgaria (data from Eurostat), Germany (Bispinck and WSI-Tarifarchiv, 2014), Poland (GUS, 2014b) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012).

In Denmark, workers in these three occupational groups believe their earnings are less than national average wage levels (approximately 75% lower in all three cases), and also have a higher fear of losing their jobs. In contrast, data from Statistics Denmark suggest that other elements of working conditions are in line with the national averages, with the exception of food processing and related trades workers who have a greater need to work at high speed and a greater prevalence of variable working hours.

In France, information related to food processing and related trades workers shows that these workers are usually characterised by high stress pressures (63% of them have to work in a rush compared with the national average of 37.1%), higher exposure to heat or cold conditions (71.7% versus the national average of 20%) and a higher exposure to manual handling of loads and postural constraints. In addition, 71.1% of them report working at least 20 Saturdays per year while the national average is only 24.5% (Amira, 2014; Dares, 2014).

Greek information shows that the three occupational groups are characterised by a high prevalence of foreign nationals and part-timers, as well as a high prevalence of low earners; 30%, 55% and 70% of Greek workers in the ISCO-08 751, 752 and 753 occupations, respectively, earn less than €699 per month according to data from EL.STAT.

In contrast, data from Istat in Italy suggest that these three ISCO-75 occupations have working conditions that are relatively similar to the national average, with the exception of a greater prevalence of overtime practices among wood treaters, cabinet-makers and related trades workers. For garment and related trades workers, for example, temporary or part-time contracts, involuntary temporary work and involuntary part-time work are significantly less widespread than the corresponding national averages.

Similarly, data from the NWCS 2011–2013 show that only food processing and related trades workers in the Netherlands can be characterised as an OMD in comparison with national standards – although the three occupational groups have lower than national average wage levels. Hence, it is not strange that food processing and related trades workers give a lower age for when they expect to have to stop working in their current occupation – that is, 59.5 years-old compared with the national average of 62 years-old.

The same result is found in the UK where some authors suggest that working conditions in food processing related occupations (meat processing workers, bakers) can be extremely unpleasant as well as harmful to health and safety (James and Lloyd, 2008; Mason and Osborne, 2008). Thus, pay rates for most process operatives are low and repetitive work routines, which are physically demanding and monotonous, can often result in injuries to the back, neck, hands and shoulders. In some cases, employees work long hours to make up their pay and ensure a reasonable standard of living, with ‘gruelling’ 10 hour shifts. Opportunities for learning and progression are extremely limited and there is evidence of work intensification as large supermarket chains apply increasing pressure on suppliers to cut costs.

Wood treaters, cabinet-makers and related trades workers have a higher propensity to suffer from work accidents in a number of countries, including the Netherlands (data from NWCS 2011–2013), Poland (GUS, 2014a) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2011). For instance, 7.5% of workers in this occupational group in the Netherlands report this issue compared with 2.3% for the national average.

Stationary plant and machine operators (ISCO-08 81): Rubber, plastic and paper products machine operators, textile, fur and leather products machine operators, food and related products machine operators, wood processing and papermaking plant operators, other stationary plant and machine operators

National information relating to some of the occupations in the ISCO-08 81 group – comprising rubber, plastic and paper products machine operators (814), textile, fur and leather products machine operators (815), food and related products machine operators (816), wood processing and papermaking plant operators (817) and other stationary plant and machine operators (818) – shows mixed results and, in some cases, these occupations cannot be considered as OMD.

Information from Member States such as Bulgaria (data from Eurostat), the Czech Republic (data from the ISPV), Denmark (data from Statistics Denmark), Poland (GUS, 2014b), Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012), the Netherlands (data from NWCS 2011–2013) and the UK (ONS, 2013) confirms that these occupational groups are characterised by wage levels that are 50%–75% lower than the national average, depending on the country. In Poland, for instance, average hourly gross earnings vary from 69.6% of the Polish national average for textile, fur and leather products machine operators (815) and 76.7% for other stationary plant and machine operators (818).

Available information on other elements of working conditions is much more mixed. For example, data from a study by CVVM in the Czech Republic show that 68.4% of all stationary plant and machine operators believe they are paid less than they deserve (compared with the national average of 58.5%) and have fewer further training opportunities. The percentages of Czech operators claiming a probable job loss, an atmosphere full of conflict or high levels of stress are much lower than the corresponding national averages. However, other variables such as number of average working hours or the prevalence of fixed-term and part-time contracts are similar to or below the corresponding national averages. In Denmark, only food and related products machine operators suffer high levels of stress at work, as well as relatively lower levels of social support from other colleagues according to data from Statistics Denmark. The working conditions of French textile, fur and leather products machine operators are not particularly worse than the national average (Dares, 2014).

In Germany, information from the IGA Initiative shows that the percentage of food and related products machine operators suggesting they would be able to stay in the same occupation until retirement is lower than the national average. The issue of posted workers in meat processing was a major issue in Germany in 2013–2014 (Deutscher Bundestag, 2013; Hausding, 2014). Meanwhile, German wood processing and papermaking plant operators are exposed to higher health-related risks and work accidents (Wittig et al, 2013) – a finding matched by data from the Netherlands (NWCS 2011–2013) and Poland (GUS, 2014a).

In Italy, the ISCO-08 81 occupations are characterised by having a higher prevalence of overtime practices than the national average, whereas other elements of working conditions such as the prevalence of part-time or temporary contracts are less than the national average levels. The only exception is food and related products machine operators, who are characterised by a higher prevalence of fixed-term contracts, involuntary part-time and temporary working situations according to data from Istat. Also for this occupation, Dutch information shows that up to 25.2% of these operators reckon they are affected by ‘burnout’ feelings, a percentage that is much higher than both the other ISCO 81 occupations considered as OMD and the national average (12.7% of Dutch workers). Similarly, Dutch food and related products machine operators state that 59.3 years-old is the age up to which they think they will be able to continue

working in their current job; this age is the lowest among the ISCO 81 occupations and lower than the national average of 62 years-old.

Assemblers (ISCO-08 82): Assemblers

The occupational group of assemblers (ISCO-08 821) is characterised by multiple disadvantages, although existing national evidence provides a ‘mixed’ perspective on this occupation.

For instance, information from Member States such as Bulgaria (data from Eurostat), Denmark (data from Statistics Denmark), Poland (GUS, 2014b) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) shows that, while the occupation is characterised by lower wage levels (70%–80% of the national average), these are generally speaking not as low as in other occupations.

In contrast, available information from the Czech Republic shows that hourly wage levels for assemblers are in line with the national average. However, this group is particularly affected by a conflictive working atmosphere, a greater prevalence of fixed-term contracts than the national average and a strong fear of losing their job, whereas stress levels, part-time and overtime practices are smaller than the corresponding national averages according to data from ČSÚ, data from the ISPV and a study by CVVM.

In countries such as Denmark, Finland, Italy and the Netherlands, the working conditions associated with assemblers do not seem to be so ‘disadvantageous’, at least in comparison with national standards. For example, with the exception of lower hourly wage levels, assemblers in Denmark and Finland are not particularly affected by stress levels, poor social support at work, exposure to accidents and poor employment prospects according to data from Statistics Denmark, the NFA and Statistics Finland. In Italy, the percentage of assemblers in voluntary and involuntary fixed-term contracts or part-time practices is less than the corresponding national averages according to data from Istat. Similarly, in the Netherlands, assemblers are characterised by lower hourly wage levels and a relatively higher exposure to accidents, although other elements of working conditions such as work–life balance and sustainability are more positive among this group than the corresponding national average. For instance, only 1.1% of Dutch assemblers identified difficulties in combining work and family life, whereas the national average is 8.9% (NWCS 2011–2013).

Finally, information from Germany shows that male assemblers face an above average health risk (Wittig et al, 2013), a result confirmed by Polish and Portuguese data on accident rates among this occupational group (GUS, 2014a; Portuguese Ministry of Solidarity, Employment and Social Security, 2011).

Drivers and mobile plant operators (ISCO-08 83): Car, van and motorcycle drivers, mobile plant operators

Existing national information suggests that the occupational groups of car, van and motorcycle drivers (832) and mobile plant operators (834) can be labelled as OMD, especially the former.

Evidence from a number of Member States – Bulgaria (data from Eurostat), Finland (data from Statistics Finland), Poland (GUS, 2014b) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) – shows that both occupational groups are confronted with hourly wage levels lower than the national averages. German taxi drivers, for instance, suffer particularly from very low wages (Destatis, 2012). In contrast, data from Statistics Denmark show that hourly wage levels in both occupations are above the national average.

In the Czech Republic, the level in both occupational groups who reckon they are paid less than they deserve is higher than the national average (78.3% compared with the national average of 58.5%). Both groups also claim a high prevalence of overtime practices and high stress levels as well as less access to training activities (6.8% for drivers and 5.9% among mobile plant operators compared with 11% for the national average) according to data from ČSÚ and a study by CVVM. Car, van and motorcycle drivers suffer particularly from longer working hours (43.2 hours per week versus 41.9 hours for the national average). However, other elements of working conditions such as the prevalence of part-time practices or fixed-term contracts are in line with or even below the corresponding national averages.

In France, information for car, van and motorcycle drivers shows that they face several important disadvantages. Thus, drivers are more exposed to working time constraints than average French workers. This is reflected in changes in daily working times (50.9% compared with 22.7%), difficulties in fixing their work schedule for the next week (37.9% compared with 10.4%) and a higher prevalence of night and weekend working. French drivers in this occupational group are particularly confronted with difficult situations when dealing with customers, and are particularly exposed to stress situations and acute weather conditions (38.2% versus 20% for all workers). In the case of the mobile plant operators, available data show that this occupational group is not so constrained by working time issues than with problems related to postural constraints, exposure to noise or manual handling of loads (Amira, 2014; Dares, 2014).

In Italy, available information from Istat shows that both occupational groups face a higher prevalence of overtime practices and involuntary temporary and part-time practices than the corresponding national averages.

Information from Spain shows that ‘vehicle drivers’ is one of the occupations with the largest percentage of people suggesting that they can rarely or never learn new things at work (27% compared with 16.4% for the national average), higher exposure to high or very high noise at work, and little space to work comfortably (21.2% compared with the national average of 10.8%). In addition, up to 83.2% of Spanish vehicle drivers suffer from some type of work-related pain (posture, position, effort and so on) (INSHT, 2011).

In the Netherlands, data from the NWCS 2011–2013 identify that car, van and motorcycle drivers experience particularly negative working conditions in terms of overtime working practices, as well as higher exposure to work-related accidents than the national average. This is also the case for mobile plant operators. In addition, car, van and motorcycle drivers experience greater difficulties in combining work and family life than the national average. However, burnout levels and prospects of continuing in the same job until retirement age are similar to the corresponding national averages; similar results are obtained for mobile plant operators.

This higher exposure to work-related accidents among drivers is confirmed in other Member States such as Poland, where up to 1.1% of all accidents among this occupational group result in death compared with the national average of 0.41% (GUS, 2014a).

Agricultural, forestry and fishery labourers (ISCO-08 92): Agricultural, forestry and fishery labourers

The occupational group of agricultural, forestry and fishery labourers (ISCO-08 921) is an OMD according to national information collected for this study.

Information from the Cypriot Statistical Service shows that this occupational group is characterised by very long average working hours (46.8 hours compared with the national average of 41.3 hours), as well as one of the lowest hourly wages in the national economy (€8.35) and a very high dissatisfaction level with their working conditions and environment. In addition, a very high percentage of farm labourers (45% of the total) feel that their safety and health are endangered by the work they perform. The large number of immigrants within this occupational group in Cyprus may explain this result.

In the Czech Republic (data from the ISPV), Denmark (data from Statistics Denmark), Finland (data from Statistics Finland) and Poland (GUS, 2014b), agricultural, forestry and fishery labourers receive an income that is less than 60% of the average gross national monthly wage. This percentage goes down to 40.2% in Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012). In the Czech Republic, labourers in this occupational group suffer from a very high prevalence of fixed-term contracts (43.7% compared with 9.8% for the national average) and less participation in training activities according to data from ČSÚ.

In Germany, this occupational group combines lower wage levels (27% of surveyed male agricultural workers earn low wages compared with 11% for the national average) with a very high prevalence of marginal part-time contracts (40% of the total), poor prospects of staying in the occupation until retirement age (especially as far as forestry labourers are concerned) and a very high rate of work-related accidents, especially among foreign seasonal workers and posted labourers (Wittig et al, 2013; Destatis, 2012; Bispinck and WSI-Tarifarchiv, 2014).

A similarly high incidence of accidents can be detected in countries such as Bulgaria (NSSI, 2013), the Netherlands (data from NWCS 2011–2013), Poland (GUS, 2014a) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2011).

In Italy, this occupational group is affected by a very high share of involuntary temporary and part-time work according to data from Istat – 93.1% and 84.5%, respectively, where the corresponding figures for the national average are 61.9% and 61.6%, respectively.

In Sweden, the special group of agricultural labourers involved in berry picking is affected by multiple disadvantages in terms of very low wage levels and exposure to poor living and working conditions (Nilsson, 2014). As in the case of Cyprus, the particularly poor working conditions for berry pickers are caused by gaps in labour migration legislation and particularly by a lack of transparency in incomes and employer costs for immigrant workers (Efendic, 2013).

In the UK, labourers involved in agricultural, forestry and fishery activities combine very low wage levels; £7.75 (€11.06 as at 23 July 2015) is the median hourly wage compared with £11.28 (€16.04) for the national average, where 40% of workers earn £7.40 (€10.56) or less with very long working hours (38.2 hours per week compared with 33.1 hours for the national average) (ONS, 2013).

However, evidence from countries such as Denmark (data from the NFA and Statistics Denmark) and the Netherlands (NWCS 2011–2013) shows that this occupation does not suffer from disadvantages in elements of working conditions such as successful combination of family and work life, burnout levels, age limit for changing job, fear of losing their job or a supportive social environment.

Labourers in mining, construction, manufacturing and transport (ISCO-08 93): Mining and construction labourers, manufacturing labourers

The two occupational groups of mining and construction labourers (ISCO-08 931) and manufacturing labourers (ISCO-08 932) can be considered as OMD from the information available from many EU Member States.

Information from different Bulgarian sources (NSSI, 2013; data from Eurostat) shows that both mining and construction labourers and manufacturing labourers are exposed to high accident rates (especially mining and construction labourers) and hourly wage levels that are less than the national average. Similar results are available in other Member States such as Cyprus (data from the Cypriot Statistical Service), Poland (GUS, 2010a, 2014b), Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2011, 2012) and the Netherlands (NWCS 2011–2013).

In the Czech Republic, up to 80% of people belonging to the occupational group ISCO-08 93 say they are paid less than they deserve, compared with a national average of 58.5%, according to data from a study by CVVM and data from ČSÚ. The percentage of people in the occupations that report experiencing stress at work and a conflictive work atmosphere is also higher than the corresponding national averages. In addition, up to 20% of people in this occupational group suggest that their work has a negative influence on their health status compared with 2.9% for the national average. The extent of fixed-term contracts is also higher than the national average.

In Greece, information from EL.STAT shows that mining and construction labourers are characterised by a high proportion of foreign nationals (42.5%) and temporary workers (29.1%); almost two-thirds of temporary workers have employment contracts for a term ranging from one to three months. In addition, 40% of employees earn less than €699 per month. Information for Greek manufacturing labourers shows relatively better working conditions, with a lower prevalence of temporary workers and higher average wage levels.

Information from Germany (data from the IGA Initiative) and the Netherlands (NWCS 2011–2013) shows that in both occupations, but especially for mining and construction labourers, existing prospects of staying in the occupation until retirement age are lower than the national average. German labourers also receive less training than the national average (Wittig et al, 2013).

Italian mining and construction and manufacturing labourers face a higher than average prevalence of fixed-term contracts and overtime practices according to data from Istat.

Mining is a high-risk activity in many countries. For instance, information from a Bulgarian government study funded by the European Commission, research by the Federation of Metalworking, Mining, Chemical, Pharmaceutical, Petroleum and Gas Workers' Unions (Fieqmetal) in Portugal and a study from Spain (INSHT, 2013) show that miners tend to be exposed to high temperatures, radiation and harmful agents, high noise and vibration levels, as well as the hazards related to the use of explosives, intense physical work or limited space to work comfortably. All these elements combine to make mining a very disadvantageous activity. One of the consequences of these poor working conditions is the number of accidents at work. Bulgarian information shows that the construction sector there is particularly affected by a high presence of the grey economy and illegal forms and practices of employment (Dzhekova and Williams, 2014).

Despite these negative elements, the situation is not as bad in some countries in relation to some dimensions. For instance, problems of long working hours, overtime practices or involvement in continuing training activities are not that important for these occupational groups in the Czech Republic and, in Finland, construction and manufacturing labourers have higher wage levels than the national average according to Statistics Finland.

Food preparation assistants (ISCO-08 94): Food preparation assistants

Like the occupational groups of cooks and waiters/bartenders, the occupational group of food preparation assistants (ISCO-09 941) can be defined as an OMD in some Member States but not all.

For example, information from the ISPV in the Czech Republic shows lower than national average wages. This disadvantage is combined, according to data from ČSÚ, with a very high prevalence of fixed-term contracts and part-time jobs (46% and 16.8%, respectively, compared with 9.8% and 6.8% for the corresponding national averages) and fewer training activities.

In Denmark, food preparation assistants are subject to lower gross hourly wages (DKK 150.72 (€20.19) compared with DKK 237.7 (€31.85) for the national average, as well as a greater prevalence of variable working hours and a need to work at high speed (data from the NFA and Statistics Denmark)). This high incidence of low hourly wage levels in this

occupational group is backed by evidence from Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) and Poland (GUS, 2014b).

Food preparation assistants in the Netherlands have lower wage levels and job prospects (NWCS 2011–2013). Evidence from Sweden shows that they suffer from important disadvantages in earnings, prospects and job quality (skill use and discretion, social environment, physical environment, work intensity) (Swedish Work Environment Authority, 2013).

In the UK, this occupational group is mainly affected by a combination of low wage levels. The median hourly wage for the occupation is £6.25 (€8.92), with 80% of workers earning £7.35 (€10.49) or less (ONS, 2013). There is also a higher proportion of part-time work than the national average.

Available indicators from the Netherlands (NWCS 2011–2013) and Sweden show that this occupational group is not particularly affected by negative elements such as high burnout levels, negative impacts on health or difficulties in combining work and family activities.

Refuse workers and other elementary workers (ISCO-08 96): Refuse workers

National information confirms the existence of multiple disadvantages for refuse workers (ISCO-08 961) in a number of Member States.

In the Czech Republic, data from ČSÚ shows a higher prevalence of fixed-term and part-time contracts (49.6% and 14.8% versus 9.8% and 6.8% for the national average, respectively), lower levels of pay, less participation in education and higher levels of overtime compared with the corresponding national averages.

In Denmark, refuse workers are exposed to lower hourly wage levels, higher accident rates and higher working speeds than the corresponding national averages according to data from the NFA.

German refuse workers have poor prospects of being able to stay in the occupation until retirement age (Institut DGB-Index Gute Arbeit, 2013), as well as high physical demands and a very strong incidence of sickness leave according to an annual report on absenteeism in the German economy (WiDo, 2013).

In Italy, refuse workers are characterised by a higher extent of overtime practices and a prevalence of involuntary temporary and part-time employment according to data from Istat.

In Latvia (VDI, 2014), Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2011) and the Netherlands (NWCS 2011–2013), the occupation is characterised by higher than average accident rates. Dutch information stresses the high proportion of refuse workers complaining of burnout (up to 20.2% of people in the occupation compared with a national average of 12.7%).

Information from several countries also suggests the prevalence of low hourly wage levels in this occupation, ranging from 26% less than the national average in the cases of Belgium (Statistics Belgium, 2012) and Bulgaria (data from Eurostat) to 71% lower in Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) and 82% lower in Denmark (data from Statistics Denmark).

Other occupations with disadvantages identified at national level

In addition to the list of ISCO-08 3-digit level occupations selected for this study (Table 1) as discussed above, Eurofound's network of national correspondents identified several other occupations that can be considered as OMD in their respective countries. The criteria used to identify these additional occupations are based on a combination of existing national information sources and the perceptions of the national correspondents.

Cleaners and helpers (ISCO-08 91 group)

One occupational group where there is widespread national evidence confirming its multiple disadvantaged nature in many countries is cleaners and helpers (ISCO-08 91) in relation to:

- domestic, hotel and office cleaners and helpers (ISCO-08 911);
- vehicle, window, laundry and other hand cleaning workers (ISCO-08 912).

For instance, an Austrian study on working conditions in the cleaning sector and based on Working Climate Index data shows that nearly half of workers in this occupation complained about:

- low wage levels (compared with 9% of all Austrian employees);
- atypical working time patterns (with evening, night and early morning working hours because of the nature of the service);
- the associated difficulties of having a good work–life balance;
- the impossibility of continuing in the same job until retirement age (around 30% of respondents compared with 17% of all employees);
- the high prevalence of cleaners suffering from physical and psychosocial work strains.

Similarly, a Czech study by CVVM shows that cleaners and helpers are characterised by:

- very low average wages (71.4% suggested they were paid less than they deserved compared with the national average of 58.5%);
- high probability of losing their job;
- low level of training opportunities;
- high concentration of fixed-term contracts;
- underemployment;
- high share of unpaid overtime work;
- high levels of stress (30.8% reckoned they suffered from stress almost every day compared with the national average of 9.3%);
- a higher perceived negative influence of working life on health status, general well-being and family life.

Cleaners are seen as an OMD in the Finnish labour market. They are poorly paid and their working conditions are both emotionally and physically demanding.

In the Netherlands (NWCS 2011–2013), cleaners think the age up to which they will be able to continue in their current occupation is 56.4 years-old (one of the lowest of any occupational group) compared with a national average of 62 years-old.

Low wage levels are confirmed by studies in Belgium (Statistics Belgium, 2012), Hungary (data from the Hungarian Central Statistical Office), Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012), Poland (GUS, 2014b) and Spain (INSHT, 2013).

In the UK, the median hourly wage for this occupational group is £6.54 (€9.33) compared with the national average of £11.28 (€16.04), with 70% of cleaners and helpers earning £7.30 (€10.41) or less (ONS, 2013).

In Spain, a high proportion of cleaning workers work weekends and bank holidays, have low associated learning opportunities and, generally speaking, low satisfaction levels at work (INSHT, 2013).

Evidence from Cyprus (Antoniou, 2010; CharalambidouSolomi, 2011) and Sweden (Abbasian and Bildt, 2007; Hägg et al, 2008) shows that a large majority of workers employed as domestic assistants and cleaners are women and, in the case of Cyprus, third country nationals. This finding may also explain the current poor working conditions in the occupation in Cyprus.

These difficult working conditions may explain why cleaners are overrepresented in the Finnish early disability retirement system or why the sector experiences high turnover levels and major difficulties in recruiting new staff in Belgium (VDAB, undated) and the UK (MacNamara, 2014).

Hairdressers, beauticians and related workers (ISCO-08 514)

This group is labelled as an OMD in several countries (Belgium, France, Germany, the Netherlands), in terms of poor wages, prospects and intrinsic job quality.

Evidence from Belgium shows that this occupational group is one of the 15 worst paid 3-digit ISCO occupations in the country; the average monthly wage is 34% below the national average (Statistics Belgium, 2012). A similar result is found in the Netherlands (NWCS 2011–2013). In Germany, the sectoral agreed minimum wage until 1 August 2015 was less than the statutory minimum wage introduced in January 2015.

French evidence (Dares, 2014) shows that hairdressers, beauticians and related workers are more exposed to chemical and biological agents (88% and 78% of workers, respectively) than the national average (33% and 22%, respectively). In Germany, up to 42.9% of hairdressers work beneath their qualification level (Wittig et al, 2013). It is therefore not surprising that, in Belgium, hairdressing is considered an occupation where it is difficult to fill vacancies (VDAB, undated).

Childcare workers and teachers' aides (ISCO-08 531)

Childcare workers and teachers' aides are an OMD in countries such as Belgium, Hungary and Italy.

According to data from Istat, this occupational group is characterised in Italy by high levels of (involuntary) part-time and temporary work coupled with low wage levels and job prospects. In Belgium, childcare workers are one of the five occupations with the highest number of accidents according to information from the Fund for Occupational Accidents.

Personal care workers in health and residential services (ISCO-08 532)

Personal care workers in health and residential services are another occupation with significant national evidence on multiple disadvantages. Despite increasing life expectancy and demands for personal care, this occupation is experiencing major recruitment and retention problems in a number of Member States due to poor associated working conditions such as low pay, lack of career progression opportunities, the demanding nature of the job and image problems.

Evidence from the Czech Republic (ISPV data), Hungary (data from the Hungarian Central Statistical Office) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) shows that average gross monthly wages in the sector are 60%–70% of the corresponding national average.

In the UK, the 2012 median hourly wage for this occupational group was £7.90 (€11.28) against a national median wage of £11.28 (€16.04), while 40% of workers earned £7.41 (€10.58) or less (ONS, 2013). The majority of the British workers did not receive set wages, making it hard to plan and budget, and 57.8% were not paid for their travelling time between visits. Also in the UK, a study by the trade union UNISON found that 41.1% of social workers were not given specialist training to deal with their client's specific medical needs, while over half the workers reported that their terms and conditions had worsened over the last year (UNISON, 2012).

In Germany, 74% of care workers said they would not be able to work in the occupation until retirement age and 84% felt high time pressure due to their work schedule (Ver.di, 2013; Institut DGB-Index Gute Arbeit, 2013).

Protective services workers (ISCO-08 541)

In France and Poland, available studies suggest that the occupational group of protective services workers is also subject to several disadvantages.

Polish research on protective services workers shows that not only are earnings very low in this occupation, but also working time was longer than the average and most of the workers were employed on the basis of civil law contracts (GUS, 2014b).

Meanwhile, French research for the subgroup of security guards (ISCO-08 5414) shows that they are particularly exposed to flexible working time, including Sunday and Bank Holiday work, as well as night work (75% compared with a national average of 15%) (Dares, 2014).

Market-oriented skilled agricultural workers (ISCO-08 61), market-oriented skilled forestry, fishery and hunting workers (ISCO-08 62)

In addition to the occupational group of labourers in the agricultural, forestry and fishery sectors (ISCO-08 921) described above, information available in countries such as Denmark, Italy, Latvia, Norway and Portugal shows that skilled workers in market-oriented agricultural, forestry, fishery and hunting activities (ISCO-08 61 and 62) can be also characterised as OMD in terms of lower salaries, lower intrinsic job quality and working time aspects.

Average earnings in Denmark (data from Statistics Denmark), Latvia (data from the Central Statistical Bureau of Latvia) and Portugal (Portuguese Ministry of Solidarity, Employment and Social Security, 2012) are around 50%–60% of the national average for these two occupational groups.

There is a high prevalence of overtime and involuntary part-time and temporary work practices among Italian workers in these occupational groups according to data from Istat. In Latvia, the accident rate is also high among these workers (VDI, 2014). In Denmark, workers in these occupational groups are particularly concerned about the possibility of losing their jobs according to data from the NFA.

Building and related trades workers, excluding electricians (ISCO-08 71)

Construction labourers (ISCO-08 931) are identified at European level as an OMD. Workers involved in building and related trades (apart from electricians) are regarded as OMD in several EU countries including Croatia, Italy, Latvia, the Netherlands and Portugal.

For instance, in Croatia, building workers report health and psychological problems caused by work in adverse conditions (noise, dust, cold and so on) as well as difficulties in achieving an adequate work–life balance, high working time pressures and a higher prevalence of work accidents (Croatian Institute for Health Protection and Safety at Work, 2014).

Heavy truck and bus drivers (ISCO-08 833)

Car, van and motorcycle drivers (ISCO-08 832) are identified at European level as an OMD. Heavy truck and bus drivers are also considered an OMD in some EU countries.

Evidence collected from several Member States such as Belgium (data from the Fund for Occupational Accidents), the Czech Republic (Kyzlinková and Dokulilová, 2007), Germany, Ireland (Health & Safety Review, 2014), Malta and Sweden confirms this negative situation. It is reflected in excessive working hours, long working shifts and high prevalence of overtime issues (with physical environment and health and safety implications), a high number of accidents and work-related injuries, as well as violence at work problems. For instance, every fourth Swedish bus driver in public transport experienced threats or violence in 2013 (Arbetsmiljöverket, 2014). In Germany, heavy truck drivers are particularly exposed to low wage levels (40% of truck drivers say they are not happy with their earnings). They also report very long working hours (54 hours per week on average) and high exposure to accidents and stress levels, as well as much discontent with work–life reconciliation issues (Wittig et al, 2013; Dribbusch et al, 2014; Bispinck and WSI-Tarifarchiv, 2014; ZF Friedrichshafen, 2014). These poorer working conditions may explain why this occupation has major difficulties filling vacancies in the Czech Republic (Aktualne, 2014).

Transport and storage labourers (ISCO-08 933)

Transport and storage labourers are another OMD according to the information collected in certain Member States where this particularly refers to occupations such as freight handlers (ISCO-08 9333) and shelf fillers (ISCO-08 9334).

Information collected from Belgium (data from the Fund for Occupational Accidents), Germany (Wittig et al, 2013), Italy (data from Istat) and the Netherlands (NWCS 2011–2013) shows that transport and storage labourers are characterised by a greater prevalence of involuntary part-time and temporary work, overtime, fixed-term contracts and low wage levels than the corresponding national averages. They also suffer from a higher-than-average risk of dropping out of working life before retirement age due to the higher prevalence of work-related accidents and health risks.

Occupations regarded as OMD in some Member States

A number of occupations can be identified as being OMD in individual Member States. Travel attendants, conductors and guides (ISCO-08 511) score particularly low in Denmark in the dimensions of working time, earnings and prospects according to data from the NFA. Armed forces occupations, other ranks (ISCO-08 03) are characterised by poor associated working conditions in all four dimensions of job quality in the Netherlands (NWCS 2011–2013).

Two occupational groups, postal courier services – part of messengers, package deliverers and luggage porters (ISCO-08 9621) – and call centre agents (ISCO-08 5244) are identified as OMD in Germany. In the case of postal couriers, the DGB Good Work Index (‘Index Gute Arbeit’) finds the job quality of workers in logistics, postal and courier services to be significantly below the average in a number of elements, including a high prevalence of marginal part-time workers

and low hourly wages (Ver.di, 2013). Some 60% of German call centre agents suggest their wages are insufficient to get by on. These workers also have one of the highest incidence of days of sickness leave due to health problems (including mental disorders) (Beiderwieden, 2013; AOK, 2014).

In Finland, a special group is formed by temporary agency workers, a group (not an occupation as such) who are identified as particularly vulnerable within the Finnish labour market in terms of earnings, prospects and intrinsic job quality (Huotari and Pitkänen, 2013; Mäkinen et al, 2014).

Conclusions: Country differences in identifying OMD

In many countries, the identification of OMD coincides with those selected at EU level (Table 1). Even in countries with different labour market characteristics like the Czech Republic and Sweden, many of these OMD can be considered disadvantaged in the national context, that is, in comparison with the rest of the occupations in the country.

The study has highlighted the prevalence of migrant workers in some of the OMD (for example, waiters, construction labourers and food processing workers), sometimes linked to the posting of workers or fraudulent contracting.

Machine operators, with the exception of food machine operators, are not considered an OMD in some countries. Assemblers were not found to be especially disadvantaged in a few countries in the EU15.

Among the occupations not selected for analysis in Chapter 1, cleaners stand out as an OMD in many EU28 countries.

Initiatives and policies aimed at improving working conditions 3

This chapter identifies and describes initiatives and policies aimed at improving working conditions in OMD. They include measures addressed at specific occupations and transversal initiatives targeted at broader groups of occupations. Examples of specific initiatives and policies are highlighted in boxes.

This chapter is based on information from Eurofound's network of correspondents. Most of the examples presented in this chapter are sectoral measures, that is, many of the measures do not focus on particular occupations but they refer to all workers undertaking a certain economic activity. However, there are sectoral measures that contain specific references to particular occupations (for example, berry pickers, miners, domestic cleaners and drivers).

A number of measures aimed at improving the working conditions of other occupations which were not initially considered as OMD (based on statistical data at European level in Chapter 1) were also identified by the national correspondents. More precisely, information collected at national level includes significant initiatives and policies aimed at occupations such as: workers in the care, health and social sector; cleaners and helpers; and hairdressers.

The initiatives and policies are presented by sector or economic activity, given that their classification by specific occupation is not feasible in practical terms. They are organised according to the following job quality areas:

- earnings or income;
- prospects (employment status and protection, job insecurity and employability);
- working time (duration, organisation and work–life balance);
- intrinsic job quality (skills development, psychosocial and physical risks, and health).

The initiatives and policies may be related to one or several of these four dimensions of working conditions or specific aspects of them. Aspects of working conditions not included in the contributions received from national correspondents are also mentioned.

The national correspondents were asked to provide a list of selected policy examples. Hence, this compilation of initiatives and policies is not an exhaustive list of all the measures in force in each country and for each analysed occupation. In addition, the information provided is only summarised below and not all the examples are presented. A full list of initiatives is provided in Annex III (available on request from Oscar Vargas Llave: ova@eurofound.europa.eu), organised by country, job quality area and main actors.

Horeca-related occupations

The Horeca sector is highly fragmented, with high seasonal work. The vast majority of the sector are microenterprises and it is a big employer, particularly of young people.

Most of the examples of national initiatives addressed at cooks (ISCO-08 512), waiters and bartenders (ISCO-08 513) and food preparation assistants (ISCO-08 941) are aimed at the tourism sector or the hotel and catering industry in general. This section therefore presents examples of initiatives and policies aimed at workers within the Horeca sector in general and without focusing exclusively on specific occupations.

These occupations have problems related to unsocial and irregular hours, and violence and harassment at work. However, these are not the main area of attention of the measures identified by this study.

Horeca-related occupations – Summary of initiatives

Earnings-related measures recur regularly in the examples which, in general, are agreements reached via social dialogue. There are also numerous initiatives dealing with intrinsic job quality, that is, aimed at improving skills and promoting health and safety (for example, prevention of physical and psychosocial risks), which are generally implemented by public authorities. However, the examples do not pay particular attention to situations in relation to employment status such as job security, involuntary part-time work or atypical working hours, although these are recurrent disadvantages for these occupations. One of the poor conditions for waiters and bartenders is the level of job strain and, although some initiatives have sought to tackle psychosocial risks, no specific attention is paid to job autonomy and work intensity.

Initiatives concerning improvements in earnings

The terms related to wages in the Greek Collective Employment Agreement on the pay and working conditions of employees of hotel enterprises are particularly significant. The agreement provides for no increase in basic wages in 2014 and for a 1% increase in 2015, and was signed one day before the expiry of the previous sectoral agreement which provided for wage reductions of 15%. Also in Greece, several agreements affecting hotel enterprises at local level were identified, including the local sectoral collective employment agreement for pay and working conditions of employees of hotel enterprises in the Prefectures of Lassithi and Iraklio.

There are other examples of sectoral agreements in:

- Denmark (Collective Agreement in the Personal Service Sector 2014–2017);
- Hungary (Collective Agreement in the Hospitality and Tourism Sector);
- Slovenia (Collective Agreement of Activities of Catering and Tourism 2014–2015);
- Sweden (Collective Agreement in the Hotel and Restaurant Sector 2013–2016).

All four are nationwide measures. In these agreements, the most interesting terms benefiting cooks, waiters and bartenders are linked to earnings. For instance, they establish higher minimum basic salaries than the national average in Hungary and Slovenia. In Sweden, the collective agreement in the hotel and restaurant sector creates a model for local wage setting, based on employee performance criteria connected to specific company objectives. In Denmark, the collective agreement in the personal service sector states that skilled waiters must earn more than unskilled waiters; the social partners wish to motivate more waiters to participate in education and expect this provision to result in more unskilled waiters wanting to become skilled waiters.

Initiatives concerning improvements in prospects

There are also examples of initiatives aimed at favouring employability and labour participation, and thus facilitating career advancement and promotion. In Spain, professionalism certificates in ‘basic kitchen tasks’ and in ‘basic restaurant and bar tasks’ allow workers in the selected occupations to improve their qualifications by accrediting professional competences acquired through work experience and/or non-formal methods of training. These certificates are promoted by national and regional public authorities.

In Belgium, the sector covenant for the hotel and catering industry is a tripartite agreement that focuses on the link between education and the labour market, lifelong learning and employment policy at regional level (Flemish region).

In Croatia, there is a provision of scholarships and guarantees for employment to attract young people to occupations in the tourism industry. This measure is applied by the biggest and most competitive companies in tourism in the country (for example, Arena Pula and Zelena Laguna Poreč) with the support of public authorities. Around 700–900 young people are included in the scheme every year.

Initiatives concerning improvements in intrinsic job quality

An example from the UK relates to skills development where the UK Commission for Employment and Skills (UKCES) and the Federation for Industry Sector Skills and Standards are working to reduce skills gaps among cooks.

UKCES is a publicly funded, industry-led organisation that offers guidance on skills and employment issues in the UK. The Federation for Industry Sector Skills and Standards is composed of independent, employer-led UK-wide organisations. It aims to develop high quality skills standards with employers. Among the objectives of both institutions are to:

- support employers in developing and managing apprenticeship standards;
- reduce skills gaps and shortages and improve productivity;
- boost the skills of their sector workforces;
- improve learning supply.

UK: Sector Skills Councils

Sector Skills Councils are independent, employer-led organisations which seek to build a skills system that is driven by employer demand. The 18 Sector Skills Councils and five Sector Skills Bodies work with over 550,000 employers in the UK to define skills needs and skills standards, and to define occupational standards and job competencies. They also advise employers about the qualifications that are best suited for apprenticeships and have a list of training providers that can deliver those qualifications. The focus is industry and not occupation based. People 1st is the Sector Skills Council dealing with hospitality, leisure, passenger transport, travel and tourism.

The government is currently piloting major changes to the skills system and skills funding in England through the Employer Ownership Pilot. The Trades Union Congress (TUC) has expressed support for some key aspects of the scheme. Unionlearn, the TUC's learning and skills organisation, sees it as a priority to support union involvement in the work of Sector Skills Councils and the new Industrial Partnerships. Unionlearn works closely with affiliated unions to identify suitable candidates to sit on the boards and sub-committees of Sector Skills Councils and Industrial Partnerships to ensure that workers have their voices heard.

Source: UK contribution

Other examples deal with working conditions and health and safety issues. This is the case for several nationwide campaigns.

In Belgium, the Federal Public Service Employment, Labour and Social Dialogue implemented a nationwide inspection campaign on psychosocial risks in the catering sector in 2012. The first inspection of catering establishments focused on whether there was a psychosocial risk analysis (a legal requirement) and on prevention measures; 80% of the establishments received a written warning following this first inspection. A further inspection in the second half of 2012 resulted in a written warning for 35% of the establishments.

In Norway, the Governmental Inspectorate has carried out a joint inspection campaign in hotel, catering and food industries to check the extent to which the requirements of health and safety standards were being met. Also in Norway, regulations approved in May 2011 established that regional safety representatives must ensure the quality of occupational health and safety and prevent social dumping (especially in companies without their own safety representatives).

To improve its employees' working conditions, the Bulgarian catering company Happy Lady Ltd has invested in measures such as:

- collective and personal protective equipment and clothing;
- upgrading of the ventilation system, electricity and lightning protection.

Examples of initiatives in different policy areas for Horeca related occupations are summarised in Table 8.

Table 8: Examples of initiatives for Horeca-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Mostly sector collective agreements at sector level (catering, tourism and so on)	Mainly provisions and regulation of minimum wages and annual salary increases	DK, EL, HU, SE, SI
Prospects	Some social dialogue agreements and state measures	Initiatives promoting career development and employment protection (for example, 'professionalism certificates', scholarships)	BE, ES, HR, HU
Intrinsic job quality	Mostly government measures (inspection campaigns and training programmes) Some collective agreements, measures developed by employers and company-level measures	Inspection campaigns preventing psychosocial risks A few programmes for skills development and training	BE, BG, DK, NO, UK

Note: No examples aimed at improving working time conditions were identified.

Source: *National contributions*

Retail- and commerce-related occupations

The majority of the examples of measures aimed at improving the quality of jobs and ensuring better working conditions for shops salespersons, cashiers and ticket clerks do not refer exclusively to these particular occupations. Instead, they are rather sectoral measures affecting workers in the commerce or the retail sector as a whole.

Although occupations in this sector in general have poor working conditions in relation to working time (unsocial working hours), it is necessary to distinguish the conditions of shop salespersons from those of the cashiers and ticket clerks. Cashiers and ticket clerks report an especially poor situation in relation to access to training, low income, involuntary temporary work, social environment due to violence and harassment exposure, and job strain. However, shop salespersons work longer hours.

Commerce/retail – Summary of initiatives

The majority of the measures in the examples of initiatives aim to improve working time conditions among workers in the commerce sector. These measures facilitate work–life balance and try to reduce unsocial hours – one of the main problems affecting working conditions for shop salespersons. Measures that seek to improve their earnings were also identified.

Many of the example initiatives are collective agreements that include a set of provisions for employees concerning both their working time (for example, more flexible working time, banded hours, opening hours, and compensation for unsocial working hours) and their remuneration (for example, minimum salaries, pay increases and productivity bonuses). Intrinsic job quality is also a repeated policy area among the initiatives found and there are a few measures that seek to prevent violence and psychosocial risks.

Given the different conditions of shop salespersons and cashiers and ticket clerks, a more specific occupational approach might be more appropriate for the occupations in this sector given the more difficult disadvantages of cashiers and ticket clerks, especially in relation to income and social environment.

Initiatives concerning improvements in working time and earnings

There are several examples of measures aimed at improving working time conditions. For instance, in the Czech Republic, the Parliament is working on a law for the reduction of opening hours of chain stores. This law aims to enable chain store employees to spend public holidays with their family at home by limiting store opening hours on those days. In Lithuania, a noticeable action was the reduction of working hours during Christmas holidays (December 2013), a measure implemented by employers of large shopping centres in the biggest cities of Lithuania to allow their employees to better balance work and family life.

Some collective agreements approve terms concerning the improvement of both working hours and earnings. For example, in Austria, the collective agreement in the commerce sector includes a specific provision which increases the minimum wage and extends participation rights for salespersons regarding work on Saturdays. In Slovenia, the Collective Agreement of the Activity of Commerce includes several terms for the improvement of working hours (for example, working time can be separated to a maximum of two parts or shifts) and also approves new minimum basic salaries. In Bulgaria, the Sectoral Collective Agreement in Wholesale and Retail Trade approves pay for working hours at night, equal pay for men and women, and work–life balance measures, among others.

In France, the collective agreement for the large general retailers increases the minimum level of working hours for part-time employees and demands that part-time employment contracts must forecast a weekly working time of at least 26 hours. These provisions are designed to improve work–life balance, reduce unsocial hours and increase earnings. From 1 January 2015, the distribution of working time should allow workers to share their part-time work with another employee or to adapt their part-time working hours to suit family constraints.

There are also examples of measures at company level which focus primarily on working time arrangements and the improvement of earnings. This is the case for the Penneys–Mandate collective agreement and the Tesco–Mandate/SIPTU national agreement, both in Ireland. Similarly, in Slovakia, the company Tesco offers its employees better and more transparent scheduling of working time (see box).

Slovakia: Scheduling of working time at Tesco

Tesco Slovakia offers internal benefits to its employees concerning working time. With director approval, Tesco human resources (HR) managers launched an initiative aimed at limiting long working time which covers all employees of Tesco Slovakia in all Tesco retail shops. The HR managers have set precise rules and limits for working time and improvement of working conditions of shop salespersons in Tesco shops, thus reducing average actual weekly working time.

Internal company regulation allows better and more transparent scheduling of working time, which has resulted in higher employee satisfaction, higher work autonomy and lower intensity. This company regulation is also intended to limit long working time, including overtime and night work. Likewise, Tesco offers additional benefits such as extra holidays for significant life events, a financial benefit on the anniversary of an employee joining the company, a transport allowance and a family shopping discount scheme.

Source: *Slovakian contribution*

Initiatives concerning improvements in intrinsic job quality

Several initiatives dealing with intrinsic job quality, particularly concerning hard work and dangerous conditions, as well as psychosocial risks, were identified.

An interesting measure in Sweden is online training to improve social and physical working conditions for sales workers. It was implemented by the Commercial Employees' Union (Handels), in collaboration with the Working Environment Committee of Commercial Employees, and Prevent – a non-profit organisation and provider of knowledge and training in the field of health and safety, owned by the Confederation of Swedish Enterprise, the Swedish Trade Union Confederation (LO), and the Council for Negotiation and Co-operation (PTK).

In France, the agreement about sales representatives' health at work adapts health medical monitoring to the specificities of the occupation of mobile sales representatives. Social partners choose a single work-related medical service to provide national monitoring of commercial sales representatives in cooperation with local work-related medical services.

Linked to the general Health and Safety at Work Act, there is detailed sector-specific legislation in the UK on important issues such as slips and trips, manual handling, violence, work at height and workplace transport.

In Romania, a national campaign on psychosocial risks in the working place was implemented by Territorial Labour Inspectorates in 2013. This consisted of initiatives to raise awareness nationally and initiatives concerned with work security and health for the target groups (1,163 workers from 123 banks, 1,214 workers from 119 multinational companies and 1,328 workers from 126 supermarkets). The main outcomes were a 25% reduction in the total number of employment accidents, and the development and strengthening of the culture of preventing accidents.

Exposure to third party violence and harassment is a significant disadvantage for retail and commerce occupations. For this reason, for instance, the Spanish Collective Agreement for Convenience Stores, agreed by social partners at national and sectoral level, includes a 'prevention and action protocol' for facing psychological and sexual harassment at work.

Concerning skills and training, the Sectoral Collective Agreement in wholesale and retail trade in Bulgaria approved measures to ensure employee training and attainment of a qualification once per year. The collective agreement in the Italian commerce sector established an institution managed jointly on a parity basis between the social partners for continuous vocational training.

Initiatives concerning improvements in prospects

An example that could be related to job prospects is the Sectoral Collective Agreement in wholesale and retail trade from Bulgaria, which approves a set of measures against redundancies in response to the financial and economic crisis.

Examples of initiatives in different policy areas for retail and commerce related occupations are summarised in Table 9.

Table 9: Examples of initiatives for retail- and commerce-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Collective agreements (at sectoral and company level)	Initiatives establishing minimum wages and salary increases, supplementary payments (linked to unsocial working hours, higher productivity)	AT, BG, EE, FR, IE, IT, SI
Working time	Mainly collective agreements (at sectoral and company level)	Measures facilitating work–life balance (for example, regarding work on Saturdays or holidays, banded hours, flexitime)	AT, BG, CZ, EE, FR, IE, IT, LT, SI, SK
Prospects	Collective agreements (at sectoral and company level)	Measures against redundancies (employment protection)	BG
Intrinsic job quality	Government measures and collective agreements	Health and safety measures, campaigns on psychosocial risks, prevention protocol for psychological and sexual harassment Training and qualification guaranteed by some collective agreements	BG, FR, ES, IT, RO, SE, UK

Source: *National contributions*

Manufacturing-related occupations

The group of manufacturing-related occupations is a broad one which includes jobs related to different economic activities and professions within the manufacturing sector. Given that the national initiatives are difficult to classify according to specific occupations, all these measures are studied under the ensemble of manufacturing activities. As in other sections of this chapter, the majority of the initiatives do not refer to specific occupations but they rather deal with sectors or economic activities.

This section analyses initiatives in sectors such as:

- textiles – covering garment and related trades workers (ISCO-08 753);
- food & drink – covering food processing and related trades workers (ISCO-08 751) and food and related products machine operators (ISCO-08 816);
- wood – covering wood treaters, cabinet-makers and related trades workers (ISCO-08 752) and wood processing and papermaking plant operators (ISCO-08 817);
- chemicals – covering rubber, plastic and paper products machine operators (ISCO-08 814);
- other occupations mainly linked to the metal sector such as assemblers (ISCO-08 821) and manufacturing labourers (ISCO-08 932).

Manufacturing-related occupations – Summary of initiatives

Linked to the relative high job strain and health risks of these occupations, most of the initiatives and policies seek to improve their ‘intrinsic job quality’. Most of the measures deal with the physical and/or social environment (physical and psychosocial risks prevention), but a significant number are concerned with skills development and training. Earnings are another commonly considered matter.

For some occupations (manufacturing labourers, garment workers, machine operators and food processing workers), no specific measures were reported in relation to job strain. However, some of the initiatives are meant to compensate for arduous working conditions. No measures related to employment security were reported for manufacturing labourers.

Although social dialogue is the leading driver among the measures found for these occupational groups, there are a few government-led initiatives – mostly linked to intrinsic job quality – and several examples applied by companies.

In general terms, high job strain and high health and safety risks are the main reason for poor working conditions among manufacturing related occupations and might explain the low levels of job satisfaction and poorer work sustainability. Garment workers have little training provision and food processing workers have a poorer work–life balance, probably related to atypical working hours. Manufacturing labourers have a relatively high level of job insecurity.

Initiatives concerning improvements in intrinsic job quality

Two examples of policies and initiatives dealing with health and safety are the national campaigns for:

- the continuous improvement of working conditions in the footwear industry in Portugal, based on a protocol of action signed by the Authority for Working Conditions (ACT) and other social partners in the sector;
- checking by the Territorial Labour Inspectorates of compliance with health and safety regulations in Romania affecting workers involved in the manufacture of textiles, clothing, leather and related products.

Also in Romania, there was a campaign to urge companies and workers in the food industry to adapt to meet EU legislation on safety and health at work.

A project in the Lithuanian furniture, wood and paper sector in 2012–2014, funded by the European Social Fund and implemented by sectoral social partners, sought to improve occupational health and safety in the sector’s enterprises.

In the Netherlands, ‘5xbeter’ is a joint project of employers and trade unions in the metal industry sector (see box) to improve health and safety in its companies.

Netherlands: 5xbeter project

5xbeter ('very strong for safe work') is a joint project between five social partners in the metal industry: Koninklijke Metaalunie, the Federation for the Metal and Electrical Industry (FME), the Dutch Trade Union Federation (FNV), CNV Professionals and the Dutch General Independent Union (De Unie). The project was set up in 2006 and aims to improve safety and health in companies covered by the sector's collective agreements. Its two main activities are:

- the development of a health and safety catalogue, called '5xbeter Improvement Checks', listing the major health and safety risks in the sector;
- improving the availability of coaches who advise companies and employees, and support them in the proper implementation of the health and safety catalogue in companies.

All 5xbeter's products and services are available free of charge to all companies covered by the metal industry's collective agreement.

Source: *Dutch contribution*

In Denmark, a licence card for working with 'lean production' processes has been developed, with the objective of making employees work smarter to avoid stress. The measure consists of a training course offered to assembly workers, meant to improve the working environment by reducing stress and improving job prospects. The measure aims to reduce job strain and high intensity – one of the main disadvantages reported for these occupations.

In Romania, social partners in the pulp, paper and paperboard sector implemented organisational support programmes and training for staff in 2010–2013 to help them adapt to market dynamics by, for example:

- improving the level of training and health and safety conditions at work;
- developing innovative methods of organisation of work;
- providing training in new technologies.

In Italy, the company Gruppo Luccioni has introduced its 'Play factory' method for developing a new work culture, aimed at developing employees' involvement and well-being.

Initiatives concerning improvements in earnings and working time

There are many interesting examples of initiatives aimed at improving workers' earnings. Most of the measures identified are collective agreements where social partners have agreed on aspects such as minimum salaries, and special supplements or payments linked to arduous working conditions (such as night shifts and occupational risks). For instance, Germany has extended the agreement on minimum wages for food processing workers, approved through collective bargaining. In Spain, the regional collective agreement for the metal industry, services and installation sector of the Autonomous Community of Madrid approved pay supplements to compensate for tough working conditions.

Collective agreements usually regulate a variety of aspects which may affect different policy areas (earnings, working time, skills, physical environment and so on). For instance, in Bulgaria, the subsectoral collective agreement for the pulp and paper industry, the subsectoral collective agreement for wood processing and the manufacture of furniture, and the subsectoral collective agreement for the manufacture of metal establish minimum requirements for wages and additional

remunerations. They also approve other terms related to working time, paid leave, social security, health and safety, and so on. In Lithuania, where there is a strong collective bargaining tradition within the food industry, collective agreements in food sector enterprises approve higher wages for those companies with active trade unions and flexible working time for employees with children, improving work and family life balance.

Finally, concerning initiatives implemented at company level, in Italy there are several cases of specific companies with agreements that improve conditions related to payments, which refer to special bonuses to promote productivity, organisational efficiency (for example, a bonus encouraging attendance at work and organisational efficiency at Prysman Cavi e Sistemi Italia) or night work (for example, company welfare services and variable wage at Tecnofar Spa).

Initiatives concerning improvements in prospects

In Austria, the collective agreement in the textile industry guarantees higher employment security for all blue-collar workers, with longer periods of notice in the case of dismissal. In Germany, the regional initiative Meister.Werk.nrw aims to promote good quality in production and in work, collective bargaining coverage and provision of training. The licence card for working with lean production processes from Denmark also seeks to improve job prospects and employment protection.

Examples of initiatives in different policy areas for manufacturing-related occupations are summarised in Table 10.

Table 10: Examples of initiatives for manufacturing-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Sectoral and company level collective agreements, and a few company initiatives	Agreements approving minimum salaries, wage increases, additional remuneration and compensation	BG, DE, ES, IT, LT, SI
Working time	Collective agreements at sectoral level	Flexitime and banking of hours, specific regulations on overtime and night work (some linked to pay supplements)	BG, IT, LT
Prospects	Collective agreements, measures implemented by trade unions or by employers' associations individually, and governmental initiatives	Employment security (in the case of dismissals), collective bargaining representation, promotion of job prospects	AT, DE, DK
Intrinsic job quality	Government measures, social dialogue agreements, initiatives developed by trade unions or employers' associations independently, and company-level measures	Health and safety campaigns and good practice guides, promotion of skills, training	DE, DK, IT, LT, NL, PT, RO

Source: *National contributions*

Drivers and related occupations

This section focuses on initiatives aimed at car, van and motorcycle drivers (ISCO-08 832) and mobile plant operators (ISCO-08 834), which are identified as OMD based on European statistical data (Chapter 1). Some of the national measures may have an occupation-based perspective, for example, by covering the whole group of drivers and mobile plant operators (ISCO-08 83) or just 'drivers' in general, while other measures are related to the economic activity of 'road freight transportation'. In addition, the specific occupational group 'heavy truck and bus drivers' (ISCO-08 833) has been included here – even though it was not classified as an OMD according to EU level data – because it has been reported as an OMD in countries such as the Czech Republic, Romania and Sweden (see Chapter 2).

The most significant problems for these occupations are working time (long hours and work–life balance), exposure to health risks, provision of training for drivers and low wages.

Drivers and related occupations – Summary of initiatives

This section deals with particularly regulated professions and therefore occupations. Most of the examples deal primarily with intrinsic job quality (especially health and safety matters) and working time. In the case of drivers, safety and working time appear to be closely related, as the limits on driving hours concern both safety and working time patterns. Public authorities play a key role in the implementation of measures aimed at drivers, for example, health and safety inspection activities and legislation on driving times. However, ‘drivers’ is an occupational group which contains more workers who are not well informed about health and safety.

There are relatively few examples of measures related to earnings in the national contributions. Moreover, no examples aimed at improving prospects were identified and training seems to focus on health and safety rather than other skills development aspects.

There is a lack of measures reached through social dialogue, although there are a few examples of initiatives implemented by social partners, either by trade unions or employers’ associations unilaterally, or by both sides through joint action. Among those, it is worth highlighting the measures aimed at training drivers on health and safety issues.

Initiatives concerning improvements in intrinsic job quality

Looking at some of the particular examples identified, it is worth mentioning labour inspections. For instance, in Romania, the Territorial Labour Inspectorate carried out a national campaign on health and safety at work aimed at all workers in road transportation involving inspections, identifying contraventions and imposing penalties (see box). In Sweden, the Swedish Work Environment Authority implemented a campaign consisting of inspections to secure a better work environment for truck drivers, affecting all workplaces where employees are operating trucks.

Romania: Health and safety at work campaign for road transport workers

The national campaign, ‘Driver awareness on occupational risks and inspection of compliance with regulations of health and safety at work for transport operators licensed for passenger transportation’, was implemented by the Territorial Labour Inspectorate to check how employers were complying with the law. These inspections include the revision of several legal aspects such as:

- safety and health at work;
- establishment of the application of the rules on driving times, breaks and rest periods for drivers;
- utilisation of recording equipment during their work;
- organisation of health and safety at work;
- staff training in health and safety at work.

The campaign was carried out in May–June 2013 and October 2013, and covered all workers in road transportation. The main actions undertaken during this campaign were basically carrying out inspections and applying penalties when necessary.

Source: *Romanian national contribution*

The training of workers on occupational hazards is also a significant measure for the improvement of intrinsic job quality.

In Sweden, there was a campaign for educating bus drivers in conflict management to improve safety and employment protection.

In Spain, trade unions published a guide on the prevention of occupational hazards for goods transport drivers.

In the Netherlands, the Sector Institute of Transport and Logistics is developing a number of campaigns and initiatives to improve health and safety among workers, such as the award-winning campaign 'Forklifts Heroes', which provides 'tip cards' for employees on dealing with violence or aggression and workshops for employers on supervision and risk and safety culture.

In the UK, and linked to the general Health and Safety at Work Act, the Health and Safety Executive (HSE), publishes specific health and safety guidelines for drivers jointly with the Department of Transport, as well as recommendations on driving hours.

Initiatives concerning improvements in working time

As noted above, working time regulations are of special interest in the case of drivers and some of the measures show that working hours are closely linked to work safety.

For instance, in the Czech Republic, special inspections in truck freight transportation were carried out by the State Labour Inspection Office as a measure to prevent infringements of working time regulations and secure better safety at work for drivers.

In Spain, Royal Decree 1635/2011 regulates special working hours in road transport; its objective is to improve health and safety among road transport professionals by implementing a set of minimum conditions concerning working hours in the sector as well as by improving control systems.

Romania has adopted new rules for road and freight transportation on driving times, breaks and rest periods for drivers.

Initiatives concerning improvements in earnings

There are examples of company-level initiatives on earnings from Italy:

- variable wages and economic compensations at S. Service srl;
- a bonus for improving productivity and outcomes at Graziano & CO Srl.

Examples of initiatives in different policy areas for drivers are summarised in Table 11.

Table 11: Examples of initiatives for drivers

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Company-level measures	Bonus and variable wages linked to productivity	IT
Prospects	State initiatives	Legislation and guidelines on driving hours and breaks, inspection activity on driving times	CZ, ES, IT, RO
Intrinsic job quality	Mainly state initiatives, but also measures applied by trade unions or by employers' associations independently	Health and safety campaigns, inspections, good practice guides (health and safety often linked to working times)	CZ, ES, NL, RO, SE, UK

Note: No examples aimed at improving working time were identified.

Source: *National contributions*

Construction sector occupations

In line with the type of measures and their sectoral nature, information related to the occupation 'mining and construction labourers' (ISCO-08 931) has been classified into two different groups: workers in the construction sector and workers in the mining sector. This section looks at initiatives linked to the construction sector. These measures and policies mainly seek to improve working conditions among construction labourers but some of them also refer to other occupations in the construction sector.

The main poor working conditions which characterise these occupations are health and safety risks (including job strain), low work sustainability, job insecurity, high levels of involuntary temporary and part-time work, and limited access to training for labourers.

Construction and mining labourers – Summary of initiatives

The majority of the measures deal with intrinsic job quality such as health and safety issues, job strain, and training and skills development programmes. In addition, many of the measures seek to improve wage levels (for example, minimum wage arrangements and extra payments for hard working conditions), which is not a relatively strong disadvantage for this occupational group. There are also a number of measures referring to working time and job prospects. Given the disadvantages found for labourers, it might be considered more appropriate to target the group more specifically.

However, there is no dominant driver for the type of actor implementing the measures, although social dialogue has played a major role as many of the measures are collective agreements. Public authorities tend to lead health and safety initiatives, whereas both trade unions and employers' organisations implement interesting measures for the improvement of intrinsic job quality, often in collaboration with governments. For example, there are examples of measures that have received financial support or official approval from national governments, but which have been implemented in practice by social partners.

For mining labourers, there are mostly national measures, predominantly dealing with intrinsic job quality. No examples aimed at improving working time or prospects were identified.

Initiatives concerning improvements in intrinsic job quality (health and safety)

As previously mentioned, health and safety problems are the main disadvantage for these occupations.

An example of a national initiative aimed at the prevention of occupational health problems is ‘Baufit’, an occupational health and safety programme for Austrian construction workers (see box).

Austria: Baufit OSH programme for construction workers

Baufit is a programme implemented by the Austrian Workers’ Compensation Board (social insurance for occupational risks) (AUVA), an organisation financed mainly by contributions paid by employers with legal duties in prevention of occupational accidents and disease as well as rehabilitation. It offers subsidised intervention and training courses to reduce stress loads and accident frequency at construction sites. Companies are offered training programmes on ergonomic work procedures and movements, complementary exercises, eurhythmmy and prevention of work accidents. In 2013 new training modules on reducing stress at work were added to an extended version of Baufit.

For participating companies with up to 50 employees, 80% of the costs of Baufit projects are paid by AUVA and only 20% by the companies themselves. For bigger companies, 60% of the costs are refunded by AUVA.

According to AUVA, its assessment of Baufit projects shows that sick leave numbers in participating companies could be reduced by half and work accidents by a quarter compared with the same period before implementation of the projects.

A total of 220 projects in about 200 companies were carried out between 2004 and 2014. Usually, 15–20 construction workers participated in each project, which means that a total of 3,300–4,400 workers have been involved in the programme so far.

Source: *Austria national contribution*

In Slovenia, the project ‘Establishing support environment for improvement of working processes and conditions in the field of health protection in the construction sector’ sought to identify key factors with negative impacts in the construction sector based on two surveys on stress factors (for example, workload, work autonomy, physical effort, support from colleagues, support from leaders and fear of losing their job) and physical–chemical factors causing overburden. The survey on stress factors involved 330 people. It was concluded that stress was mostly connected with working relationships, work complexity, effort; at company level, factors affecting stress at work were mostly physical effort, low material situation and fear of losing the job. These results could be linked to the fact that the sector is characterised by highly mobile and temporary jobs.

In Norway, the occupational health and safety charter for an injury-free construction industry, signed in June 2014 by social partners and the Norwegian Minister of Labour and Social Affairs, aims to make sites in the industry a safe workplace. The charter includes actions such as:

- occupational health and safety plans for every project;
- improvements in tidiness and safety conditions on all construction sites;
- annual reports on injuries and occupational illnesses;
- a guarantee that required safety equipment is always available.

In the UK, the HSE has produced an example of an occupational health and safety plan for the construction industry.

In Finland, the project ‘Developing health in the construction sector’, implemented by the Finnish Institute for Occupational Health and social partners, created a website (Työhyvinvointitarjotin, <http://tyohyvinvointitarjotin.rakennusliitto.fi>) with details of good practices in the field of promoting well-being at work.

In Bulgaria, the company Chehplast Ltd significantly improved health and safety conditions among its employees by measures including modernisation of workplaces, provision of personal protective equipment and special clothing.

Initiatives concerning improvements in intrinsic job quality (skills) and prospects

Some measures combine intrinsic job quality with the improvement of job prospects (for example, employment protection and employment contracts).

In Denmark, the Danish government approved the ‘safety card’ (Sikkerhedskort) in 2015; its objective is to secure fewer accidents and a better working environment on construction sites, as well as to counteract social dumping. All employees in the construction sector must carry a safety card with information such as name, employer and obligatory industrial injury insurance.

A collective agreement in the construction industry in Cyprus introduced a ‘special occupational identification card’ for all workers. It sought to combat undeclared work and to help the introduction of standards of occupational qualifications. In addition, special training is provided to workers who want to be employed in the construction industry to become qualified with the occupational card. Linked to this, employers and trade union organisations have jointly agreed to operate the Qualification Accreditation Centre, which gives workers in construction the opportunity to develop their skills and to certify their qualifications.

In Spain, the Labour Foundation of Construction aims to:

- enhance vocational training among workers in the construction sector;
- encourage health and safety at the workplace;
- promote employment in the sector.

The Foundation aims to provide businesses and workers in the construction industry with the necessary resources to develop a more professional, qualified and educated sector. The organisation is led by nationwide social partners.

The ‘Social House of Constructors’ is a Romanian measure aimed at ensuring the protection of employees during work disruption due to adverse weather conditions, which can be linked to employment continuity and job security.

Initiatives concerning improvements in earnings

There are several examples of measures which aim to improve construction workers’ wages, most of which have been approved by agreements between social partners.

In Croatia, the collective agreement for the building sector regulates basic wage increases when an employee works occasionally in operating conditions that are harder than normal.

In Ireland, the registered employment agreement for the construction industry sets overtime rates, minimum wage rates, pay progression for workers, annual leave provisions and so on.

In Italy, the collective agreement in the construction sector introduced shift rotations and allowances in the case of overtime, night and distressing work, which resulted in higher earnings for workers.

In Germany, the Federal Labour Minister has extended the sectoral minimum wage agreements for labourers and skilled workers in construction, where minimum wages for the sector are established. The National Statutory Minimum Wage introduced in January 2015 is not a substitute for the sectoral wage and so workers will be covered by this sectoral agreement until it expires.

At company level, in Italy, the company ERP Massa Carrara Spa used tax cuts to introduce a bonus to reward cases of higher productivity.

Initiatives concerning improvements in working time

In Croatia, the collective agreement of the large construction company Konstruktor increased the duration of annual holiday leave, with the objective of improving work–life balance for its workers.

In Ireland, the registered employment agreement for the construction industry regulates annual leave provisions for the construction industry and the working week, and also sets overtime rates.

The Italian collective agreement in the construction sector introduced shift rotations and allowances in the case of overtime and night work.

Examples of initiatives in different policy areas for construction related occupations are summarised in Table 12.

Table 12: Examples of initiatives for construction-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Collective agreements	Agreements approving minimum salaries, wage increases, additional remuneration and compensation (overtime rates)	BG, DE, HR, IE, IT
Working time	Collective agreements	Overtime and night shift regulation, leave provisions	HR, IE, IT
Prospects	State initiatives, collective agreements and measures developed independently by trade unions and employers' associations	Combating undeclared work and social dumping, social protection, career and employment promotion	CY, ES, DK, RO
Intrinsic job quality	State initiatives, collective agreements and measures developed independently by trade unions and employers' associations	Occupational risks prevention, programmes/campaigns for improving working conditions, skills development and standards of occupational qualifications	AT, BG, CY, DE, DK, ES, FI, NO, SI, UK

Source: *National contributions*

Mining sector occupations

This section presents the measures affecting the mining sector, for which only a few measures were identified by the national contributors. Given the arduous working conditions from which workers in this sector suffer, it is worth commenting on a couple of measures aimed at improving workers' health and safety conditions.

In the UK, the HSE has been working with the mining sector to review all health and safety mining legislation, with the aim of removing the unnecessary regulatory burden on business through clarification and simplification.

The Slovenian coal company, Premogovnik Velenje, d.d., has a long-running project called 'Care for a healthy worker' (see box).

Slovenia: 'Care for a healthy worker' programme for mineworkers

The project was initiated by management and health and safety representatives at the Velenje coal mine company in 1998. It is basically a medical preventive programme for reducing musculoskeletal disorders, organised especially for workers at the mine.

The company uses different analyses to prepare suitable measures, such as workability and age structure analysis, as well as statistics from the Institute of Public Health (IVZ) on the most common causes of work-related absence, and company analyses on musculoskeletal disorders. These analyses are the basis for planning the preventive health and safety activities and for the annual evaluation of the programme based on the statistical data and internal assessment.

The project was initiated by management and health and safety representatives at the company. Personnel representatives and external consultants were also involved in setting up activities within the project. During implementation, the occupational therapist and psychologist from the company's health and safety department assist in ergonomic and psychological workplace interventions as well as in training, coaching and supervision.

To take part in this prevention programme, employees do not apply by themselves, but the company draws lots for them; it takes about 5–7 years before all workers in the mine get their turn. Every year, around 110 employees are invited and 90–100 employees decide to join this activity.

The programme's main outcomes are:

- prevention and early discovery of diseases, and care for workers' health;
- a low absenteeism level (5%–6%), which represents a success given the company's main activity of coal mining;
- a fall in the number of accidents in the recent years;
- reduced absence due to other reasons such as occupational diseases (musculoskeletal disorders) and health problems;
- greater awareness by workers of their health and safety at work.

Source: *Slovenian contribution*

An example concerning skills development is the national training agreement for the mining sector in Spain. This agreement, signed by national social partners, highlights the importance of training activities in the sector and it is a commitment to the promotion of training among its workers.

In Bulgaria, the sectoral collective agreement for ‘mining and quarrying’ approved a minimum monthly wage for employees that was 40% higher than the national minimum wage; the wage increase is determined at company level according to its financial–economic situation but should never be lower than the national minimum wage.

Examples of initiatives in different policy areas for mining-related occupations are summarised in Table 13.

Table 13: Examples of initiatives for mining-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Collective agreements	Minimum wage	BG
Intrinsic job quality	State initiatives and social dialogue agreements	Health and safety regulations, medical preventive programmes, promotion of training activities	ES, SI, UK

Note: No examples aimed at improving working time or prospects were identified.

Source: *National contributions*

Agricultural, forestry and fishery sector occupations

Most of the measures covering agricultural, forestry and fishery labourers (ISCO-08 921) are implemented from a sectoral perspective, that is, the majority of the initiatives cover the agricultural, forestry or fishery sector, without dealing with specific occupations. However, there are a few particular cases such as the measures aimed at ‘berry pickers’ in Sweden.

Long hours, low wages, job insecurity, involuntary and temporary employment, health and safety issues and training difficulties are the main disadvantages experienced by these occupations.

Agricultural, forestry and fishery labourers – Summary of initiatives

The majority of the initiatives aimed at occupations in the agricultural, forestry and fishery sectors deal with health and safety, and particularly with health and safety conditions. This is to be expected, given the physical efforts, risky activities, unfavourable environmental conditions and so on that characterise these occupations. Linked to this, many initiatives consist of training and awareness-raising campaigns to promote work safety. In those cases, public authorities play a key role, usually with the support of social partners. For some countries, measures aimed at improving employment protection have also been reported, in some cases linked to combating undeclared work.

Initiatives concerning improvements in intrinsic job quality (health and safety) and working time

These occupations are among those with a relatively high share of workers who are less informed about health and safety risks. Many of the initiatives are therefore concerned with improving health and safety conditions and promoting risk prevention.

In Portugal, social partners and public authorities have published several good practice guides (for example, a guide on safety, hygiene and health at agricultural work, and a guide for workers when using agricultural pesticides) and launched

a number of awareness-raising campaigns (for example, a campaign to improve working conditions in fishery, and a campaign on occupational safety and health in agriculture and forestry).

Other examples of measures linked to health protection include:

- vaccination against tick-borne encephalitis among employees working in enterprises with active trade unions operating in the forestry sector in Lithuania;
- legislation in Spain (Royal Decree 568/2011) which establishes minimum conditions for health protection and medical assistance for those working at sea.

Measures aimed at the Finnish agricultural sector deal with a variety of areas, including intrinsic job quality and well-being, career advancement and work–life balance. The Ministry of Social Affairs and Health has created a working group on well-being at work and prolongation of working careers for agricultural entrepreneurs, which seeks to make proposals for improvement and present initiatives to prolong the working careers of agricultural entrepreneurs. So far, only proposals have been made; suggestions have included:

- easing the administrative burden on employers by developing e-services;
- improvements in the system of farm relief workers (that is, holiday replacements for farmers);
- temporary replacement workers to allow improved access to vocational education for permanent employees.

Also in Finland, the regional project ‘Apuva’ (‘Help and resources in daily life on farms’) aims to improve the health and work ability of agricultural and forestry producers, agricultural labourers and farm relief workers (see box).

Finland: Apuva project for agricultural and forestry producers and workers

Apuva (‘Help and resources in daily life on farms’) is a regional project which aims to improve the health and work ability of agricultural and forestry producers, agricultural labourers and farm relief workers in the Kainuu region of Finland through information measures and training initiatives focusing on prevention. The project is administered by agricultural expert organisation Maa- ja kotitalousnaiset (Rural Women’s Advisory Association), with financing from the European Agricultural Fund for Rural Development (EAFRD) and the regional Centre for Economic Development, Transport and the Environment.

The project has a broad focus on improving the work sustainability, covering issues such as safety at work, work–life balance, time management and healthy living conditions. The project has published a guide with information on the services and initiatives available to support agricultural workers in developing their well-being (including safety and work–life balance measures).

Source: *Finnish contribution*

Initiatives concerning improvements in prospects (focus on migrant workers)

Two measures from Sweden deal specifically with foreign berry pickers, particularly with their employment protection and intrinsic job quality. Different Swedish public authorities are cooperating in an inspection campaign to secure a better work environment for travelling berry pickers. The objective is to expose employers who exploit immigrant berry pickers from non-EU countries and who do not pay proper taxes and payroll taxes. Linked to this, the Swedish Food

Federation is working on ensuring secure employment conditions for berry pickers, with a focus on international seasonal workers. Unions in Spain are also focusing on berry pickers, signing specific agreements with local and national authorities, including with non-EU countries.

Initiatives concerning improvements in earnings

In Romania, the unique national collective agreement for the agriculture, aquaculture and fisheries industry, agreed by sectoral social partners at national level, improves unfavourable working conditions by providing health bonuses and allowances. It establishes a minimum gross wage of RON 725 (approximately €165).

Examples of initiatives in different policy areas for agricultural, forestry and fishery sector-related occupations are summarised in Table 14.

Table 14: Examples of initiatives for agricultural, forestry and fishery sector-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Collective agreements	Minimum salaries, bonuses linked to unfavourable working conditions and overtime	RO
Working time	Professionals' organisation and public centre for economic development	Proposals for work–life balance and time management	FI
Prospects	State initiatives, and measures implemented by employers' organisations	Prolongation of working careers, actions against undeclared work	FI, SE
Intrinsic job quality	State initiatives, measures implemented by employers' organisations or by trade unions, independently	Health and safety conditions, guides on occupational risks, campaigns for the prevention of accidents, health and safety inspections, well-being proposals	ES, FI, LT, PT, SE

Source: *National contributions*

Waste management occupations

This section presents examples of national initiatives covering waste management related occupations, including the European level OMD of refuse worker (ISCO-08 961). Unfortunately, only a few measures were identified by national contributors for this occupational group.

Refuse workers – Summary of initiatives

Health and safety risks, sustainability of work, involuntary temporary and part-time work, and low wages are an issue for many refuse workers. All the examples of measures in the national contributions deal with wages. No examples aimed at improving working time, job security, intrinsic health and safety or training were identified.

Most of the examples are company-level initiatives (that is, applied by the company itself).

In Italy, one company introduced 'productivity evaluation criteria' with the aim of reducing absenteeism and promoting higher productivity; actions include provision of economic incentives, canteen vouchers and productivity bonuses to promote attendance organisational efficiency.

In Malta, the Maltese government's waste management agency, WasteServ, rectified a discrimination related to pay; it adjusted the pay of eight immigrant workers so that they were being paid the same as their Maltese counterparts and not less.

One nationwide collective agreement reached through social dialogue was identified – the unique national collective agreement for ‘services of public utilities – waste management, decontamination and environmental protection activities’ in Romania. This established a series of labour rules and regulations for the sector, such as a minimum wage of RON 1,000 (€225 as at 27 July 2015) from 1 January 2012, and bonuses for extraordinary working conditions, harmful conditions, work during weekends and holidays.

In Italy, the Italian Compensation Authority (Inail) has carried out research on preventing the exposure of refuse workers to risks at municipal waste plants.

Examples of initiatives in different policy areas for waste management-related occupations are summarised in Table 15.

Table 15: Examples of initiatives for waste management-related occupations

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Company-level measures, collective agreement	Minimum wages, equal pay, bonus/incentives linked to productivity or difficult working conditions	IT, MT, RO

Note: No examples aimed at improving working time, prospects or intrinsic job quality were identified.

Source: *National contributions*

Occupations not selected as OMD at EU level

Information collected at national level for this study resulted in the identification of measures aimed at improving the working conditions of other occupations which were not selected as OMD at EU level but considered OMD at a national level in some countries. These occupations are:

- workers in the care, health and social sector;
- cleaners and helpers;
- hairdressers.

Examples of initiatives and policies aimed at these three occupational groups are given below.

Initiatives and policies aimed at workers in the care, health and social sector

Healthcare assistants (ISCO-08 5321) have been identified in several countries as an OMD (see Chapter 2). One of the most significant cases is Germany where several examples aimed at improving their working conditions were found during this study.

In general terms, there are several national measures aimed at improving the working conditions of health associate professionals (ISCO-08 32). This is the case of Hungary, for instance, where many doctors, nurses and social professionals have migrated to other Member States primarily because of their low wages and partly due to the poor working conditions, in general. Initiatives and policies aimed at these three occupations are analysed together in this section, with examples of different measures for the health and personal social care sector.

In Germany, the working conditions of care workers are addressed by several non-related initiatives. The ‘Pact for promoting good health and elderly care’ (Bündnis für gute Pflege) and the ‘Apprenticeship pact for care work’ (Ausbildungspakt Pflege) both aim at improving working conditions and wages in care work, raising employee numbers to reduce time pressure and work load, and improving vocational training standards. Meanwhile, the Campaign Healthy Care Work is a nationwide campaign aimed at improving the work ability and working conditions of care workers (see box).

Care and health associated professionals – Summary of initiatives

From a contextual perspective, the ageing of the population, and thus the increasing need for health and social care of the elderly, is becoming evident in many European countries (Germany is an example). The national measures identified for this study have varied objectives and many of them deal with different policy areas at the same time. Indeed, some of these measures seek to both solve the problem of labour shortages and promote quality and dignity of care by ensuring employment conditions in different fields of action.

The most recurrent aspects dealt with by the initiatives identified are wages and intrinsic job quality (skills and health related aspects). Although violence and harassment are a significant problem for these occupations, the national contributions do not mention any measures specifically aimed at tackling these issues.

The actors implementing the measures are also very varied and depend on the type of measure applied. The main players are social partners and public authorities, but also other stakeholders such as non-profit organisations.

Germany: Healthy Care Work

In Germany, Healthy Care Work (Offensive Gesund Pflegen) is a nationwide campaign implemented via regional networks. It has been funded by the Federal Labour Ministry since 1999, and is implemented, among others, by Initiative New Quality of Work (INQA), the Federal Institute for Occupational Safety and Health (BAUA), the employers' liability association, regional ministries and other regional stakeholders.

The aim of this joint project, which focuses on interdisciplinary cooperation and sharing of knowledge, is to improve the work ability and working conditions among health care workers. Its objectives are:

- improving working conditions and career prospects in care;
- improving the quality of care services;
- developing competitive, innovative and sustainable facilities;
- merging and supporting all relevant social partners;
- improving public appreciation for nurses.

Several actions have been implemented including academic studies, development of tools and training materials, and training programmes.

Source: *German contribution*

In 2012, the UK public service union UNISON developed an ethical care charter. This is potentially applicable to all care workers employed by local authorities in the UK, but is dependent on them signing up to it. The charter's objective is to establish a minimum baseline for the safety, quality and dignity of care by ensuring employment conditions. Linked to this, the charity Citizen UK launched a charter of good practice for care providers and care commissioners, which sets out basic standards that would enable quality for the recipient of care and dignity for the care worker. The charter calls for dignity at work and for care workers to be paid the 'Living Wage' (that is, the amount an individual needs to earn to cover the basic cost of living in the UK), to be offered an occupational sick pay scheme and given a clear pathway for

career progression. This charter could potentially cover all care workers employed by independent service providers in the UK, but it is dependent upon employers signing up.

In France, a measure concerning the home-based care sector is the agreement about prevention of arduousness, signed by social partners at national level, which seeks to improve employees' physical and mental health and to improve work organisation. The agreement implies a commitment to:

- negotiating a company-level agreement or adopting a plan of action;
- diagnosing the causes and effects of arduousness factors;
- reducing multiple exposures to arduousness factors;
- a better working organisation and an increase of qualifications;
- improved training.

Also in France, social partners have concluded an agreement on health and employment quality for the health and social care sector, whose aim is to improve working conditions and quality of working life by developing training programmes, information campaigns concerning health and quality of life, occupational risk prevention and so on.

Hungary has approved a number of measures aimed at health professionals. The government approved a number of decrees in 2013 and 2014 to introduce regular wage supplements in the health and personal social care sector. Regular (monthly) wage supplements have been introduced and wages have increased for health professionals (ISCO-08 22), health associate professionals (ISCO-08 32) and personal care workers (ISCO-08 53).

In the Hurum municipality of Norway, social partners have developed a programme to avoid involuntary part-time work (that is, to promote the freedom to choose either full-time or part-time work) among health associate professionals. They have also negotiated compensation for work at night and weekends, and inconvenient working hours are converted into hours entered into the time bank (these hours can be used to shorten working hours or be paid).

Examples of initiatives in different policy areas for workers in the care, health and social sector are summarised in Table 16.

Table 16: Examples of initiatives for workers in the care, health and social sector

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	State initiatives, social dialogue agreements, measures implemented by employers' organisations or by trade unions independently, and others (initiatives by social welfare organisations)	Campaigns and pacts for the improvement of wages, sectoral minimum wages, charters for basic conditions	DE, HU, NO, UK
Working time	Social dialogue agreement	Avoiding involuntary part-time, banking of hours	NO
Prospects	State initiatives, and measures developed by employers' organisations or by trade unions, independently, and others (initiatives by social welfare organisations)	Campaigns for the improvement of work ability and general conditions, quality and dignity of workers, development of qualifications	DE, UK
Intrinsic job quality	Social dialogue agreements, state initiatives, measures implemented by employers' organisations or by trade unions independently, and others (initiatives by social welfare organisations)	Protection of employees' physical and mental health, campaigns on health and quality of life, safety, vocational training	DE, FR, UK

Source: *National contributions*

Initiatives and policies aimed at cleaners and helpers

The national contributors from several countries identified significant measures aimed at improving the working conditions of cleaners and helpers (ISCO-08 91). Some of the measures are aimed at domestic workers in particular, but there are also initiatives covering the cleaning industry in general.

These occupations suffer from the following poor conditions: lack of training, lack of information on health and safety, and low income. Job security is also an issue for this group of workers.

Cleaners and helpers – Summary of initiatives

The measures identified cover a wide range of policy areas. The policies and initiatives aim principally at improving intrinsic job quality (particularly health and safety), earnings and job prospects (for example, employment contract or employment protection). Linked to this are measures in some countries aimed at fighting abusive labour conditions or even illegal work, which sometimes occur among domestic workers.

Public authorities play a key role in those initiatives linked to job prospects or abusive labour conditions, as well as in health and safety rules. However, measures related to earnings are normally agreements reached through social dialogue.

Among the measures aimed particularly at domestic workers, the ‘job prospects’ policy area (that is, employment contract or employment protection) is noteworthy. For instance, in the Czech Republic, the campaign ‘Do you know who is cleaning your home?’ addresses the issues faced by female foreigners working in Czech households (see box).

Czech Republic: ‘Do you know who is cleaning your home?’ campaign

As part of labour migration, female foreigners working in Czech households as cleaners constitute a new segment of the country’s labour market. These women often have to cope with inadequate treatment or various forms of discrimination, and are often forced to perform illegal work since it is far more profitable for their employers. In better cases, the most frequent problems are low wages, overtime work and insurance payments unpaid by the employer or a lack of days off.

The project seeks to develop public debate on equal opportunities for domestic helpers and to support female foreigners working in Czech households in occupations such as cleaning ladies, domestic helpers and carers. The campaign’s objectives are to:

- encourage respect for the rights of domestic helpers and the proper treatment of female foreigners in Czech households;
- raise awareness of the problem of illegal employment of female migrants as domestic helpers;
- offer support/advice courses for both the migrants themselves and other relevant institutions (for example, trade unions).

Under the framework of the project, research analysing the phenomenon of paid domestic work in the Czech Republic was conducted and a conference on the issue was organised.

The campaign is being carried out by the NGOs Člověk v tísni, o.p.s. and the Association for Integration and Migration, as well as by Center for Economic Research and Graduate Education - Economics Institute (CERGE-EI)

Source: *Czech contribution*

In Belgium, the federal government launched a system of service vouchers ('dienstcheques'), which promote the demand for domestic services and proximity services, and allow private persons to hire the services of recognised companies for domestic help. In practical terms, the system was created to tackle undeclared work rather than to improve the working conditions in those jobs.

In Spain, Royal Decree 1620/2011 regulates the labour relationship of special character in domestic services (see box).

Spain: Special Regime for Domestic Services

Royal Decree 1620/2011 regulates the labour relationship known as the Special Regime for Domestic Services. It approved new working conditions for domestic employees by establishing more and better rights for domestic workers. It also tries to tackle undeclared work.

For instance, the law improved the rights concerning working time, promoted work stability and reinforced transparency. Thanks to it, domestic workers have the right to access virtually the same benefits as other workers in the General Regime, with some peculiarities (for instance, domestic workers are not entitled to unemployment benefits).

According to the Institute of Fiscal Studies, the number of persons registered under the Special Regime in 2011 was 295,465; in 2012 it had increased to 420,300. This was a 42.25% increase, compared with increases of 0.8%–2.8% in the previous five years. The impact of this legislative initiative is thus evident.

Source: *Spanish contribution*

There are also examples of measures which deal both with job prospects (employment protection) and intrinsic job quality (health and safety). For instance, in Norway, the cleaning industry has major challenges when it comes to working conditions, health and safety standards, and undeclared work. The Ministry of Labour and Social Affairs approved a new regulation scheme for all cleaning businesses and introduced identity cards for their employees to improve working conditions. This measure has reduced illicit work and has improved working conditions in general. In addition, employers have promoted an industry programme in the cleaning industry to reinforce health and safety at work and to contribute to more decent working conditions. The programme includes regulated approval schemes for all cleaning businesses and increased requirements to follow the specifications laid down in the tender for a particular cleaning contract. Moreover, regional safety representatives in Norway work to ensure the quality of occupational health and safety and to prevent social dumping (especially in companies' without their own safety representatives).

Looking at intrinsic job quality, in the UK there are examples of measures aimed at improving both skills and health and safety conditions. In particular, UKCES and the Federation for Industry Sector Skills try to offer better training for cleaners and there are specific HSE rules governing the cleaning industry.

There are also a number of measures aimed at improving workers' pay.

In Finland, there is a wage development programme ('Ansiökehitysohjelma') for the period 2010 to 2017 whose objective is to raise the wages of cleaners by 16.5%.

In Germany, the sectoral minimum wage agreement for cleaners has been extended by the federal labour minister, meaning that the national statutory minimum wage introduced in January 2015 is not a substitute for the sectoral agreement until it expires.

In Sweden, the collective agreement for caretakers and cleaners in municipal companies increased the minimum wages, as agreed by the Swedish Municipal Workers' Union and the employers' organisation Fastigo.

There are also some other initiatives related to public bidding or government work, and dealing with earning. For instance, in Malta, the Office of the Prime Minister issued a number of mandatory conditions for all government contracts (for example, penalties for non-payment of overtime work).

Finally, concerning working time, a campaign against unsocial working hours implemented in Austria aimed to reduce non-standard working hours (early in the morning and late in the evening) and to improve work–life balance.

Examples of initiatives in different policy areas for cleaners and helpers are summarised in Table 17.

Table 17: Examples of initiatives for cleaners and helpers

Policy area	Type of initiative (actor)	Examples	Member States
Earnings	Social dialogue agreements, state initiatives	Minimum wage agreements, wage development programmes	DE, FI, MT, SE
Working time	Trade union initiative	Campaign against unsocial working hours	AT
Prospects	Mainly state initiatives	Service vouchers and ID-cards, campaign against inadequate working conditions and undeclared work, improvement of workers' rights, social dumping prevention	BE, CZ, ES, NO
Intrinsic job quality	Mainly state initiatives, also initiatives implemented by employers' associations	Initiatives promoting health and safety at work, specific regulations, regional safety representatives, skills development	NO, UK

Source: *National contributions*

Initiatives and policies aimed at hairdressers

Hairdressers (ISCO Code 5141) are considered as an OMD in France where there are several measures aimed at improving their working conditions. Two measures in particular deal with intrinsic job quality, in particular health and safety matters.

The regional bodies of the French National Health Insurance Fund, with the support of social partners, offer financial assistance for the purchase of ergonomic equipment to reduce exposure to musculoskeletal disorders.

The National Federation of Hairdressers (FNC) has published a position statement advising employers to apply precautionary principles to avoid carcinogenic substances.

Overview of the measures identified

The sections above describe a diverse range of initiatives and policies aimed at improving working conditions in a number of sector-related occupations characterised by multiple disadvantages.

There are cases where a single initiative aims at improving several job quality areas. For instance, sectoral collective agreements tend to include different terms and conditions which improve different aspects. Looking at the whole collection of examples found, the majority of the measures (around 54%) are aimed at improving the 'intrinsic job quality' area (that is, skills, autonomy, social and physical environment, risks prevention, work sustainability and so on). Close to one-third of the measures refer to earnings (37%), while the rest deal with working time (25%) and with prospects (around 20%).

There are certain occupations or sectors where some policy areas are more recurrent than in others such as:

- working time arrangements for sales workers;
- health and safety issues, together with working time, for drivers.

Concerning the type of actor, players are also varied and normally depend on the type of measure. For instance, there are numerous examples of sectoral collective agreements reached through social dialogue by the social partners. There are also a number of examples of initiatives dealing with health and safety measures, usually implemented by public authorities (particularly in the case of regulations).

Social dialogue is the most common driver (40% of the measures), closely followed by public authorities (32% of the measures). Other stakeholders by order of importance are employers' associations, trade unions and companies – each implementing around 13%–18% of the measures.

The majority of the examples found are nationwide measures, but there are also interesting examples at regional and company level.

Looking at the national perspective, it is possible to suggest several results. In the majority of EU Member States and Norway, the identified initiatives mainly focus on dealing with the intrinsic job quality area. However, some countries (Bulgaria, Estonia, Greece, Hungary, Ireland, Italy, Malta and Slovenia) have an important focus on earnings. In Austria, the Czech Republic and Slovakia, the main focus is on working time issues, while the focus in Belgium and Croatia has been on the employment prospects.

Concerning the main type of actor involved, in most EU countries, the initiatives have been principally adopted through social dialogue practices, including collective bargaining processes. In principle, this is as expected since, given the general lack of occupational focused initiatives, the main players at sectoral level in many countries are sectoral social partners. However, there are a number of countries (Belgium, Finland, Hungary, Norway, Portugal, Romania, Spain and the UK) where government initiatives are prevalent and there is rather weak sectoral social dialogue in some of these countries. In Cyprus and the Netherlands, the initiatives reported were taken separately by social partners and mainly company examples were presented from Italy, Lithuania, Malta and Slovakia.

Transversal initiatives and policies

Only a small number of initiatives and policies target specific OMD, most of which are at sectoral level. However, collective bargaining systems differ between Member States and, in some countries, a sectoral collective agreement does not apply to all workers. In some countries, workers are not covered by the agreement if they are not members of a signatory trade union and, in others, there is no a sectoral agreement in place in specific industries.

It is therefore important for governments and national-level social partners (under intersectoral agreements) to develop initiatives to address the poor working conditions of all workers regardless of their occupation or membership of a trade union. Transversal policies normally target all workers and focus on minimum standards. These policies affect all workers and can therefore contribute to the improvement of the quality of work of employees in OMD in one or several elements of working conditions. In some cases, they may address issues which are not tackled directly through specific sectoral or occupational policies.

Due to the large number of transversal initiatives in the EU, only the most recent ones are summarised below.

Transversal initiatives and policies related to earnings

Many EU Member States stipulate a minimum wage enforced by law, often after consultation with social partners, or directly by a national intersectoral agreement. This minimum wage applies to all employees, or at least to a large majority of employees, within a country.

According to minimum wage statistics from Eurostat, 22 EU Member States applied a national minimum wage in January 2015. Several of the founding EU Member States have a lengthy tradition of ensuring a national minimum wage for those at the lower paid end of the labour market. However, a number of Member States including Germany, Ireland, the UK and many of the countries that joined the EU in 2004 or later have only recently introduced minimum wage legislation.

There is no national minimum wage in six EU Member States (Austria, Cyprus, Denmark, Finland, Italy and Sweden) and also in the non-EU country of Norway. In Cyprus, minimum wages are set by the government for specific occupations (for example, domestic workers). In Austria, Denmark, Finland, Italy, Sweden and Norway, minimum wages are laid down by sectoral collective agreements that together cover a high proportion of the working population.

Germany introduced a national minimum wage on 1 January 2015, although transitional provisions apply in some circumstances and sectors such as waste management, construction, mining and cleaning services. In the past, minimum wages were set for several sectors by collective agreements and declared binding by the Federal Ministry of Labour and Social Affairs.

In addition to minimum wage initiatives, it is possible to identify a number of additional transversal initiatives and policies intended to improve the general wage levels of workers. For example, unemployed people accepting a part-time (usually low paid) job in Belgium can ask for public financial support via the 'Income Guarantee Allowance' in order to achieve sufficient total income. In Malta, wages are adjusted every calendar year in accordance with the inflation rate; this Cost of Living Allowance (COLA) ensures that all wages, and especially those of the disadvantaged workers, keep pace with inflation. In Spain, Law 35/2010 of 17 September 2010 containing urgent measures for the reform of the labour market stresses that payments in kind cannot represent more than 30% of total earnings and that they should not reduce total earnings in cash below the minimum interprofessional salary.

Austria, the Czech Republic and Ireland: Recent discussions and agreements on the minimum wage

At its federal congress in 2013, the Austrian Trade Union Federation (ÖGB) resolved to claim a monthly gross statutory minimum wage of €1,500 and thereby put this topic on the political agenda. As a consequence of this resolution, the unions at sector level include it with their policy and put it on the agenda for the annual negotiations on collective agreements.

In the Czech Republic, the minimum wage is one of the lowest in the EU28 countries and is received by only approximately 2% of employees. The social partners, together with the national authorities, finally agreed to increase it from January 2015 up to CZK 9,200 per month (approximately €332). The government foresees further increases up to 40% of the average wage over the next 4–10 years.

In Ireland, the national minimum wage is currently set at €8.65 per hour, having been reduced temporarily to €7.65 per hour in February 2011 by the previous government due to the economic crisis. In July 2014, the government announced the establishment of a Low Pay Commission, a statutory body expected to make annual recommendations on the level of the minimum wage and related matters for low paid workers.

Source: *Austrian, Czech and Irish national contributions*

Transversal initiatives and policies related to duration and organisation of working time

Working time practices are regulated by the Working Time Directive (2003/88/EC), which requires all EU countries to guarantee a number of working time rights for all workers, with the exceptions of some sectors including doctors in training, offshore workers, sea fishing workers and people working in urban passenger transport. This directive regulates, among other elements, maximum weekly working hours, minimum daily and weekly rest periods and some extra protection rules for night work, although there are some differences among Member States regarding how the directive has been implemented (European Commission (2012a) for more information on these differences).

There are also examples of national transversal initiatives and policies intended to foster working time-related issues in different domains, such as the limitation of unsocial working hours or flexitime practices. For instance, Collective Agreement 76 of 18 July 2000, signed by all relevant Belgian social partners, regulates for the whole of the country and with a cross-sectoral perspective the existing working time practices in those jobs and occupations characterised by non-standard working hours (and defined within the same collective agreement). Meanwhile, section 18 of the Irish Organisation of Working Time Act 1997 addresses those workers employed under ‘zero hour’ contracts (particularly relevant in sectors such as retail, Horeca and social care), where these workers are entitled to payment equivalent to 25% of hours they are contractually expected to work or payment equating to 15 hours.

To reduce involuntary part-time practices, the Norwegian government published in 2011 a White Paper on joint responsibility for a good and decent working life (2010–2011). This has so far funded 47 projects intended to reduce the incidence of this problem. In Sweden, social dialogue between the Swedish Municipal Workers’ Union (Kommunal) and the Swedish Association of Local Authorities and Regions (SKL) has resulted in a common agreement to ensure the right to part-time and full-time work for municipality employees in the whole country (see box).

Sweden: Municipalities grant the right to work full time to all employees

Since 2004, four out of 10 Swedish municipalities have introduced the right to part-time and full-time employment. The right to full-time employment aims to reduce the gender inequality between men and women in Sweden, where women more often work part time than men. Since several female-dominated occupations, such as healthcare and cleaning services, are found at the municipal level, these have been highlighted as particularly important in combating the horizontal segregation in the Swedish labour market. The problem pointed out by the trade union is that employees in these occupations have not had the opportunity to choose their own working time arrangement and have, despite requests for full-time work, been granted part-time contracts. The model is based on employer–employee dialogue where the employee gets to choose annually whether to work part time or full time.

Source: *Swedish national contribution*

Transversal initiatives and policies related to employment prospects

There are a number of national examples of transversal initiatives and policies intended to foster issues related to employment prospects such as employment protection and career advancement/promotion.

In 2013, the Croatian Employment Service introduced an extended pension insurance for permanent seasonal workers. Under this scheme, employers who permanently keep on at least 20% of their seasonal workers after the end of the season can request co-financing of pension insurance out of season for a maximum period of six months. In Greece, the operational plan ‘Artemis’ is designed to tackle undeclared work in certain sectors with the highest presence of undeclared work (Greek Ministry of Finance, 2013).

In France, the latest pension reform (Law 2014-40 of 20 January 2014) introduced from January 2015 the possibility for employees who are exposed to some predefined occupational risk factors (for example, night work, shift work and dangerous chemical agents) to obtain ‘extra points’ for a personal account that can be used subsequently for different purposes such as attending a vocational training course, financing a period of part-time employment (when people are still in employment) or acquiring quarterly pension rights to retire earlier. Similarly, the new 2013 Slovenian Pension and Disability Insurance Act establishes compulsory supplementary pension insurance mechanisms from employers to secure the right to an occupational pension among insured persons performing particularly hard work or work harmful to their health.

In the Netherlands, the National Platform for Sustainable Employability brings together specialised expertise from consultants, knowledge centres and companies to identify practical applications for sustainable employability.

Germany: Projects on sustainable work for elderly workers

Two projects were identified in Germany related to the current demographic changes and the population ageing problem, both funded by the Federal Ministry of Employment and supported by several social partners. Both projects cover not only working time but also have employment prospects elements.

The ‘Growing Together – Designing Work’ (Zusammen Wachsen-Arbeit Gestalten) project, covering the period from 2011 to 2014, sought to support collective bargaining and social partners in testing and designing different ways for making work more sustainable for elderly workers in different sectors and related occupations.

The ‘Horizontal Career Change’ (Horizontaler Berufsumstieg) project provides support to elderly workers who need or want to change their occupation due to work-related health reasons. The project has developed an online database for workers, worker representatives and employers with information on searching for alternative occupations with the same qualification and similar wage levels.

Source: *German national contribution*

Transversal initiatives and policies related to intrinsic job quality

EU Member States have developed a number of transversal initiatives and policies intended to foster other job quality-related domains such as skills development, prevention activities in social environment/psychosocial-related risks and physical environment-related risks. Examples of these initiatives and policies are presented below.

Skills development

Several examples of transversal initiatives aimed at skills development can be identified.

In the Czech Republic, the 2013 project ‘Extend your Knowledge for Stability’, which is co-financed by the European Social Fund, aims to fund professional growth programmes for employees whose employers, due to the economic crisis, are temporarily unable to assign their employees work in the agreed volume.

In Denmark, the recent employment reform of June 2014 has made it easier for both skilled and unskilled workers, as well as the unemployed, to access further training opportunities. A policy programme implemented by the government known as ‘Job Rotation’ provides financial support to companies to promote job rotation projects for enhancing skills (see box).

Denmark: Job rotation scheme

This government programme aims to subsidise job rotation by compensating companies for sending their employees on relevant education and training courses.

One example of a company making use of this initiative is Bisca, which has chosen to use the job rotation programme to sustain and develop the production of biscuits and cookies in its existing facilities in the municipality of Vordingborg. The company is a major workplace in a small town environment and it is therefore of great importance for the workers' job prospects to sustain their jobs. The programme consists of job rotation within the company to educate existing employees. The rotation is assumed to enhance workers' skills and to give them more enjoyment in their daily working life. Hence, it enhances both the prospects and the intrinsic job quality of the participating employees.

Source: *Danish contribution*

In Finland, the national government passed new legislation in 2013 entitling employers to compensation for the costs arising from training employees, especially groups of workers who had previously received few training opportunities.

Health and safety

In parallel with the Framework Directive on Safety and Health at Work (89/391 EEC), there are a wide range of national policies and initiatives concerned with prevention activities related to social environment and psychosocial/physical risks. Such initiatives are often developed by public authorities (sometimes in collaboration with social partners), but also by representative social partner organisations (either in collaboration or on their own initiative or by other agents).

EU Member States have developed over the years special laws intended to ensure healthy and safe working conditions within enterprises. For example, legislation was introduced recently in Croatia (see box).

Croatia: New law on health and safety at work

The new Law on Occupational Safety (OG 71/14) came into force on 19 June 2014. It includes provisions on:

- setting up the National Institute for the Improvement of Safety at Work;
- protecting workers from psychosocial risks (stress) and psychophysiological effort at work.

The law prescribes:

- general principles of risk prevention at work and protection of health;
- rules to eliminate risk factors;
- procedures for the training of workers;
- procedures of information and consultation of workers and their representatives with employers and their agents.

Source: *Croatian national contribution*

There is also a wide array of national legislation regulating specific elements of work-related risks. In Belgium, for instance, the law of 28 February 2014 on the welfare of workers in the performance of their work focuses on the prevention of any type of psychosocial risks at work (see box).

Belgium: Law on the welfare of workers at work

The law of 28 February 2014 on the welfare of workers in the performance of their work aims to guarantee the welfare of workers by preventing psychosocial risks at work, including in particular violence, harassment and sexual harassment. Among other elements, the law foresees the introduction of improved procedures to detect and prevent violence, harassment or sexual harassment in the workplace. It also broadens the definition of harassment in the workplace, shortens the time periods to be able to notify the employer of this type of risk and introduces the possibility for the victim to claim compensation for moral and material damages. In addition, the law reinforces the role played by the employment tribunals and the Employment Inspectorate in combating violence, harassment and sexual harassment at work.

Source: *Belgian national contribution*

In Italy, the ‘stability law’ (Law no. 147 of 27 December 2013) revises the regulation of compensation insurance for accidents at work by increasing some type of coverage and the set of the beneficiaries.

In Portugal, Decree Law 24/2012 of 6 February 2012 regulates the minimum safety and health requirements of workers from the risks related to chemical agents at work.

Member States also developed specific national strategies and programmes intended to guide the activities of public and private sector stakeholders in the domain. Examples include the Bulgarian National Programme for Safety and Health at Work 2014, the Portuguese National Strategy for Health and Safety at Work 2013–2015 and the Integral Plan of Action elaborated by the Spanish Labour and Social Security Inspectorate for 2013.

National public authorities have also developed other initiatives intended to improve risk prevention activities.

For instance, the Cypriot Department of Labour Inspection developed a code of practice related to heat stress in 2014 and also sought to deal with existing risks for workers due to exposure of workers to thermally burdened workplaces.

In Denmark, the Fund for Better Working Environment and Labour Retention aims to improve work environment programmes within individual enterprises in specified sectors characterised by tough working conditions (for example, agriculture, forestry and fishery, transportation, and wood and furniture manufacturing).

In Germany, a work programme on musculoskeletal health risks has been set out by the labour inspectorates of the regional Länder for the period 2013–2018 as part of the German Occupational Protection Strategy.

The Irish Health and Safety Authority started the ‘BeSMART’ initiative in early 2011, which seeks to help small business produce their own risk assessment and safety statement via a free online tool.

Since 2012, the Portuguese National Authority for Working Conditions has promoted an awareness-raising campaign on working conditions in confined spaces aimed at different stakeholders, which includes guidance documents, communication tools and inspection visits.

In Spain, the National Institute of Health and Hygiene at Work publishes a series of informative technical notes on risk exposure and other advice intended to facilitate the application of legislation related to risk prevention and health and safety issues.

Two recent public policy measures implemented in Malta and Poland are intended to improve the working conditions of enterprises subcontracted by the public sector (see box).

Malta and Poland: New public procurement practices

In Malta, the Office of the Prime Minister issued in July 2013 a number of mandatory new conditions which a contractor must abide by in order to be awarded a contract of work by the government and which are intended to avoid any type of abuse by the employer. Under the new rules:

- workers employed by contractors working on a government contract must be paid the same basic rate as workers employed in government services;
- services provided by companies that have won government contracts cannot be subcontracted to third parties;
- all employees of the contract holder, whether working directly on the government contract or not, must have a written employment contract.

In Poland, the Parliament passed in August 2014 an amendment to the Public Procurement Law designed to ensure that employment contracts, social and health insurance are in place as well as wages that cannot be less than the statutory minimum wage in given a year. These new policies are expected to particularly affect some particularly disadvantaged occupations such as cleaners, security personnel, healthcare workers and refuse sorters.

Source: Maltese and Polish national contributions

In some cases, social partners have developed within the framework of social dialogue initiatives intended to improve prevention activities related to physical and psychological risks. A good example of this is found in Finland, where a tripartite working group on ‘risk of violence’ was appointed in 2013 to investigate whether the legislation and existing guidance related to the risk of violence in work was adequate or needed to be updated. Interestingly, the group drew attention to the fact that many Finnish employers were not fully aware of existing legislation on safety at work related to violence.

In other cases, such initiatives are taken by social partners on their own and on an individual basis. For instance, the Irish Small Firms Association, in conjunction with the Irish Health and Safety Authority, has developed a Workplace Health Toolkit for small businesses. The Portuguese Employers’ Association (AEP) has developed in collaboration with the National Authority for Working Conditions (ACT), and within the framework of the ‘Programme Prevention’, a number of good practice manuals and guides intended to assist enterprises in implementing measures to improve their performance in relation to health and safety at work.

Finally, it is possible to identify some initiatives developed by independent third parties.

The Danish Cancer Society is currently running a campaign called ‘Smoke free at work’. This campaign provides ad hoc tools for companies wanting to implement a non-smoking policy within their premises; smoking in private workplaces is legal in Denmark.

In Slovenia, the project ‘Improvement of the working environment in key activities of the Obalno-kraška region’ is supported by several social partners and research institutions and covered the period 2010 to 2012. It sought to introduce innovative work organisation methods in local enterprises so as to combine positive economic results with better health and safety conditions at work.

EU policy approach

As happens at national level, an occupational approach does not feature in EU policies. The Treaty on the Functioning of the European Union mentions the concept of ‘occupation’ mainly when referring to the prevention of occupational accidents and diseases (Article 156). It is also to some extent linked to the employment concept with regard to the application of the principle of equal opportunities and equal treatment of men and women (Article 157. 3).

Currently applied and budgeted EU policies are mainly thematic-based (for example, environment) or have a sectoral approach (for example, Common Agriculture Policy). An occupational focus in employment and social areas is as yet absent. However, this does not mean that the EU does not pay attention to the disadvantages presented in this report. As such, EU action in the social field aimed at improving the disadvantages related to working conditions focuses mainly on:

- setting minimum working conditions standards through legislation such as the health and safety directives;
- applying strategies, recommendations and programmes addressed at easing and facilitating general goals such as the initiative *An agenda for new skills and jobs* (European Commission, 2010b) in the EU2020 strategy.

Because the EU has not specifically addressed the occupational level, the action taken is often composed of cross-cutting measures dealing with health and safety issues. In some special cases, however, such as the working time of truck drivers, the working conditions of an occupation are regulated.

The examples given below provide a brief overview of the actions taken at EU level with regard to the job quality areas rated as disadvantaged in the occupations analysed in this study.

EU regulation through directives

Other than the Working Time Directive 2003/88/EC of 4 November 2003 laying down minimum safety and health requirements concerning certain aspects of the organisation of working time, the EU has adopted a set of legislation regarding road transport which affects the occupation ‘Car, van and motorcycle drivers’ (ISCO-08 832). In addition, Directive 2002/15/EC lays down minimum requirements with regard to the organisation of working time for workers in mobile road transport activities, including self-employed drivers. These minimum requirements are supplemented by common rules on drivers’ driving time and rest periods established in Regulation (EC) No. 561/2006.

In relation to intrinsic job quality, legislation has been developed on health and safety. Apart from the Framework Directive 89/391/EEC on safety and health at work, some directives have been adopted addressing either risks potentially linked to the occupations or sectors analysed in this study.

A thematic approach is pursued by the health and safety legislation, although individual directives also focus on specific tasks, hazards at work or group of workers – but not on occupations.

It is well known that other areas identified as disadvantaged for the occupations analysed, such as ‘earnings’, fall outside EU legislative competencies.

EU soft measures

The EU has developed policy documents such as strategies in various areas. Although countries are not obliged to take account of their content, it is important for national policies.

For example, the flagship document of the EU2020 strategy, *An agenda for new skills and jobs* (European Commission, 2010b), includes the improvement of employment and working conditions as a way to develop skills and to reach higher employment rates.

Other strategies are those related to health and safety. The most recent ‘EU Occupational Safety and Health Strategic Framework 2014–2020’ identifies key challenges and strategic objectives for health and safety at work, presents key actions and identifies instruments to address these.

Instruments that can be used for improving working and employment conditions include the European Social Fund.

Autonomous social dialogue

EU action is not only taken at institutional level by EU bodies. EU social partners also have a role to play given that the occupations identified as disadvantaged take place in sectors which have formalised social dialogue committees. At least 10 of these committees are potentially able to deal with the OMD identified in this study; some of them have reached agreements through sectoral social dialogue to improve working conditions, mainly in the areas of working time, health and safety, training and general working conditions (Degryse, 2015). The various documents and other outputs from these committees over the past 15 years suggest that the occupational focus has been overwhelmed by economic activity. There are hardly any references to specific occupations because, as expected, the sectoral social dialogue committees handle broad working conditions in quite extensive subsectors.

The vast majority of initiatives introduced through social dialogue are related to health and safety issues. Such initiatives use different instruments such as ‘joint opinion’, ‘best practice’, ‘proposals for action’ and ‘joint declaration’.

For example, in the extractive industry sector affecting mining workers (ISCO-08 931), a joint declaration on health and safety was signed on 28 September 2012 by the European Mine, Chemical and Energy Workers’ Federation (now IndusriAll) and the Confederation of European Paper Industries (CEPI), which addressed their national affiliated organisations and led to the production of health and safety guidelines. Similarly, social partners in the agriculture sector issued a declaration on 21 November 2005 which addressed the protection of workers related to risks arising from plant protection products and aimed to reduce workers’ exposure to the risk of work-related musculoskeletal disorders.

Other examples are found in other sectors. For example, in relation to skills and mobility, the EU social partners and the European Commission launched the Hospitality Skills Passport in June 2014, which fosters a better match of offer and demand and enhances mobility within the tourism sector. European social partners in the cleaning industry have a joint position to promote ‘daytime cleaning’ and to obtain more working hours, income and better work–life balance. In the construction industry, sectoral social partners run several projects on occupational health and safety.

At intersectoral level, few framework agreements have been signed in relation to working conditions. One example is the Autonomous Framework Agreement on Work-related Stress signed by the European Trade Union Confederation (ETUC), Business Europe, European Association of Craft Small and Medium-Sized Enterprises (UEAMPE) and the European Centre of Enterprises providing Public Services (CEEP) on 8 October 2004.

A report by several EU social partners and ETUC assessed the reality of arduous and hazardous occupations and tried to link this reality with a realistic and worker-friendly end-of-career policy (Werner Buelen et al, 2014). Its findings show

that working in these occupations has a long-term destructive impact on the physical and psychological well-being of the workers involved.

Finally, the European Trade Union Institute (ETUI) carried out a study on ‘occupations and ageing at work’ which examined the relationship between age and working conditions from the angle of several occupational categories (Vendramin and Valenduc, 2012).

Final remarks

Statistical evidence is presented in Chapter 1 on occupations which have poor scores across the EU28 and Norway in a plurality of employment and working conditions which seriously affect the quality of work. The workers in these occupations may encounter significant obstacles compared with other workers even in the same sector. These obstacles may prevent their progress in their careers as they interact with each other: low skills are related to low earnings, poor working time (hours and shifts) is linked to poor health conditions, and so on. Disadvantaged working conditions mutually feed into each other and, overall, constitute poor quality jobs.

The implications of such undesirable working situations could be seen as a new field of action at EU level. Policies and activities could pay attention to these specific occupations. Despite differences both at national level and within the assessment of each occupation, facts and figures at EU level unveil a vicious looping in these worst score occupations.

After fine-tuning of the occupations identified as OMD in terms of a better assessment of the sectoral context, an integrated approach addressing the various disadvantages identified could be carried out at EU level.

Conclusions and potential avenues 4 for improvements

Chapters 1 and 2 present information on a number of occupations with multiple disadvantages (OMD). These are defined as occupations that score relatively poorly in four dimensions of job quality (earnings, employment prospects, working time and intrinsic job quality) according to the job quality indices methodology developed within the framework of a Eurofound secondary analysis of the fifth European Working Conditions Survey. In this framework, job quality is assessed at the level of the job and includes characteristics proven to have a causal relationship on health and well-being.

Further analysis in Chapter 1 shows, at EU level, the specific conditions of the selected OMD to enable the public and policymakers to understand what the disadvantages involve and what needs to be improved in the different occupations.

Chapter 2 incorporates national information on the working conditions for the list of OMD identified at EU level, as well as for an additional group of occupations identified at national level as having multiple disadvantages.

Chapter 3 describes initiatives, policies and measures at national level intended to improve working conditions in these OMD. The initiatives are examples of how improvement of working conditions is considered for those occupations, although there are very few policies targeting the specific occupations themselves.

This chapter draws out the study's main findings, some of which are possible topics for further research on the occupational perspective of working conditions. It also reflects on the consequences of an occupation having multiple disadvantages, suggests ways to improve working conditions in OMD (bearing in mind contextual aspects such as labour market trends and the role of social dialogue) and highlights some policy implications.

Main findings

Most OMD identified at EU level also identified at national level

Generally speaking, most of the occupations characterised as being 'multiple disadvantaged' at EU level (Chapter 1) were also identified as being OMD at national level (Chapter 2) in terms of:

- lower wages;
- limited employment prospects;
- a high proportion of non-standard forms of employment and difficult aspects of organisation of working time;
- a high prevalence of physical and psychosocial risks at work.

Evidence shows that this situation is clear for some occupations such as cooks, waiters and bartenders, shop salespersons, cashiers and ticket clerks, agricultural/forestry/fishery labourers and mining/construction labourers. In other cases such as manufacturing-related occupations (ISCO-08 groups 75, 81 and 82), however, the results are more 'mixed' in the sense that the national information indicates that these occupations cannot be labelled as 'multiple disadvantaged' in some Member States.

National sources of information were also used to compile a list of additional occupations that can be considered as an OMD in certain Member States. The occupational group of cleaners and helpers appears to be an OMD in a large number of Member States. Other occupations mentioned in a smaller number of countries as being an OMD include:

- hairdressers;
- beauticians and related workers;
- childcare workers and teachers' aides;
- personal care workers in health and residential services;
- protective services workers;
- skilled workers in market-oriented agricultural, forestry, fishery and hunting activities;
- workers in building and related trades workers;
- heavy truck and bus drivers;
- transport and storage labourers.

In many of these occupations (for example, agricultural and construction-related occupations, cleaners and helpers), there is a high presence of foreign workers.

Nature of the disadvantages

The analysis at European level (Chapter 1) shows that OMD are mainly found in service-related occupations such as:

- personal service workers – cooks, waiters and bartenders;
- sales workers – shop salespersons, cashiers and ticket clerks;
- plant and machine operators and related occupations – assemblers, machine operators, drivers, mobile plant operators;
- elementary occupations – mining, construction and manufacturing labourers, refuse workers and food preparation assistants.

There is a clear concentration of OMD in mid-to-low skilled occupations of the service and manufacturing sectors and in low skilled occupations in various sectors. Although all of them are multiple disadvantaged and have in common high job strain, difficulties in accessing training and exposure to some risks, it is of interest to determine which areas are a major concern.

For services workers, in general, even if there are substantial differences (for example, between shop salespersons and waiters), OMD are characterised by a high share of workers with poor employment conditions including part-time or temporary contracts, job insecurity and low income.

Although some manufacturing workers are also affected by job insecurity, the risks to their health are the main issue of concern. In some cases, it seems that exposure is unavoidable and initiatives and policies try to deal with it by income compensation.

Two OMD, drivers and in particular refuse workers, have very poor working conditions in most aspects. The working conditions of these workers may have an impact on work–life balance, on making ends meet and, above all, on their health status.

It is important to reflect on how working conditions affect the career of those in OMD and ultimately what will be the implications for their participation in the labour market. Results show that a higher share of workers in most OMD think they will not be able to work when they are 60 years-old.

National and institutional context matters

In general, eastern European countries have a higher proportion of OMD (and a comparatively higher share of craft workers and plant and machine operators), followed by southern European countries (with a comparatively higher proportion of services workers in Horeca and commerce). This finding is closely related to the structure of the economy in a particular country and, to some extent, influences the outcomes related to the disadvantages in a particular occupation.

The same occupation can present different situations in different EU countries. In relation to workers working long hours, for example, drivers work longer in some countries than in others. Also, some occupational groups (for example, skilled workers in manufacturing) are not disadvantaged in a small number of countries. In many cases, however, an occupation is considered disadvantaged in all countries when seen in the national context.

Looking at the distribution of OMD across countries, there are elements of the national institutional setting that can play a role in terms of a worker being multiple disadvantaged and especially regarding possibilities for a worker to improve their status and working conditions. These elements are industrial relations, the welfare state and labour market characteristics (for example, segmentation and employment protection). These elements should be further explored to find out how exactly they impact on the working conditions of OMD.

Multiple disadvantage traps

OMD have a higher proportion of workers with poor working conditions in terms of employment status, training and health risks, career prospects, training and working time characteristics. When most or all of them are part of a particular job, the worker might face a situation in which the different conditions interact with each other (reinforcing each other) such that they remain affected by all of them. This situation leaves few possibilities for the worker to improve their situation.

For example, working in an environment which has high health risks, with no access to further training and temporary employment, can have a multiplying negative impact on career development. Poor health, a lack of training and a temporary job could limit possibilities for promotion and might represent a constraint for finding another job or, more likely, the risk of being dismissed during a restructuring process. During the economic crisis from 2008 to 2014, for example, low skilled workers with a temporary job had a higher chance of becoming unemployed than other workers.

The higher the accumulation of disadvantages, the less likely it is for a worker to be able to improve their employment and working conditions, including avoiding the risk of unemployment and being able to make transitions in their working life.

Policies and studies

Lack of occupational perspective in relation to working conditions

The examples given in Chapter 3 are based on information collected from national sources and do not represent an exhaustive list of initiatives and policies. The report, however, has shown that the focus on working conditions in identified policies and initiatives is very rarely occupational. In general, it is dominated by a sectoral approach in the sense that most of the existing national sources provide information by economic sectors (NACE classification) and not by occupation (ISCO classification).

Related to this, the concept of OMD can be labelled as new in most European countries in the sense that no studies were identified at national level dealing with this concept from a comprehensive perspective. Notwithstanding this, the report includes relevant information on occupations characterised by tough working conditions from national statistical data sources and some ad hoc studies.

Initiatives to improve working conditions among OMD have a sector approach

Among the national initiatives, policies and measures intended to improve working conditions in OMD presented in Chapter 3, there is a lack of measures with an occupational focus, either in general or for a specific OMD. Indeed, the concept of OMD is not typically used in the policy/social dialogue domain by relevant national actors (trade unions, employers, researchers, government officials and so on), at least not compared with other concepts used in some Member States (for example, Belgium and Italy) such as risky sectors, workers with disadvantages (young unemployed, immigrants, people with disabilities) and occupations which have difficulty filling vacancies due to their hard working conditions. The majority of the policies and measures identified by the study are therefore sectoral ones. However, there are a few measures and initiatives aimed specifically at particular OMD:

- berry pickers in Sweden;
- miners in Bulgaria and Slovenia;
- domestic cleaners in the Czech Republic and Spain;
- drivers in Romania and the UK.

Overall, considering the whole collection of measures identified by this study, the majority (around 54%) are aimed at improving the intrinsic job quality elements of OMD such as skills and the prevention of psychological and physical risks. Based on the information provided by the national correspondents, these initiatives tend to be led by social partners through social dialogue (40% of the identified measures), closely followed by public authorities (32% of the identified measures). Initiatives and measures taken either by individual social partners, individual companies or other institutions (third parties and NGOs) account for less than 20% of the identified measures.

Among Horeca occupations, unsocial and irregular working hours could be a typical disadvantage, but the identified measures do not pay particular attention to this problem; most focus on improving either the earnings or the intrinsic job quality of these occupations rather than addressing working time organisation issues. In contrast, the majority of initiatives in the retail and commerce-related occupations deal with working time issues, mainly trying to alleviate the prevalence of unsocial working hours – an element which is very relevant for these occupations.

Most of the identified measures and initiatives for manufacturing related occupations deal with intrinsic job quality elements (particularly in relation to the alleviation of job-related health and safety risks), as well as with earnings. In the case of driving related occupations, most of the identified initiatives and measures deal with two of the less favourable elements of these occupations, namely health and safety (intrinsic job quality) and working time issues.

In the case of construction and mining related occupations, the identified measures and initiatives focus particularly on improving intrinsic job quality elements (probably as a response to the incidence of work-related health and safety problems among these occupations), as well as earnings related measures. A similar emphasis on intrinsic job quality elements, in particular on work-related safety conditions, is also seen among agricultural, forestry and fishery sector related occupations. In contrast, identified initiatives and measures aimed at care, health and social sector related occupations vary in their scope and cover different areas (mainly in earnings, intrinsic job quality and employment prospects elements).

The identified measures and initiatives aimed at cleaners and helpers try to improve their intrinsic job quality and job prospects (particularly in tackling abusive labour conditions and the extent of illegal work practices), whereas the very few initiatives aimed at waste management related occupations (refuse workers) all focus on improving earnings.

As well as the working time issues in Horeca occupations, other policy ‘gaps’ can be identified from the information provided by the national correspondents. The reduction of job strain does not seem to be a policy target in initiatives in the Horeca and manufacturing sectors, while tackling violence and harassment could be encouraged in healthcare occupations.

It is important that sectoral policies develop an occupational approach, so that they can better improve different working conditions in diverse occupations such as the differences between cashiers and shop salespersons.

Transversal initiatives targeting all workers may play an important role in addressing negative elements associated with OMD

In addition to the collection of initiatives and policies aimed at improving working conditions within OMD (mostly from a sectoral perspective), the report presents a number of ‘transversal’ initiatives which seek to improve the conditions of all occupations. These wide-ranging initiatives try to guarantee minimum quality levels for all occupations in one or more of the four main job quality areas so as to prevent the risk that some occupations fall below minimum standards. These identified general initiatives have been developed either by public authorities (in the form of legislation), by social partners (in collaboration or via ad hoc initiatives) or by third parties (NGOs and so on).

Examples of these transversal initiatives include:

- the introduction and improvement of statutory national minimum wages;
- measures reducing the duration of working hours or limiting the prevalence of unsocial working hours;
- measures fostering employment protection or career advancement and promotion (including measures to deal with current and future demographic change);
- initiatives and policies intended to foster skills development activities;
- prevention activities against social environment/psychosocial related risks or physical environment-related risks (higher safety norms, stronger safety and skills standards, personal protection means, norms regarding the moving of heavy loads and so on).

The economic crisis is also impacting on working conditions in OMD. It has affected the priorities of public authorities and social partners in the improvement of existing working conditions, especially in those sectors and occupations characterised by multiple disadvantages. In the case of some Member States particularly affected by the economic crisis (Croatia, Greece, Ireland, Spain), the attention among social partners and public authorities is currently on reducing high unemployment levels rather than on improving working conditions in specific occupations or sectors.

Importance of social dialogue practices and initiatives related to intrinsic job quality in most EU countries

In most EU countries, the initiatives identified by this study were mainly adopted through social dialogue practices, including collective bargaining processes. In other countries (Belgium, Finland, Hungary, Norway, Portugal, Romania, Spain and the UK), government policies seem to be more prevalent. In Cyprus and the Netherlands, some of the reported initiatives have been taken separately by social partners, while company examples are reported from Italy, Lithuania, Malta and Slovakia.

The available information shows that the initiatives have mainly focused in most countries on dealing with the intrinsic job quality area. However, the main issue reported in a small number of countries (Bulgaria, Estonia, Greece, Hungary, Ireland, Italy, Malta and Slovenia) has been related to earnings. Working time issues have received attention in Austria, the Czech Republic and Slovakia, while employment prospects initiatives have been reported from Belgium and Croatia.

Avenues for improvements

Evidence calls for action and a more holistic approach

The European Working Conditions Survey and the Labour Force Survey show that some occupations are disadvantaged in various aspects. National sources added some other occupations to the list and put disadvantages in a national context. Those conditions represent a risk for workers' career development and their health and well-being. Even though there are examples of initiatives and policies in EU countries, additional policy efforts need to be considered at different levels to improve the working conditions of some of these workers. The examples provided in this report can serve as source of information for implementing initiatives in contexts where they do not exist.

To tackle the real problem (that is, the fact that workers are affected by multiple disadvantages), a more holistic approach aimed at tackling all disadvantages needs to be considered – especially for the most disadvantaged occupations.

Key aspects to be tackled: access to training and undeclared work

All OMD have a smaller percentage of workers participating in training provided by their employer. Development of skills is important for all workers and the productivity of companies in the EU. For workers in OMD, however, it is essential to be able to cope with possible changes in skills demand (for example, technological changes) and to improve their opportunities for higher wages, promotion or moving to another job in the occupational ladder. Access to training is essential.

For some of the workers in these occupations (mainly waiters, construction labourers, agricultural labourers, food preparation assistants, drivers and cleaners), there is an additional disadvantage: the prevalence of undeclared, illegal or fraudulent situations, which makes any improvement in the four job quality areas more difficult. This issue is raised mostly in the national-level analysis.

Role of collective bargaining and industrial relations characteristics

Among the institutional settings, the existing system of industrial relations – and particularly the negotiating power of trade unions at country or sector level – influences the importance of social dialogue practices. Even though the sectors are the main level for the development of initiatives and not the occupations, sectoral collective bargaining should be considered a framework within which the multiple disadvantages can be tackled. One reason for this is that, depending on the national context, agreements can be comprehensive enough to cover most of the disadvantages identified. The second reason is that employers and workers' representatives know the conditions of work in OMD and can make a relevant contribution to tackling them. However, the different relevance of sectoral social dialogue in various EU countries needs to be taken into account since, in some countries, sectoral social dialogue is not much developed and thus does not cover the majority of workers.

The industrial relations system can play a role in improving the working conditions of OMD. The proportion of workers in OMD is higher in countries with relatively low collective bargaining coverage such as the Czech Republic, Hungary and Romania (17%–36% of workers are covered by an agreement). Countries with a low proportion of OMD include Belgium (96% collective bargaining coverage) and Sweden (88% collective bargaining coverage). Moreover, workers in some OMD (namely, Horeca, sales and elementary occupations) generally have a low rate of union membership in countries for which data are variable (for example, the UK) compared with OMD in manufacturing or higher skilled occupations. Collective bargaining coverage and union membership might influence the possibilities for better working conditions in OMD.

Examples in the report show that active unions in companies contribute to the development of initiatives for the improvement of working conditions in OMD. In companies with no union representation or in countries with no automatic extension of sectoral collective agreements, the possibilities of improving working conditions through negotiation and social dialogue do not exist. This is either due to the lack of social dialogue or because the companies are not covered by any agreement, including any provision for certain minimum conditions.

Labour market needs and needs of workers in OMD in the labour market

The occupational structure from 2004 to 2014 shows an upgrading trend in Europe (an increase the share of high skilled occupations), with some decline in middle–low skilled workers in craft related occupations and plant and machine operators, and some increase in personal service workers (waiters, cooks, food preparation assistants), care workers, cleaners and helpers, and sales workers. There is also an increase in elementary occupations identified as OMD.

Apart from the forecast demand for high skilled occupations until 2025, there will be a considerable demand for the OMD noted above in the services sector and in elementary occupations. Some countries are already experiencing difficulties in filling vacancies for some jobs in these occupations (for example, waiters, construction labourers and sales workers) due to reasons including demographic change, lack of skilled people and hard working conditions. In order to replace workers and fill vacancies, it is important that European workers are properly trained, but also that the jobs in those occupations offer more attractive working conditions.

The situation can be illustrated by developments in the Horeca sector, where employers rely on young people to fill vacancies for waiters. The ageing process of European societies will imply a further need for young workers across all occupations. However, being a waiter is not attractive for some young people because of the poor working conditions. For the labour market to function well in some countries, an improvement in working conditions may be needed so that people want to work in certain occupations. Policies and initiatives that seek to improve conditions so as to attract workers to certain sectors already exist in European countries for Horeca and construction occupations, for example.

The structural change represented by the observed decrease in some middle–low skilled occupations could also have implications for the career development of low skilled occupations (elementary occupations). For some labourers, especially in manufacturing, the ‘natural’ development in their careers is to move to the occupations of plant machine operators and craft related workers. The decline in the share of some of these occupations could limit their career progression. If this is the case, learning and training will become even more relevant for career advancement and the acquisition of better working conditions.

Some recent trends connected to the economic recovery after the economic crisis (2008–2014) appear positive for job creation, but probably not so much in terms of quality of work. For example, in Spain, employment growth in 2014 and 2015 has mainly taken place through temporary and part-time jobs. In other countries, labour legislation can be used for some occupations in a way that maintains some of their poorer working conditions. For example, zero hours contracts (UK) and ‘mini jobs’ (Germany) are largely used for Horeca occupations and labourers in general.

To summarise, the improvement of working conditions in OMD could benefit both companies and workers. It could also be a lever for a reduction of inequalities in European countries which, in some cases, have become more unequal during the recent economic crisis.

Need for more research and policy debates

Further research is needed to better identify and explain the internal characteristics associated with OMD including issues such as:

- background information on the workers active in OMD (for example, typical job transition patterns and incidence of poor working situations);
- questions related to the workplaces where OMD are found;
- the relationship between OMD and the prevalence of informal economy practices;
- the influence of sector-related characteristics on the working conditions associated with OMD;
- the ‘cumulative’ effects of individual negative job quality characteristics on the well-being and health of workers in OMD;
- the influence of the ‘country’ dimension (institutional settings) on the working conditions in OMD;
- assessment of the most relevant and effective policy tools to deal with the negative elements associated with OMD.

The evolution of these OMD also needs to be considered, especially in a context of rapid technological change. Both qualitative research through cases studies and more in-depth statistical analysis at national level will contribute to more knowledge about the processes of improvement and the specific national contexts.

From a policy perspective, this report has shown that the occupational perspective is insufficiently taken into account in the policy debate related to working conditions and in social dialogue practices, both at EU and at national/regional level. This occupational perspective is likely to become increasingly important in the coming years and arguably should be integrated as a supplementary view to the sectoral one when analysing working conditions.

The situation of having a significant proportion of workers in OMD makes their work not sustainable³ over the life course, as workers in OMD face difficulties in continuing in the same occupation until their retirement age. This is particularly true in a context characterised by the increasing polarisation and segmentation of the labour market and the problems associated with an ageing population in many Member States. Both elements are likely to reinforce the need to ensure longer and healthier working careers for all workers in general, and specifically for those engaged in specially disadvantaged occupations. This in turn will require a more focused emphasis in European and national policy and social dialogue initiatives on improving the working conditions of OMD through higher standards of occupational health, safety and well-being at work, as well as enhanced opportunities for skills development and employment prospects.

³ See Eurofound (2014c) for a comprehensive description of the ‘sustainable work’ concept.

New approaches to improve working conditions and reduce inequalities

To achieve improvement, it may be necessary to start thinking differently. The term ‘disadvantage’ or ‘disadvantaged’ groups referred to in social policies normally includes poor people, disabled persons, drug abusers, migrants and women. In the world of work, however, differences in wages, employment status and working conditions are to a great extent based on occupational differentials. And indeed workers in OMD are more likely to be at risk of exclusion from a good working environment and opportunities for development. A policy approach taking into account occupational differences will help to reduce inequalities in society, probably using the ‘disadvantage’ term. In relation to the latter, it remains important to avoid stigmatisation of both the occupation and the job holder.

Relevance of the analysis for EU policy

EU2020 has the objective of increasing participation in the labour market so that it achieves its target of 75% of people in employment. *An agenda for new skills and new jobs* (European Commission, 2010b) is one of the flagships of the EU2020 strategy to reach that objective because it encourages skills development to foster job quality and productivity. To go in that direction, the concepts of sustainable work (Eurofound, 2012d, 2014c) and inclusive labour markets⁴ are essential. The situation of a considerable proportion of workers in OMD is not sustainable and lacks inclusiveness. Applying the principles guiding both concepts will contribute to making possible the European policy objectives mentioned above. However, also in the European context, the policy debate and decision-making on some issues (for example, earnings) can have effects on the OMD identified. Therefore, some occupational mainstreaming in policies could be also relevant for the improvement of working conditions.

⁴ ‘Labour markets are inclusive when everyone of working age can participate in paid work, especially vulnerable and disadvantaged people’ (European Commission, undated).

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Annex I: Methodology

This project builds on the findings of the report, *Occupational profiles in working conditions: Identification of groups with multiple disadvantages* (Eurofound, 2014b). It uses some common methodological aspects in relation to the sources (EWCS2010), job quality indices and concept of occupation. However, a new identification of occupations is made at the ISCO-08 3-digit level and the EU LFS 2013 has been used for a few specific working or employment conditions for the purpose of presenting more up-to-date findings.

In addition, the second strand of the report on policies to improve working conditions is based on national contributions from the 28 Member States and Norway.

The purpose of this project is therefore twofold. First, it aims to map disadvantages in terms of working conditions related to the selected OMD to provide specific knowledge to policymakers to design policies and initiatives aimed at improving their working conditions. Second, it aims to map existing initiatives, programmes and services designed to improve the working conditions of workers in OMD in the EU Member States and – whenever such information is available – their impact, providing knowledge for the development of new policies or the improvement of existing ones.

Definitions and underlying concepts

Occupation in the EWCS and in the EU LFS is captured by two open-ended questions (the title of the main paid job and a description of what is mainly done in it), which have subsequently been coded into the ISCO-08 classification (ILO, 2008). This report and the identification of ‘occupations with multiple disadvantages’ are based on ISCO-08; therefore, its definitions and key concepts are important for the analysis.

Occupation is defined in ISCO-08 as ‘a set of jobs whose main tasks and duties are characterised by a high degree of similarity’ (ILO, 2012). Two concepts are considered key to the design and construction of ISCO-08:

- the ‘job’ – defined as ‘a set of tasks and duties carried out or meant to be carried out’ by one person including an employee or a person in self-employment;
- the ‘skill’ – defined as ‘the ability to carry out the tasks and duties of a given job’.

ISCO-08 has a hierarchical structure: the broadest categories are the 1-digit major groups; each major group is further organised into sub-major, minor and unit groups. The analysis done for Eurofound (2012a) is limited to the major and the sub-major occupational groups (ISCO-08, 1-digit and 2-digit levels, respectively). The current study includes the 3-digit level so as to identify occupations which are more homogeneous and relevant for the project’s aim of analysing policies that address the improvement of working conditions in OMD.

Two dimensions of skill are used to arrange the occupations into groups: the ‘skill level’ and the ‘skill specialisation’.

The level of skill is defined as a function of ‘the complexity and range of tasks and duties to be performed in an occupation’. It is measured by considering the nature of the work performed in an occupation in relation to the characteristic tasks and duties for each ISCO-08 skill level, and/or the worker’s level of formal education and their amount of informal on-the-job training and/or previous experience.

The skill specialisation is considered in terms of the field of knowledge required, the tools and machinery used, the materials worked on or with, and the kinds of goods and services produced.

While the concept of the level of skill is mainly applied at the major group level, sub-major groups are primarily arranged on the basis of skill specialisation.

The major groups in ISCO-08 are associated with four broad skill levels, defined in relation to the levels of education specified in the International Standard Classification of Education (ISCED-97). A relatively informal classification is derived from ISCO-08 on the basis of the application of the skill level (higher or lower) requirement: high, mid and low skilled occupations. Thus, the occupational groups of ‘managers, professionals and technicians’ (ISCO-08 1) are sometimes classified as high skilled occupations; ‘clerical support workers’ (ISCO-08 4) and ‘service and sales workers’ (ISCO-08 5) as mid-skilled service occupations; ‘skilled agricultural and fishery workers’ (ISCO-08 6), ‘craft and related trades workers’ (ISCO-08 7) and ‘plant and machine operators, and assemblers’ (ISCO-08 8) as mid-skilled manual occupations; and elementary occupations are classified as low skilled occupations (ISCO-08 9).⁵

All occupations identified as having multiple disadvantages are include in the groups of mid-skilled service occupations, mid-skilled manual occupations and low skilled occupations.

Job quality, health and well-being indices

This report uses the job quality indices – earnings, prospects, intrinsic job quality and working time quality – to identify OMD. These indices are related to some self-reported well-being indicators such as number of health problems, negative effect of work on health, mental well-being, self-reported work–life balance, and meaningfulness of work.⁶ These indicators were constructed by Green and Mostafa (Eurofound, 2012a) to identify occupations and groups of workers in these occupations who were experiencing poor working conditions and negative outcomes on their physical and psychological well-being.

Green and Mostafa (Eurofound, 2012a) define ‘job quality’ as a synonym for ‘quality of work and employment’. They define the concept of the ‘job’ as broader than that of the work itself, as it also encompasses the nature of the physical location of employment. However, this does not cover the nature of the labour market and beyond.

The four job quality indices include two sets of extrinsic job features – ‘earnings’ and ‘prospects’ – and two sets of intrinsic ones – ‘intrinsic job quality’ and ‘working time quality’. These features integrate elements from multiple disciplines such as economics, sociology and occupational psychology, and have been associated in epidemiological studies with a proven impact on health and well-being.

The index of earnings captures the level of monetary reward through the construction of a harmonised monthly earnings variable. Prospects refer to a person’s need for employment. This need is related to the need for income, for employment continuity, and for enhancement. Key features include job security and prospects of advancement in their job.

Whether the job allows for a good balance between a person’s working life and private life is captured by the working time quality index. This focuses mainly on features of the timing of the job.

⁵ Formal education requirements are only one component of the measurement of a level of skill and should be considered as indicative only. The most important determinant of skill level is the nature of the tasks performed in a particular occupation in relation to the characteristic tasks defined for each skill level. It is not necessary for a person to hold qualifications at a particular level for their job to be classified at a particular ISCO skill level.

⁶ In Eurofound (2012a), Green and Mostafa use slightly different labelling for the indices of well-being: number of health problems, health issues caused by work, subjective well-being, subjective work–life balance, and meaningfulness of work.

Intrinsic job quality is about the work and its environment. The index is made up of four sub-indices associated with meeting people's needs. The first sub-index (skills and discretion) captures the concepts of the skills required to do the job and the level of autonomy that a worker has.⁷ The second sub-index (social environment) captures this environment's positive and negative aspects. The third sub-index (physical environment) concerns physical or posture-related hazards. The fourth sub-index (work intensity) refers to the intensity of labour effort during work time, with labour effort incorporating both physical and mental aspects (Eurofound, 2012a).

Identification of OMD

The identification of OMD is based on the variation of the indices of job quality across occupations. The weighted mean for each occupational group is computed and ranked to select the occupations in the bottom tercile of the ranking on all four of the dimensions. Occupations where job quality is low (in the bottom tercile of the distribution) on three or four dimensions of job quality are labelled 'occupations with multiple disadvantages'. The occupations where job quality is high, in the two upper terciles of the distribution, are labelled 'all other occupations'. This process has been carried out in two steps.

- Step 1: Occupational groups at 2-digit level are ranked and those consistently (three out of four or four out of four job quality indices) found in the bottom tercile of the job quality index distributions are selected.
- Step 2: Due to the purposes of the analysis, those occupational groups at 2-digit level selected in Step 1 are further disaggregated to 3-digit level, checking if they score in the bottom tercile at this level. If they do, they form part of the list of occupations with multiple disadvantages.

The reasons for selecting occupations at 3-digit level scoring in the bottom tercile in three or four indices are as follows.

- Improvement of working conditions in those occupations must be addressed by policies targeting the occupations.
- The occupations are relatively homogenous so that their specific characteristics can be better distinguished.
- Occupations can be recognised easily by the public and stakeholders.
- The selection of occupations carried out considers those with the worse situation (bottom tercile).
- With this method, a third of workers are included.
- The selection allows for a more accurate analysis for specific working conditions and therefore makes it possible to relate working conditions to occupations and policies.

To complement the statistical analysis and to include the national perspective, the contributions from Eurofound's network of European correspondents include information available on occupations that present various disadvantages at national level. In this case, the criteria are more flexible because the intention is to identify OMD at national level that have not been identified by the statistical analysis at EU level. Thus, the report differentiates occupations identified by the analysis of the EWCS and occupations identified by this study.

To facilitate the presentation and interpretation of data, as well as to draw attention to specific issues, the report includes the specific working conditions aspects listed in the table below. Many of these are included in the job quality indices.

Variables included in the statistical analysis of the study using EWCS2010 or EU LFS 2013

Job quality area	Area	Indicator	Outcomes by job quality area	Sustainability
	Sociodemographic and economic indicators	Sector ISCO-1 and ISCO-2 Country (only large countries) Age Gender Country of origin	EARNINGS Making ends meet Feeling well paid for the job	Able to work when 60 years-old – only for those older than 45 years
Prospects	Employment status	Employment status	HEALTH AND SAFETY-RELATED OUTCOMES	
		Type of contract	Health at risk	
		Family worker	Work affects health negatively	
		Involuntary/voluntary temporary contract	Health status	
Intrinsic job quality	Training	Training paid by employer	Accident at work (absent because of)	
	Health and well-being	Job autonomy	Stress at work always or most of the time	
		Work intensity (Green index)	WHO-5: Psychological well-being	
		Social environment index		
		Physical risks indices (ergonomic, biological and ambient risks)	WORKING TIME: Work–life balance	
		Job strain: autonomy and intensity		
Health and safety information				
Earnings	Earnings	Income	PROSPECTS: Job insecurity Career development	
Working time	Working time	Long hours (more than 48)		
		Very short hours		
		Part-time and involuntary part-time		
		Atypical hours index (possible selection to be made)		
		Irregular hours index (possible selection to be made)		

Identification of policies

The project’s second aim was to compare policies implemented for the improvement of working conditions of OMD. The objective was to further explore the working conditions of workers in these medium-to-low-skill occupations at national level and to identify policies that seek to improve these conditions and which make work in these occupations more sustainable.

The report uses information provided by Eurofound’s network of national correspondents to identify policies, measures and services designed to improve working conditions in the OMD previously identified, as well as, where information is available, the outcomes of these initiatives. This includes measures in the fields of active labour market policies (ALMPs) (including training), career development, health and safety, wages and working time arrangements. Although the focus of the report is on the identification of policies, information available on working conditions of OMD in the national context was requested from national correspondents and forms part of the findings related to the identification of OMD.

Limitations of the analysis

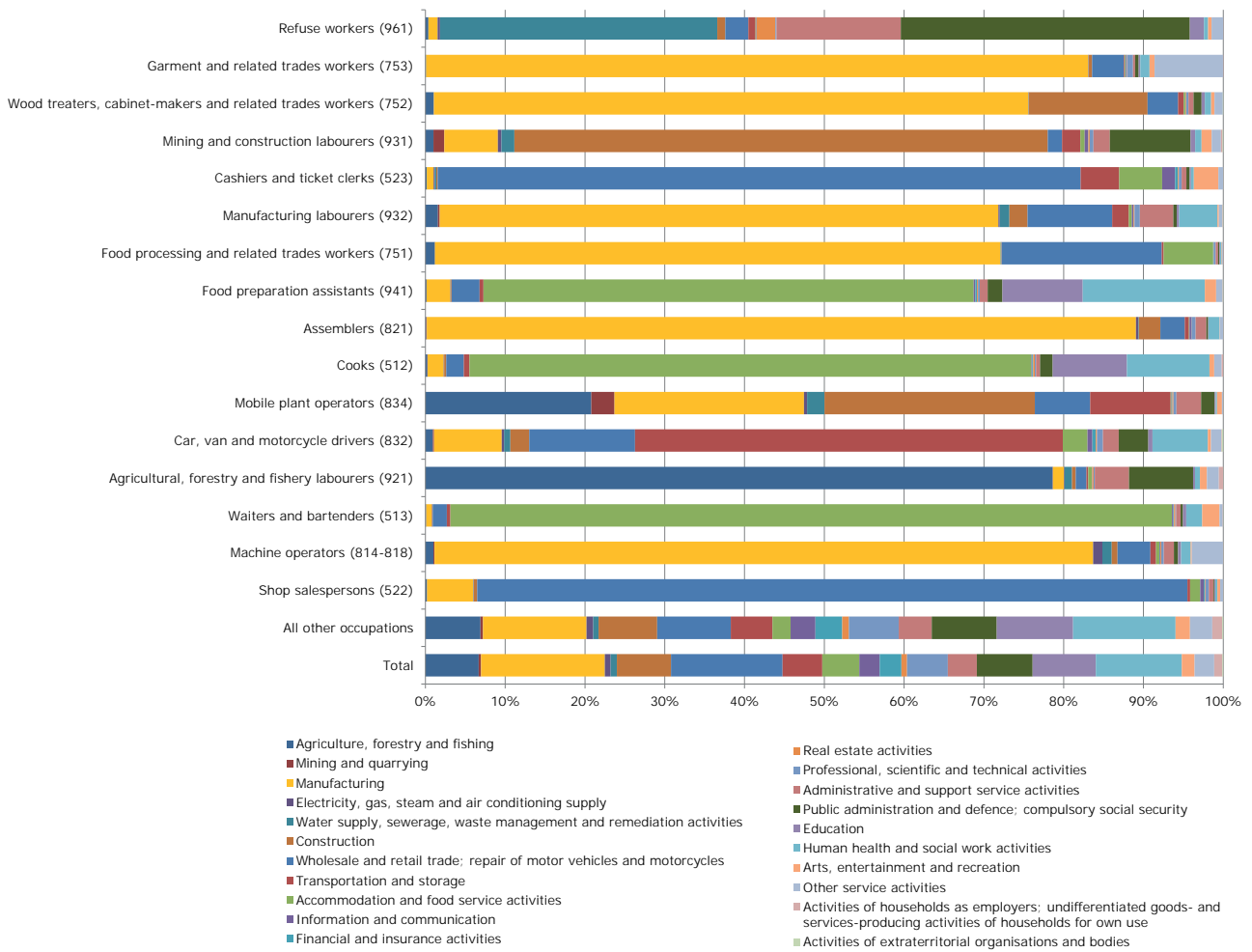
The application of specific research methods always has advantages and disadvantages.

The EWCS data might have relatively small samples when looking at specific occupations. Some occupations were eliminated from the analysis for this reason. Another consequence of performing analysis of occupations at the ISCO 3-digit level is that the possibilities for country comparison are limited.

The EU LFS 2013 data have their own limitations in the sense that they do not include information on ISCO 3-digit codes from all EU countries.

The collection of information for the study is not exhaustive, which means that it does not represent a census of policies but the main examples in relation to the occupations identified as having multiple disadvantages. The identification of OMD using Eurofound's network of European correspondents has its own limitations as the level and the extent of information differs from country to country.

Annex II: Distribution of workers in OMD by economic sector



Source: EU LFS 2013

Occupation is a critical factor in determining the type of working conditions a person will experience during their professional life. This report explores the working conditions of workers – particularly medium-to-low skilled and unskilled – in occupations that are found to have low levels of job quality as measured by four key indicators: earnings, prospects, working time and intrinsic job quality. The knock-on effects of poor job quality and unacceptable working conditions for these workers are significant in terms of psychosocial and physical health, job security, work–life balance, career path and, ultimately, the sustainability of their work. Based on data from the European Working Conditions Survey 2010 and the EU Labour Force Survey 2013, the report presents examples of initiatives, policies and measures across the 28 EU Member States that aim to improve overall working conditions in these disadvantaged occupations.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency, whose role is to provide knowledge in the area of social and work-related policies. Eurofound was established in 1975 by Council Regulation (EEC) No. 1365/75, to contribute to the planning and design of better living and working conditions in Europe.

