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A review of methods used across Europe to estimate work-related accidents and illnesses among the self-employed



European Agency for Safety and Health at Work

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A REVIEW OF METHODS USED ACROSS EUROPE TO ESTIMATE WORK-RELATED ACCIDENTS AND ILLNESSES AMONG THE SELF-EMPLOYED

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1. Introduction

Self-employment is identified as an important occupational safety and health (OSH) challenge in the Community strategy 2007-2012 on health and safety at work. This challenge was already recognised in the first Community strategy and was addressed through *Council Recommendation 2003/134/EC concerning the improvement of the protection of the health and safety at work of self-employed workers.* The Council Recommendation identifies the key challenge as being: the number of such workers who are largely outside the scope of the Union Directives on health and safety at work and who in certain Member States are not covered by the legislation on OSH; and their prevalence in certain 'high-risk' sectors, such as agriculture, fishing, construction and transport (

Figure 1). In addition, self-employed work is commonly low paid, low skilled, with long and irregular hours.

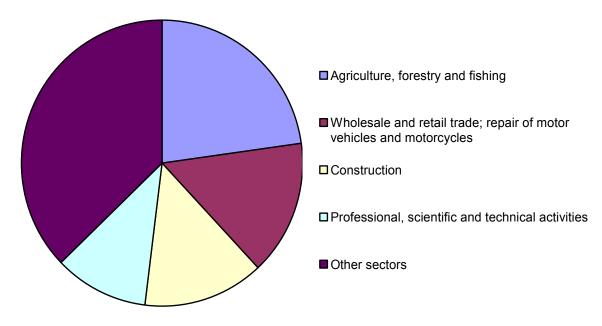


Figure 1: Self-employed population EU-27 by sector in 2009

Source: Eurostat LFS series - Detailed annual survey results

Definitions of self-employed differ considerably across Member States, but Pedersini and Coletto (2009) identify five basic categories of self-employment most commonly used in the relevant literature:

- 1. Entrepreneurs, who run their business with the help of employees;
- Traditional 'free professionals', who, in order to work in their occupation, must meet specific requirements, abide by regulations and duty-bound codes and often pass examinations to be listed in public registers. They generally carry out their activities alone or in association with other professionals and with the help of a limited number of employees, if any;
- Craft-workers, traders and farmers, who represent the traditional forms of self-employment. These self-employed workers often work with their family members and possibly a small number of employees;
- 4. Self-employed workers in skilled but unregulated occupations, sometimes referred to as 'new professionals';
- 5. Self-employed workers in unskilled occupations, who run their business without the help of employees, but can sometimes be assisted by family members.

Methods for estimating accidents and illness among the self-employed

Unless stated otherwise, all references to self-employed in this report do not include employers (defined as a person who works his own business, professional practice or farm for the purpose of earning a profit and who employs at least one other person). The basic categories listed above are reflected in the data on self-employed from the European labour force survey (LFS), which show that the largest numbers work as skilled agricultural and fishery workers and as craft and related trades workers (Figure 2).

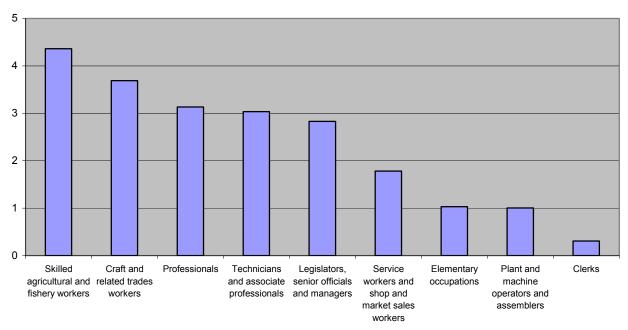
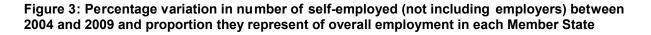
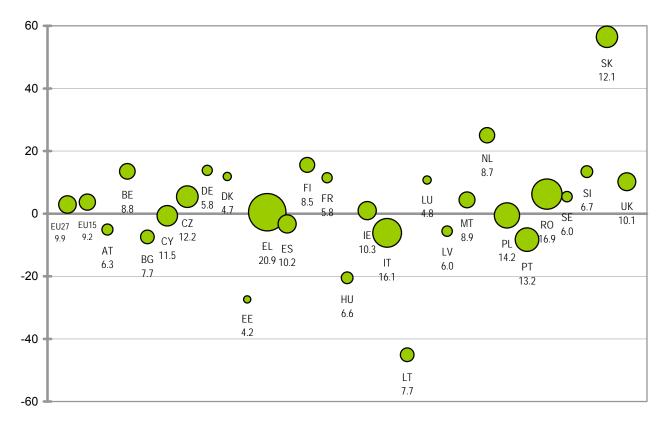


Figure 2: E U-27 number of self-em ployed (not including employers) by occupation in 2009 (millions)

Source: Eurostat LFS series - Detailed annual survey results

In 2009, self-employed workers accounted for about ten percent of all employment in Europe, ranging at Member State level from 21% of the working population in Greece to 4% in Estonia (Figure 3). From 2004 to 2009 the number of self-employed workers increased by just under three percent in the EU-27 (from 20.6 million to 21.2 million), but self-employment has remained stable over the period if taken as a proportion of the whole workforce. At member state level the proportion of the workforce in self-employment has also stayed stable from 2004-2009, with significant changes only seen in Lithuania (decreasing from 14% in 2004 to 8% in 2009) and in Slovakia (increasing from 8.5% to 12%).





Note: width of bubble represents the percentage share of total employment in 2009 consisting of self-employed, not including employers, ranging from 21% in Greece to 4% in Estonia

Source: Eurostat LFS series - Detailed annual survey results

Although the overall proportion of self-employed workers is stable in Europe, there has been a marked growth over recent years in the number of self-employed working in the services and construction sectors.

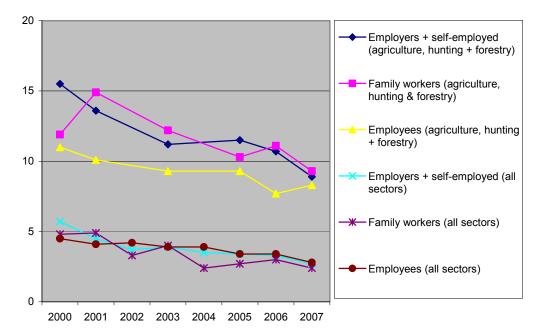
The level of self-employment in high risk sectors such as agriculture and construction means that the capturing of accurate OSH data for this group becomes ever more important. Currently, such information is available at European level from surveys of workers, such as Eurofound's European working conditions survey (EWCS) and the LFS (2007 ad-hoc module on accidents at work and work-related health problems) and from accident registers (ESAW¹).

Unfortunately, the available statistics present significant shortcomings. In the case of worker surveys the scope for analysis of data is limited by the relatively small proportion of self-employed captured in the sample. For their part, accident registers suffer from high levels of underreporting of non-fatal accidents among the self-employed and many registers only cover work-related accidents among employed workers. With respect to work-related illness among the self-employed, European level data are generally lacking and insofar as studies exist at national level they are not comparable between countries.

Notwithstanding these limitations, reliable figures are available for fatal accidents among selfemployed. ESAW data indicate that – when taking all sectors together – there is no great difference in

¹ Administered by Eurostat, the European Statistics on Accidents at Work (ESAW) provides harmonised data based on a common collection methodology

the incidence rate of fatal accidents² among employees compared with self-employed (including employers and family workers). The situation is different, however, in the agriculture, hunting and forestry sector, which has the highest proportion of self-employed workers: here the fatal accident rate of self-employed and family workers is notably higher than that of employees (Figure 4).





Note: Fatal accident incidence rates for workers in the agriculture, hunting and forestry sector are not available for the years 2002 and 2004. Source: Eurostat LFS series - Detailed annual survey results

With respect to work-related illness, Eurofound's fourth European working conditions survey (EWCS) indicates that self-employed workers consider themselves to be at greater risk than employees, with 46% of self-employed reporting that work affects their health, compared with 33% of employees.

Besides these well-known European-wide data collection activities, initiatives exist at Member State level, based on registers, surveys or surveillance systems. Coverage of the self-employed within these monitoring systems can depend on whether they are covered by the national legislation on health and safety at work; whether they come under the social security system; and whether the sample size of a survey is sufficiently large.

Although national differences in definitions, reporting rates and systems render comparative data analysis difficult, there is scope for improving the quality of monitoring of OSH for self-employed through the sharing of knowledge about current practices across Europe. This report describes monitoring systems currently in use and highlights any recent initiatives designed to improve the monitoring of OSH with respect to self-employed in ten selected Member States (Belgium, Czech Republic, Finland, Germany, Hungary, Italy, Lithuania, Malta, The Netherlands and Poland).

A brief overview of the data available on occupational accidents and on occupational health problems or diseases, as well as of data improvement initiatives, is presented for all 27 EU Member States in section 4.

² Incidence rate = (number of persons with fatal accidents at work that occurred during the year / number of persons in employment in the reference population) x 100 000

³ Incidence rate = (number of persons with fatal accidents at work that occurred during the year / number of persons in employment in the reference population) x 100 000

2. Monitoring of OSH for the self-employed in a selection of countries

As well as representing Europe's geographical diversity, the ten countries that feature in this section were selected so as to include both large and small countries and those from EU-15 and newer Member States. In addition, the selection of countries also covers three broad types of national insurance system from the perspective of social protection for the self-employed:

- 1. No social insurance system for self-employed persons: it is up to each self-employed person whether to take out private insurance. Member States following this model are: The Netherlands, Lithuania and Finland.
- 2. Partial social insurance system for self-employed persons: for example, during illness the selfemployed person receives 70% of the minimum income. Additional private insurance can be taken to make up the difference between the maximum compensation and normal income. Belgium follows this model.
- 3. The social insurance system for self-employed persons is comparable with that for employees. Member States with this model are: Germany, Poland, Czech Republic, Italy, Hungary and Malta.

Each of the ten Member State descriptions below gives some key employment figures from the 2008 European labour force survey. Information is also given about the social security coverage for self-employed each country, drawing on the EU's Mutual Information System on Social Protection (MISSOC). Finally, the situation as regards monitoring of work-related accidents and illnesses is summarised for each country, with mention being made of any new initiatives undertaken to improve coverage or quality.

2.1. Belgium

Key figures (LFS 2008)	
Total employment:	4.41 million
Total self-employed:	373,600
Proportion self-employed:	12% (stable since 2000)
Sectors with highest proportions of self-employed:	agriculture (44%), other community, social, personal services (18%) and real estate (17%)
Proportion self-employed who are women:	33% (no change since 2000)

Social security coverage

Under Belgian law, self-employed workers are responsible for all of their social security obligations. For these workers, social contributions cover three sectors of the social security scheme: pension, family allowance and health insurance (heath care, maternity leave and financial compensation) (Pedersini and Coletto, 2009). In contrast to employees, there exists no specific social protection system against occupational accidents, occupational diseases and unemployment for self-employed workers.

Financial compensation in case of sickness and invalidity for self-employed workers is provided through the National Institute of Sickness and Invalidity Insurance. The daily allowance is a lump sum and not calculated on the actual loss of income of the self-employed worker.

In order to avoid loss of income during a period of work incapacity due to an illness or an accident, a self-employed worker can voluntarily arrange individual insurance cover. No reliable estimate can be made of the number or proportion of self-employed workers who have taken such insurance.

Monitoring OSH

In Belgium, the Fund for Occupational Accidents and the Fund for Occupational Diseases are responsible for data collection on occupational accidents and diseases. The social security scheme, however, does not in general cover occupational accidents or occupational diseases of self-employed workers, meaning that they have no have data for this group.

As an exception, the Asbestos Fund provides compensation to victims (or their relatives) of typical asbestos related diseases, such as mesothelioma and asbestosis. Claimants must prove that they were exposed to the asbestos in Belgium. The scheme is managed by the Fund for Occupational Diseases and subsidised by the federal government and by a special employer contribution. Before the fund was established in 2007, only the victims of a recognised asbestos-related occupational disease (caused by exposure to asbestos at work) were compensated, which excluded self-employed workers. Although self-employed workers are able to claim compensation under the new fund, the fact that the exposure to asbestos does not have to be specifically work-related means that no data are available on levels of occupational exposure for this group.

Financial compensation in case of sickness or invalidity for self-employed workers is provided through the National Institute of Sickness and Invalidity Insurance. However, as there is no distinction made in the cause of the work incapacity (private or occupational accident, sickness or occupational disease), no figures are available on the number of self-employed workers suffering from an occupational accident or disease.

On a voluntary basis, the self-employed worker may be insured against income loss during a period of work incapacity due to an illness or an accident. Again, no distinction is made in the cause of the work incapacity (private or occupational accident, sickness or occupational disease), so data are not available. Furthermore, the voluntary nature of the insurance means that if the insurance companies collected these data, they would not give an accurate picture.

2.2. Czech Republic

Key figures (LFS 2008)	
Total employment:	4.9 million
Total self-employed:	577,600
Proportion self-employed:	12% (increased by 1.5% since 2000)
Sectors with highest proportions of self-employed:	construction (30%); real estate (27%); and other community, social, personal service activities (26%)
Proportion self-employed who are women:	28% (very slight decrease from 29% in 2000)

Social security coverage

In the Czech Republic, the social security system is in principle uniform for both employees and selfemployed workers. Participation in the sickness insurance scheme (cash benefits in case of sick leave) is, however, voluntary (Pedersini and Coletto, 2009). In contrast to employees, there is no specific social protection system against occupational accidents and occupational diseases for selfemployed workers.

Monitoring OSH

The social security scheme in the Czech Republic does not cover occupational accidents or occupational diseases for self-employed workers; therefore, no data are available.

2.3. Finland

(1 50 0000)

Key figures (LFS 2008)	
Total employment:	2.5 million
Total self-employed:	201,000
Proportion self-employed:	8% (stable overall since 2000)
Sectors with highest proportions of self-employed:	agriculture (55%), other community, social, personal services (17%) and construction (10%)
Proportion self-employed who are women:	36% (slight increase from 34% in 2000)

Social security coverage

The self-employed are covered by the same social security schemes based on residence as employed persons and other persons residing permanently in Finland. Nevertheless, insurance against accidents at work and occupational diseases is voluntary for self-employed, except in agriculture where such insurance is obligatory. It is estimated that about 40% on non-agricultural self-employed have taken the insurance, but the estimates are somewhat unreliable; for example because some salaried workers are also part-time self-employed.

Occupational Health Services (OHS) are voluntary for the self-employed; however, the Social Insurance Institute pays 60% of the costs of preventive OHS also for the self-employed. Agricultural self-employed joining OHS also get a 20% reduction of their obligatory insurance fee against accidents at work and occupational diseases.

Monitoring OSH

Administrative data from the compensation system

Absolute numbers of fatal and non-fatal (at least 4 days of absence) accidents at work are known for agricultural (all) and for non-agricultural (those with voluntary insurance) self-employed. The rates can be reasonably reliably calculated for the agricultural self-employed, while for the non-agricultural self-employed the exact denominator is not known. Nevertheless, for the above-mentioned case data, the causes and circumstances of the accidents are known and can be used in their prevention. The situation is identical for occupational diseases, except that the limit of four days or more of absence does not restrict the data concerning chronic diseases without incapacity to work (e.g. hearing loss, asbestosis, pleural plaques etc.), which are also known. For accidents at work with less than four days of absence, the absolute number is recorded also, but the level of under-reporting can't be assessed. The administrative data are compiled and disseminated by the FAII and MELA. Some of these data are disseminated also by Statistics Finland. In addition, a research and service oriented database for accidents at work is created from these data by FAII and used by FIOH to produce data to support preventive services. Separate analyses for self-employed are possible from the database.

Survey data

A survey on "Work and Health" has been run every three years among the employed population since 1996 (last round 2009). This survey collects information on accidents at work that occurred during the last 12 months and work-related health problems or symptoms suffered during the last 12 months. The sample size is about 3000 employed persons, so every round includes about 100 agricultural and 300 other self-employed persons, of which about 75% are currently in employment. Rough estimates of the incidence rates of accidents at work and work-related health problems can be calculated from this survey. The small number of self-employed in the sample is a limiting factor. Currently, an exercise is underway (started in 2009, will be finalised in 2010) to analyse further the situation of the self-employed by aggregating data from several annual rounds of the survey. This survey is run by the Finnish Institute of Occupational Health.

2.4. Germany

Key figures (LFS 2008)	
Total employment:	38.2 million
Total self-employed:	2.2 million
Proportion self-employed:	5.7% (no significant change since 2000)
Sectors with highest proportions of self-employed:	agriculture (20%), other community, social, personal services (16%) and real estate (12%)
Proportion self-employed who are women:	37% (increase from 34% in 2000)

Social security coverage

Book VII of the German Social Code (SGB VII, Accident Insurance)⁴ defines who is covered by (occupational) accident insurance. Self-employed, employers and freelancers may insure themselves and their collaborating spouses on a voluntary basis – insofar as they are not already covered by SGB VII or the statutes of the statutory accident insurers.

Independent social security systems exist for farmers as well as self-employed artists and publicists. Responsible institutions for accident insurance are the accident insurance institutions for the agricultural sector, the industrial and the public sector.

Monitoring OSH

According to §6 of the German Working Conditions Act (Arbeitsschutzgesetz), the employer is obliged to gather information on non-fatal occupational accidents (resulting in a worker being unfit for work for more than three working days) and fatal accidents. The accident insurance institutions for the agricultural sector, industrial and public sector collect information on fatal and non-fatal occupational accidents as well as notifications by employer or self-employed of suspected occupational diseases on a regular basis (see report sheets for non-fatal and fatal accidents and notifications of suspected occupational diseases notifications of suspected occupational diseases self-employed, notifications of suspected occupational diseases made by an occupational physician do not distinguish between self-employed and employees⁶.

Despite the regular data collection on occupational accidents and diseases, statistics on selfemployed are not published routinely. An exception is the "Report on Safety and Health at Work 2007" of the Federal Ministry of Labour and Social Affairs⁷ and the Federal Institute for Occupational Safety and Health (BAuA), which presents statistics (accidents, working conditions, loads and complaints) for self-employed. However, the report only covers statistics collected by the accident insurance institutions corresponding to the industrial sector.

In general, only the number of accidents and occupational diseases of those self-employed covered by the statutes of the accident insurance institutions appear in the statistics. Thus, accidents and diseases of non-covered self-employed are not recorded. All in all, the level of underreporting in Germany cannot be estimated.

⁵ http://www.dguv.de/formtexte/unternehmer/U_1000/U1000.pdf; http://www.dguv.de/formtexte/unternehmer/U_6000/U6000.pdf http://www.lsv.de/nrw/03service/04elektronische_unfallanzeige/index.html http://www.lsv.de/lsv_all_neu/service/formulare/blb/nb/unfallanzeige-nb.pdf http://www.lsv.de/lsv_all_neu/service/104_02/Port/formalanzeige-nb.pdf

⁴ Bundesministerium der Justiz. Siebtes Buch Sozialgesetzbuch - Gesetzliche Unfallversicherung <u>http://bundesrecht.juris.de/bundesrecht/sgb_7/gesamt.pdf</u>

http://www.lsv.de/hrs/04leistungen_neu/leist04/leist04_02/Berufskrankheitenanzeige_des_Unternehmers_08_04_04.pdf http://www.dguv.de/formtexte/aerzte/F_6000/F6000.pdf; http://www.lsv.de/gartenbau/pdf_dokumente/bg_pdf/bk_arzt.pdf

⁷ Bundesministerium für Arbeit und Soziales. Soziale Sicherung im Überblick 2009 http://www.bmas.de/coremedia/generator/1040/property=pdf/a721 soziale sicherung gesamt.pdf

2.5. Hungary

Key figures (LFS 2008)	
Total employment:	3.8 million
Total self-employed:	252,000
Proportion self-employed:	6.6% (a decrease of 2.8% since 2000)
Sectors with highest proportions of self-employed:	agriculture (23%), other community, social, personal services (19%) and real estate (14%)
Proportion self-employed who are women:	35% (increase from 31% in 2000)

Social security coverage

The Hungarian social security system comprises the following main branches: pensions and health insurance, including accidents at work (social insurance), plus mixed-type unemployment insurance, family allowances and social assistance. In principle, cover extends to all persons who are gainfully employed and those of equivalent status: persons in paid employment (including those in public administration), the self-employed (including members of co-operative societies), numerous groups of persons of equivalent status, persons receiving income support, and job-seekers receiving allowance or compensation or pre-pension compensation. Everyone is automatically affiliated to a social insurance scheme as soon as he or she begins to work. Self-employed people register themselves and employers register their employees.

Monitoring OSH

Self-employed persons who pay insurance are covered for occupational diseases and accidents; however, the monitoring of their OSH situation is limited due to a lapse in the information system from 13 May 2007 onwards. As a result of changes in the management of the reporting system, the legal items on reporting, investigation and registration of occupational diseases and accidents give exemption to self-employed workers and these cases cannot therefore be reported, investigated or verified.

OMFI (Hungarian Institute of Occupational Health) collects data on occupational diseases and the Labour Inspectorate (OMMF) on occupational accidents. These statistics are also published by the central statistics institute (KSH). These data concern only organised employees and there is a possible severe underreporting in occupational diseases. Work accidents and work related diseases concerning the self-employed are not collected at the present time. With regard to work accident rates, the 2006 IV Quarter report of the Hungarian Labour Inspectorate (OMMF) does not include the category 'self-employed'. It is possible to find data on sole entrepreneurs and limited partnerships but these data refer, most probably, mainly to employees of enterprises and, to a smaller extent, to the owner, i.e. the self-employed workers themselves. Only 5% of the total number of work accidents were reported by sole entrepreneurs or limited partnerships, while they make up 20 % of the total number of the employed.

2.6. Italy

Key figures (LFS 2008)	
Total employment:	23 million
Total self-employed:	3.7 million
Proportion self-employed:	16.2% (an increase of 5.1% since 2000)
Sectors with highest proportions of self-employed:	agriculture (33%), real estate (32%) and other community, social, personal services (29%)
Proportion self-employed who are women:	31% (significant increase from 25% in 2000)

Social security coverage

National Insurance cover for both self-employed and regular workers is primarily handled by the state in the form of compulsory insurance or basic pension schemes. The cover is managed by two organizations: INPS and, for public administration employees, INPDAP. INPS, apart from handling basic pension schemes for semi-subordinate workers⁸, also handles the cover of some of the selfemployment categories through three funds: Fund for Craftsmen, Fund for Retailers and Fund for Farmers.

There are also some independent organisations that manage pension cover for various professional categories within the self-employed, including: lawyers, public notaries, chartered accountants, accountants, business consultants, psychologists, medical doctors, nurses, biologists, veterinarians, pharmacists, engineering technicians, land surveyors, agriculturalists, engineers and architects. These pension schemes are funded through compulsory contributions.

Insurance to cover occupational accident, health and illness is compulsory in Italy. This is handled through the Italian National Institute of Occupational Insurance (INAIL) and covers the following categories of self-employed workers: craftsmen, farmers and semi-subordinates.

Occupational safety and health for self-employed should benefit from legislation introduced in 2008 reinforcing the compulsory use of work equipment and personal protective equipment. This law also gives self-employed workers the opportunity to be part of the health surveillance system and, at their own expense, to participate in health and safety training courses that are specific to their occupational risks.

Monitoring OSH

Occupational illness and injury data from reports to INAIL are available through an online database: <u>http://bancadati.inail.it/prevenzionale/</u>. Information is grouped into provincial, regional and national levels and includes: insured activities, claims declared, claims compensated and the type of risk. It has also been divided into different types of work contracts (self-employment, fixed term, and semi-subordinate). Logically, data is limited to the self-employed categories for which occupational illness and injury insurance is compulsory: craftsmen, farmers and semi-subordinates.

Since 1978 a surveillance system has been in place, designed to monitor occupational illness and injury, focusing in particular on emerging multifactor illnesses and also on the category of workers involved. Since the establishment of the Local Health Authorities (ASL), doctors who diagnose, become aware of, or even suspect, an occupational injury, have the duty to report these to the ASL. The ASL then evaluates possible criminal significance, assessing if there has been any negligence on the part of the employer with regards to health and safety laws. Since 1999 all reports to the different ASL offices are recorded centrally and a specific software application (Ma.Pro.Web) is used to record information regarding occupational illnesses and any investigations carried out. Data are accessible online, but at present the system is only active in a few of the Italian regions. In principle, the Ma.Pro.Web software could be used in other countries operating medical surveillance systems.

The system for recording fatal injuries is active nationally and includes the possibility of entering the type of contract, so allowing retrieval of data on self-employed and semi-subordinates.

⁸ A particular subcategory of self-employed worker recognised in Italian law

2.7. Lithuania

Key figures (LFS 2008)

Total employment:	1.5 million
Total self-employed:	116,300
Proportion self-employed:	7.8% (a decrease of 6.2% since 2000)
Sectors with highest proportions of self-employed:	Agriculture (37%), other community, social, personal services (14%) and construction (12%)
Proportion self-employed who are women:	37% (slight decrease from 40% in 2000)

Social security coverage

Self-employed persons are identified under the Law on State Social Insurance according to the sources of payment of compulsory social insurance contributions. Whereas "employed persons" receive wages and are insured through the employer (a certain part of the contribution is also paid by the insured person), "self-employed persons" receive income for their activities and pay their own compulsory insurance contributions.

Self-employed are not covered by accidents at work and occupational diseases insurance; are not compulsorily covered by sickness and maternity insurance; are also not obliged to insure themselves against unemployment; but are so insured due to their participation in the pension insurance scheme.

Monitoring OSH

Incidence rates for self-employed persons regarding occupational accidents and diseases are not available in Lithuania because professional status (i.e. self-employed, employees or other) is registered neither in occupational accidents' database, which is administered by the State Labour Inspectorate nor in the State Register of Occupational diseases, which is administered by the Institute of Hygiene. The fact that the self-employed are not covered by insurance for accidents at work and occupational diseases means that data is not available from the insurance system.

Very crude figures for occupational diseases among the agricultural self-employed can be made from the State Register of Occupational diseases database when the injured person's name coincides with the name of the enterprise. In 2008, for example, 16 cases of occupational diseases were registered for nine agricultural self-employed persons.

The Occupational Medicine Centre (Institute of Hygiene) intends to add a field for professional status to the occupational disease reporting form in order to administer these data in the State Register of Occupational diseases. It may be possible for the State Labour Inspectorate to make the same improvement to the Occupational accidents' database.

2.8. Malta

Key figures (LFS 2008)	
Total employment:	159,400
Total self-employed:	14,200
Proportion self-employed:	8.9% (an increase of 1% since 2000)
Sectors with highest proportions of self-employed:	construction (22%), wholesale and retail (18%) and real estate (15%)

Proportion self-employed who are women:

18% (significant increase from 14% in 2000)

Social security coverage

Both employed (class I contributions) and self-employed / self-occupied (class II contributions) persons are covered by the social security scheme. Self-employed pay 15% of the income declared by the payer in the previous year, whereas the contribution rate of employers and employees in 2008 was at 10% of the basic weekly wage⁹. Self-employed are eligible for all social benefits, except unemployment benefits.

The Maltese Social Security Act defines a self-employed person as a "person who has not yet passed his sixty-fifth birthday, is ordinarily resident in Malta, and is not an employed person nor a self-occupied person", whereas "self-occupied means a self-employed person who is engaged in any activity through which earnings exceeding €910 per annum are being derived"¹⁰.

Monitoring OSH

The Maltese Department of Social Security collects data on non-fatal accidents at work. According to the National Statistics Office, self-employed workers without employees suffered 203 accidents at work in 2008. Data on fatal accidents at work is collected by the Occupational Health and Safety Authority (OHSA). All in all, three workers died in fatal occupational accidents in 2008, but none was self-employed.

At present, no data is available on occupational illnesses and work-related health problems for selfemployed workers without employees (Pedersini and Coletto, 2009). However, the Department of Social Security has introduced new claim forms on injuries and occupational diseases, which will enable the national Statistics Office to collect further variables which are required at a European level.

According to a study carried out in 2005, underreporting does not significantly affect statistics on accidents at work overall, but may affect those for the self-employed.

2.9. The Netherlands

Key figures (LFS 2008)	
Total employment:	8.5 million
Total self-employed:	712,900
Proportion self-employed:	8.4% (an increase of 1.6% since 2000)
Sectors with highest proportions of self-employed:	agriculture (34%), other community, social, personal services (26%) and construction (15%)
Proportion self-employed who are women:	39% (slight increase from 37% in 2000)

Social security coverage

The general protection system applies as a rule to all residents of the Netherlands; therefore, special regulations for self-employed exist only with respect to a few points. Against the risk of employment injuries and occupational diseases there is no special protection system, the corresponding law applies only to employees. Since June 2008, the right to receive maternity compensation for a maximum of 16 weeks was extended to cover also self-employed persons (in anticipation of Directive 2010/41/EU on equal treatment of self-employed men and women).

⁹ Ministry for Social Policy, Social Security Division. Annual Departmental Report for 2008 <u>http://www.msp.gov.mt/documents/dss/dss_2008.pdf</u>

¹⁰ SSA – Maltese Social Security Act of 1st January 1987

http://docs.justice.gov.mt/lom/Legislation/English/Leg/vol_7/chapt318.pdf

Self-employed persons are responsible for arranging their own individual insurance for possible loss of income if they are unable to work due to illness or an accident. According to Treur (2007) and Vroonhof et al. (2008), almost half of the self-employed do not have such insurance, especially those on a low income. Premiums for insurance cover depend on age, deferred period, amount of daily compensation and duration of claim, but start at a few hundred euros a month. However, there are some (organised) interest groups¹¹ which offer collective insurance at a reduced price.

Monitoring OSH

Representative incidence rates on self-employed persons regarding occupational accidents and diseases are not currently available in the Netherlands. Up to 2005, information about occupational accidents including sickness absence could be extracted from the workers' survey EBB (Enquête BeroepsBevolking) of the central bureau of statistics (CBS). Since 2005, however, information about this theme is collected by the NEA (Nationale Enquête Arbeidsomstandigheden) of TNO, which only covers usual employees.

Data on work-related accidents and ill health are collected by insurance companies, but information held on their databases is confidential. Furthermore, the fact that only half of all self-employed have insurance means that this data would not be representative.

Occasionally, information about accidents and diseases among self-employed is gathered as part of a larger project not focused on monitoring and mainly concentrating on one specific group and risk factor. An example is a project of the Ministry of Social Affairs and Employment on physical risk factors among self-employed construction workers.

Between 1998 and 2004 a social insurance system was in place for self-employed persons that could offer a comparable reporting system to that of employees.

2.10. Poland

Key figures (LFS 2008)

Total employment:	15.6 million
Total self-employed:	2.2 million
Proportion self-employed:	14.3% (a decrease of 3.6% since 2000)
Sectors with highest proportions of self-employed:	Agriculture (66%), wholesale and retail (19%) and transport, storage and communication (12%)
Proportion self-employed who are women:	36% (slight decrease from 38% in 2000)

Social security coverage

As from 1st January 1999 self-employed persons who perform non-agricultural activities and their cooperating persons are part of the general social insurance system. They are insured in the pension scheme on a mandatory basis as well as in the employment injuries and occupational diseases scheme. Sickness insurance is voluntary for these persons. Contributions of self-employed persons (health insurance, pension and accident premiums) are thereby entirely financed by the insured themselves, with their own funds. In order to be entitled to sickness benefits, a self-employed person has to prove 180 days of continuous insurance cover (compared to 30 days for mandatory insured employees). The insured self-employed do not receive benefits if the illness lasts less than 30 days, however, in the case of an occupational disease or injury, they have the right to benefits from the first day of insurance. There is no specific ruling on working time and self-employed workers can join parental leave and sickness leave on a voluntary basis.

Farmers are insured separately covering short-term incapacity of work (including sickness, maternity and labour accidents).

¹¹ E.g. ZZP Nederland, <u>www.zzp-nederland.nl</u> or PZO, <u>www.pzo.nl</u>

Monitoring OSH

At present there are no surveys providing incidence rates of occupational accidents or diseases for self-employed.

As regards reported accidents, the National Labour Inspectorate (PIP) is responsible for analysis of data concerning circumstances and causes of work accidents involving both employees and self-employed individuals. National registers for occupational diseases information on self-employed do, however, not exist.

A revised Accident Registration form was issued in 2005, which follows the ESAW methodology and contains various items about the victim of an occupational accident, specifying also if he/she is self-employed or not.

3. Summary of self-employed OSH monitoring in the selected EU-27 Member States

Country	Type of social insurance system	Data on occupational accidents	Data on occupational health problems/ diseases	Initiatives to improve monitoring	Further comments
Belgium	Responsibility of self-employed; no social protection against occupational accidents, diseases and unemployment	No	No		Social security system does not cover occupational accidents or diseases of self-employed
Czech Republic	Uniform for all workers; sickness insurance voluntary for self- employed; no protection against occupation accidents and diseases	No	No		Social security scheme does not cover occupational accidents and diseases
Finland	Same social security scheme applies except for occupational accidents and diseases where insurance is voluntary for self- employed other than farmers	Yes	Yes	Administrative data by the FAII and MELA; survey "Work and Health" since 1996 (sample size 3000 including 300 self-employed)	Administrative data is reliable; small sample size in survey of self-employed
Germany	Voluntary occupational accident insurance for self-employed, insofar as self-employed are not directly covered by the German Social Code (SGB VII)	Yes	No, self- employed cannot be distinguished		
Hungary	Equal insurance for everybody starting work, including accidents at work and self-employed.	No	No		OMFI (Hungarian Institute of Occupational Health) collects occupational accidents and diseases statistics only for organised employees, not self-employed

Country	Type of social insurance system	Data on occupational accidents	Data on occupational health problems/ diseases	Initiatives to improve monitoring	Further comments
Italy	Occupational accidents and diseases insurance (compulsory) by INAIL covers only the following categories of self-employed workers: craftsmen, farmers and semi-subordinates.	No, only partial data available	No, only partial data available	ISPESL National system of epidemiological surveillance of workplace injuries aimed at researching causes; MalProf: national system of epidemiological surveillance of occupational diseases based on local health units' reports	only 50% of self-employed have insurance (under representation)
Lithuania	Compulsory, except occupational accidents and diseases, sickness and maternity leave, unemployment; self-employed pay own contributions	No	No	The Occupational Medicine Centre (Institute of Hygiene) is adding a field for professional status to the occupational disease reporting form so that these data feature in State Register of Occupational diseases.	
Malta	Self-employed covered by same social security scheme as employed and are eligible for all social benefits, except unemployment benefits	Yes	No	Department of Social Security gradually introduced new claim forms on injuries and occupational diseases, which will deliver data on new variables for National Statistics office	
Netherlands	Self-employed included in universal system except for work- related injury and occupational disease	No	No		As a result of changes to national workers' survey in 2005, data on self- employed could no longer be extracted
Poland	Self-employed other than farmers are part of a mandatory general social insurance system	Yes	No	Revised accident registration form in use since 2005 follows ESAW methodology containing victim information specifying if self-employed or not	

4. Summary of self-employed OSH monitoring in other EU Member States

Country	Monitoring of occupational accidents	Monitoring of occupational health problems/diseases	Initiatives to improve monitoring
Austria	Data validity of national surveys is limited as surveys on occupational accidents are carried out infrequently, whether covering self-employed or not. In 2007 a survey was carried out by Statistics Austria as part of the LFS 2007 ad hoc module on accidents at work and work-related health problems. The European questionnaire was differentiated further and enlarged. As part of the LFS the survey was representative and covered all sectors and groups.	As for occupational accidents. The social insurance data cover primarily occupational diseases.	Differentiation and enlargement of LFS ad hoc module.
Bulgaria			
Cyprus	National surveys of the working population are representative. National registers, however, are only representative regarding the sectors and the groups of workers	Data on occupational health problems and diseases are not available for the self-employed at present	On 7/12/2007, new regulations concerning the Notification of Work Accidents came into force. All accidents suffered by self-employed persons during their work and which lead to an absence from work for more than three calendar days, suffered by employed and self-employed persons during the normal journey between home and the place of work (commuting accidents) have to be reported to the Department of Labour Inspection.
Denmark	Data are available from national registers, but are not representative for self-employed due to a level of underreporting in this occupational group.	As for occupational accidents.	
Estonia	Data are available from national registers. Under national legislation, there exists only data on those accidents which took place in the circumstances when the self-employed worked with the employees of other employers. No national surveys exist.	National legislation does not provide for collection of appropriate data.	Steps to establish data collection by surveys have been taken recently. Under the amendment, which came into force on 1/07/2007, the Occupational Health and Safety Act (1999), Article 1, applies to the work of self- employed (however, to a limited extent).

Country	Monitoring of occupational accidents	Monitoring of occupational health problems/diseases	Initiatives to improve monitoring
Greece			
Spain	Data are available from national surveys, but not registers.	As for occupational accidents.	Last working conditions survey in 2007. Continuous surveillance system for work accidents register.
France	There is no statistical system for a detailed account of work-related accidents among self- employed in France. Three studies related to work accidents exist; however, they are based on small samples. Reliable results would need larger samples such as 1000 lost time accidents at national scale.	Specific social security cover for the self- employed including the compensation of work- related accidents has come into force since 2006, but in contrast to the social security of employees, it doesn't yet produce OSH figures (health diseases, work-related accidents). Four studies relating to occupational health problems have been carried out in France.	Some provisions of the employment code affect self-employed workers, but French labour law is based on regulation of a work relationship as part of a work contract with a legal subordination link. An increasingly wide range of self-employment forms exist in France, which requires an appropriate and secure framework, especially as regards subcontracting. To address this challenge, the labour ministry in 2008 assigned two experts the task of: a) making a diagnosis of difficulties brought up by the current legal framework; b) identifying different forms of self-employment; and c) exploring means to make self-employed employment easier. Their report will have to propose means, legal or beyond/beside the law, to remedy the difficulties identified and allow the development of a secure framework for all forms of self-employment.
Ireland	Data are available from national registers, but only 0.3% of reports to the Health and Safety Authority relate to injuries to self-employed workers. A level of under-reporting is likely given the large proportion of small enterprises in Ireland.		
Luxembourg	Data are available from national surveys and registers.	As for occupational accidents.	ESAW2, then ESAW3.
Latvia			

Country	Monitoring of occupational accidents	Monitoring of occupational health problems/diseases	Initiatives to improve monitoring
Portugal	Data are available from national surveys and registers.		Only the Labour Inspection Monitoring System exists.
Romania			
Sweden			
Slovenia	Data are available from the national register on accidents at work. Coverage of self-employed is legally equal to other employees and insurance is compulsory. Due to salary reimbursement to employers from health insurance after 30 days of sick leave, under-reporting among self-employed is probable and still has to be assessed. National register of sick leave certificate covers	National data collection of verified occupational diseases is in preparation. Question on work related diseases is included in EHIS. Small number of interviewed self- employed.	Initiatives undertaken on both issues, but not specific to self-employed.
	self-employed. Accidents at work and all other diagnoses are covered No national survey specific to the working population is in place. Eurostat (LFS, EHIS) and Eurofound (EWCS) surveys are conducted. Results of Health Interview Survey 2007 show that sample is small for self-employed. Among 1700 employed, there were 115 self-employed interviewed (under represented). 3.8% self- employed have reported an accident at work in the last 12 months compared to an incidence rate of 4.9% for other employees. Sectors are not specified.		
Slovakia	Data on work-related accidents among the self- employed were registered till the end of the year 2007, but as a result of legislative changes they are not registered at present.	Data on occupational health problems among self-employed workers are not recorded in national registers, but they are available for further processing. Work-related diseases are collected in national registers according to economic activity (NACE).	Steps are currently being taken to register self- employed in the national register as a specific group.

Country	Monitoring of occupational accidents	Monitoring of occupational health problems/diseases	Initiatives to improve monitoring
United Kingdom	The Labour Force Survey – a nationally representative survey which covers accidents and work-related ill health – is the primary source of data on the self-employed. Work-related accidents in Great Britain are required to be reported under the RIDDOR regulations (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations). The self- employed are covered by these regulations. However, from comparison with the national survey, reporting levels amongst the self- employed are estimated at around 10%.	The Labour Force Survey – a nationally representative survey which covers accidents and work-related ill health – is the primary source of data on the self-employed. Certain work-related ill health conditions are reportable under the RIDDOR regulations. However, ill health cases are very significantly under-reported and the self-employed are particularly under-reported within that. Therefore this data is highly unreliable for assessing work- related ill health amongst the self-employed.	Since 2006, reports of work-related ill health from a voluntary network of General Practitioners have been gathered in surveillance schemes run by The Health and Occupation Reporting network. There are currently 300 GPs participating in the scheme known as THOR-GP. Self-employed cases are reported alongside employee cases although not separately identified at present. As more data is collected over time, it may be possible to use this source to increase our knowledge about work- related ill health amongst the self-employed.

Source: National Focal Points answers to a Questionnaire sent by EU-OSHA.

5. Conclusion

Self-employed workers (not including employers) make up ten percent of the workforce in Europe, ranging from 21% in Greece to 4% in Estonia. This group of workers is important in terms of health and safety at work not only because of their prevalence, but also because they represent a large proportion of those working in the high-risk sectors of agriculture (47%) and construction (17%). In most Member States the legislation concerning health and safety of workers is based on protection of the employee (as someone in a position of subordination to an employer). This framework largely excludes those workers who are self-employed, although some provisions (e.g. concerning coordination on work sites) do apply to this group and the distinction between employee and self employed is not always clear-cut (e.g. economically dependent workers or semi-subordinate workers).

The levels of self-employment in high risk sectors and the exclusion of these workers from most health and safety legislation in Europe have been identified as an important OSH challenge in both the 2002-2006 and 2007-2012 Community strategies on safety and health at work and also in Council Recommendation 2003/134/EC concerning the improvement of the protection of the health and safety at work of self-employed workers. Effective action to meet this challenge requires adequate monitoring systems that can provide accurate data on the health and safety situation of self-employed workers. The aim of this report is to present an overview of such monitoring systems currently in use across Europe, highlighting any recent initiatives taken to improve their accuracy and mentioning where relevant their potential for use in other countries.

For the overview, a selection of ten Member States' systems are described in detail and for the remaining Member States summarised information about their systems is presented in a table. In general, OSH statistics draw on three sources of data: registers of occupational diseases/illnesses and of accidents (sources of 'administrative data', whether as part of a compensation scheme or as a result of a reporting obligation), surveys that cover the working population and less commonly, medical surveillance systems. This report shows a great variation between countries in the extent to which self-employed workers are covered by these sources and in the accuracy that they are able to offer in describing the OSH situation for this group.

Availability of data concerning self-employed workers from registers of accidents and of occupational diseases/illnesses depends firstly on whether they are covered by the system. In general, accidents and illnesses are only recorded if the worker is covered by insurance or if there is a legal obligation to report. For self-employed workers, insurance cover can be automatic (universal cover), compulsory, or voluntary, depending on the country and – in some Member States – also on the sector or trade. A legal obligation to report accidents at work, (other than fatal accidents, for which reporting is obligatory in all countries) generally applies only to those who have insurance cover. However, even when the self-employed are included, the quality of administrative data of this type suffers from under-reporting and this is particularly problematic in the case of self-employed workers who often have little incentive to report accidents or illnesses.

Surveys have the advantage that all categories of worker can be treated equally, but their accuracy depends on respondents' recollection and subjective assessment of their accidents, illnesses and working conditions. While it is possible that self-employed respondents are affected by a systematic bias, the greatest obstacle in the use of survey data is the large sample size that is required in order to give representative results for self-employed workers that can be analysed usefully. The European labour force survey is large enough to allow analysis by country or by sector at European level, but too few self-employed are captured to allow sectoral analysis at national level, for example.

Surveillance systems based on reports from doctors have the potential to provide objective OSH data on self-employed on the same basis as for employees, thereby allowing direct comparison of the two groups. In practice, however, the feasibility of these systems depends largely on the way in which health provision is organised at national level. Complexity and expense may be additional factors contributing to the scarcity of medical surveillance systems in Europe.

According to the results of the review presented in this report, 16 Member States collect data on occupational accidents among self-employed workers and eight on occupational illness or disease. These figures, which include countries where the data is only partial in coverage or of limited quality, highlight the lack of monitoring information that exists across Europe on the OSH situation of the self-employed. While a number of recent initiatives have been identified that aim at increasing data coverage or quality, it worth noting that some countries (e.g. Hungary, the Netherlands and Slovakia)

have in recent years discontinued or changed monitoring systems with the result that they have less, or no longer have any, OSH data on self-employed workers. The reasons for these lapses in data collection are a result of changes to the social insurance system, legislative changes or changes to survey methodology.

When considering increasing the monitoring capacity at national level, it is useful to look at practices in other countries. Given their usual integration in insurance systems, registers of occupational accidents and of disease or illness are not readily transferable in themselves. However, the differentiation by job status as part of the procedure – for example in reporting or claims forms – is a measure that could potentially be taken up more widely in such systems. Workers' surveys are relatively straightforward to implement and their wider take-up is rather a question of having sufficient resources available to ensure that the sample size is large enough to be representative of the self-employed population. Finally, medical surveillance schemes are, like registers, highly integrated in national systems (health provision, in this case), but there is the potential to share existing information technology solutions, such as data management software.

In summary, this report has described the important role that self-employed workers play in the European workforce, highlighting the health and safety challenges posed by their prevalence in high risk jobs; particularly in agriculture. It has further shown that the extent to which the health and safety situation of this group is known varies considerably from one country to another and that this is to a some extent a function of the legal position of the self-employed as regards health and safety legislation and of the arrangements their coverage under the insurance systems. This report has also identified some initiatives that have been taken to improve current monitoring and commented on the potential for transfer of practices between countries.

The clear need for better information in this area may be addressed, at least in part, through monitoring initiatives undertaken by Member States in response to the 2003 Council recommendation concerning the improvement of the protection of the health and safety at work of self-employed workers. The Commission, in collaboration with the Advisory Committee on Safety and Health at Work, will evaluate the measures taken in response to the recommendation with a view to assess the need for future action to ensure better protection of the health and safety of self-employed workers. In this regard, a working group has been set up during the last Plenary of the Advisory Committee in June 2010.

Annex

5.1. Sources of information

Europe

Mutual Information System on Social Protection (MISSOC), www.missoc.org

European Labour Force Survey, http://epp.eurostat.ec.europa.eu

European Working Conditions Survey (EWCS), http://www.eurofound.europa.eu/ewco/surveys/index.htm

Schoukens, P., Social Security Systems for Self-Employed People in the Applicant EU Countries of Central and Eastern Europe, Intersentia ed. Social Europe Series volume 5, 2002.

Belgium

Portal Belgium - Official information and services - Work, www.belgium.be/nl/werk/gezondheid_en_welzijn National Social Security Office, www.onssrszlss.fgov.be Belgian Federal Public Service Employment, Labour and Social Dialogue, www.werk.belgie.be Fund for Occupational Accidents, www.faofat.fgov.be Fund for Occupational Diseases, www.fmp-fbz.fgov.be National Institute of Sickness and Invalidity Insurance, http://www.riziv.fgov.be Prevent, Institute for Occupational Safety and Health, www.prevent.be Belgian Federation of Insurance Companies, www.assuralia.be Federation of Belgian Enterprises, www.vbo-feb.be Organisation for the Self-Employed and SMEs, www.unizo.be Flanders' Chamber of Commerce and Industry, www.voka.be Flanders Social and Economic Council, www.serv.be Statistics Belgium, www.statbel.fgov.be

Czech Republic

Occupational Safety Research Institute, <u>http://www.vubp.cz/strankyaj.php</u> Ministry of Labour and Social Affairs, <u>http://www.mpsv.cz</u> Czech Social Security Administration, <u>http://www.cssz.cz</u> Czech Statistical Office, <u>www.czso.cz</u> Ministry of Health, <u>http://www.mzcr.cz</u> National Institute of Public Health, <u>www.szu.cz</u>

Finland

Finnish Institute of Occupational Health (FIOH), <u>www.ttl.fi</u> Federation of Accident Insurance Institutions (FAII), <u>www.tvl.fi</u> Farmer's Social Insurance Institution (MELA) – MATA-tilastot (I

Farmer's Social Insurance Institution (MELA) – MATA-tilastot (Farmer's Accidents at Work and Occupational Disease statistics), <u>www.mela.fi</u>

Methods for estimating accidents and illness among the self-employed

The Social Insurance Institution of Finland (KELA), <u>www.kela.fi</u> Ministry of Social Affairs and Health, Occupational Safety and Health website, <u>www.stm.fi/en/occupational_safety</u> Federation of Finnish Enterprises, <u>www.yrittäjät.fi</u> Statistics Finland, <u>www.stat.fi</u>

Germany

Agricultural Social Insurance (Landwirtschaftliche Sozialversicherung, LSV), www.lsv.de

Federal Institute for Occupational Safety and Health (BAuA), www.baua.de

Federal Ministry of Labour and Social Affairs (BMAS), www.bmas.de

Federal Statistical Office (Destatis), www.destatis.de

German Social Accident Insurance (Deutsche Gesetzliche Unfallversicherung, DGUV), www.dguv.de

Law database of the Federal Ministry of Justice, www.gesetze-im-internet.de

Italy

ISTAT – (Italian National Institute of Statistics) http://www.istat.it/dati/

INPS (Italian National Social Security Institute - database) http://www.inps.it/home/default.asp?sID=%3B0%3B4774%3B&lastMenu=4781&iMenu=1

INPS – Il lavoro parasubordinato nel 2005 (Parasubordinate work 2005), Rome, 2007.

INAIL – (Italian National Institute of Occupational Insurance) http://www.inail.it/Portale/appmanager/portale/desktop

ISPESL – (National Institute of Prevention and Occupational Safety) http://www.ispesl.it/

ISPESL (Mal.Prof. database) - http://www.ispesl.it/statistiche/index_mp.asp

ISPESL (Injuries database) - http://www.ispesl.it/statistiche/indexdb2.asp

Hungary

SEED (Kisvállalkozás-fejlesztési Alapítvány) Foundation for Small Enterprise Economic Development, <u>http://www.seed.hu/english</u>

OMMF (Országos Munkavédelmi és Munkaügyi Főfelügyelőség) Hungarian Labour Inspectorate, <u>http://www.ommf.gov.hu/</u>

OMFI (Hungarian Institute of Occupational Health), http://www.omfi.hu/index.php

KSH (Központi Statisztikai Hivatal) Hungarian Central Statistical Office, http://portal.ksh.hu/portal/page?_pageid=38,119919&_dad=portal&_schema=PORTAL

Lithuania

Department of Statistics to the Government of the Republic of Lithuania (Statistics Lithuania), <u>www.stat.gov.lt</u>

State Social Insurance Fund Board under the Ministry of Social Security and Labour (VSDFV), <u>www.sodra.lt/</u>

Institute of Hygiene, www.hi.lt/

Occupational Medicine Centre, Institute of Hygiene, www.dmc.lt/

State Labour Inspectorate of the Republic of Lithuania, www.vdi.lt

Methods for estimating accidents and illness among the self-employed

Ribinskienė, G., Kaip mokėti VSD įmokas savarankiškai dirbantiems asmenims (How must selfemployed persons pay state social insurance contributions). Apskaitos ir mokesčių apžvalga, 2002/11.

Malta

Ministry for Social Policy, <u>www.msp.gov.mt</u> National Statistics Office Malta, <u>www.nso.gov.mt</u> Occupational Health and Safety Authority, <u>www.ohsa.org.mt</u> Social Security Act 1987, <u>http://docs.justice.gov.mt/lom/Legislation/English/Leg/vol_7/chapt318.pdf</u>

Netherlands

Ministry of Social Affairs and Employment, <u>http://home.szw.nl/index.cfm</u> Statistics Netherlands (CBS) (databases NVS, EBB and NND), <u>www.cbs.nl</u> National institute for public health and the environment (RIVM) (database Nationaal Kompas Volksgezondheid), <u>www.rivm.nl</u> TNO work and employment (databases NEA, WEA, not-working population), <u>www.tno.nl</u> Netherlands Centre for Occupational Diseases (NCvB), <u>www.beroepsziekten.nl</u> Labour Inspectorate (AI), <u>www.arbeidsinspectie.nl</u> The institute for employees insurances (UWV), <u>www.uwv.nl</u> The platform for self-employed persons (PZO), <u>www.arbouw.nl</u> The trade organization for the construction industry, <u>www.arbouw.nl</u> Two trade unions for self-employed persons, <u>www.zzp-nederland.nl</u> and <u>www.fnvzzp.nl</u>

Poland

Central Statistical Office, http://www.stat.gov.pl/gus/praca_wynagrodzenia_ENG_HTML.htm

Accidents at work and work-related health problems, Central Statistical Office, Warsaw 2008, <u>http://www.stat.gov.pl/gus/praca_ludnosc_Eng_HTML.htm</u>

Nofer Institute of Occupational Medicine, http://medpr.imp.lodz.pl/english/niom.htm

Polish National Labour Inspectorate, <u>http://www.pip.gov.pl/html/en/html/index.htm</u>

Central Institute for Labour Protection CIOP, http://www.ciop.pl/778.html

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