



Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States

2012

Report prepared by the Cardiff Work Environment Research Centre (CWERC), Cardiff University



Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States

Annex

David Walters - Cardiff University
Emma Wadsworth - Cardiff University
Michael Quinlan - University of New South Wales

Table of Contents

1. Panel Membership	4
2. Documents provided to National Experts	5
Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States	5
Framework	7
3. Workshop	8
Programme.....	8
Delegates.....	9
4. Country reports	10
BULGARIA	10
CYPRUS	30
FRANCE.....	46
GERMANY.....	56
LATVIA	67
SPAIN	81
SWEDEN	96
THE UNITED KINGDOM	114

1. Panel Membership

National Expert	Country	Organisation / Position
Fernando Benavides	Spain	Centre for Research in Occupational Health-CiSAL, University Pompeu Fabra, Barcelona CIBER Epidemiology and Public Health, Spain
Georgios Boustras	Cyprus	Assistant Professor, Center for Risk and Safety in the Environment (CERISE), Cyprus
Kaj Frick	Sweden	Malardalen University, Sweden
Ana M García	Spain	Department of Preventive Medicine and Public Health, University of Valencia, Centre for Research in Occupational Health-CiSAL, University Pompeu Fabra, Barcelona CIBER Epidemiology and Public Health, Spain
Miriam Gartner ¹	The Netherlands	Safety and Risk Management Consultant, Tebodin Consultants & Engineers, Netherlands
Svetla Karova	Bulgaria	Independent Occupational Health and Safety and Environmental Protection Consultant, Bulgaria
Christophe Martin	France	Associate Director of ESAIP Grasse Researcher at Mines ParisTech, France
Ralf Pieper	Germany	Federal Institute for Occupational Safety and Health (BAuA) & Bergische Universität Wuppertal, Germany
Charles Woolfson	Latvia	Professor of Labour Studies, Institute for Research on Migration, Ethnicity and Society (REMESO), Linköping University, Sweden
David Walters	United Kingdom	Cardiff Work Environment Research Centre, Cardiff University
Emma Wadsworth	United Kingdom	Cardiff Work Environment Research Centre, Cardiff University
Advisory Board Member	Country	Organisation / Position
Thomas Coutrot	France	Head of Working Conditions and Industrial Relations, Department of Research and Statistics, (Direction de l'animation de la recherche, des études et des statistiques, DARES), Ministry of Employment, France
Aristodemos Economides	Cyprus	Senior Labour Inspection Officer, Department of Labour Inspection, Cyprus
Atanas Kolchakov	Bulgaria	Ministry of Labour and Social Policy, Bulgaria
Kai Seiler	Germany	Head of the Workplace Health Promotion Unit, NRW (North Rhine-Westphalia) Institute for Health and Work, Germany
Theo Nichols	United Kingdom	Cardiff Work Environment Research Centre, Cardiff University
Michael Quinlan	International	University of New South Wales, Australian School of Business
Ivars Vanadzins	Latvia	Institute of Occupational and Environmental Health, Latvia
Laurent Vogel	EU	Director of the Working Conditions, Health and Safety Department, European Trade Union Institute (ETUI)
Manuel Velazquez	Spain	Head of the Labour Inspectorate of Biscay, Ministry of Employment and Social Security, Spain
Peter Westerholm	Sweden	Emeritus Professor, Department of Medical Sciences, Occupational and Environmental Medicine, Uppsala University, Sweden

¹The Netherlands was included in the project workshop for comparative purposes only; it was not a selected Member State and therefore has not been included in the final report.

2. Documents provided to National Experts

Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States

As we have tried to make clear in the Research Protocol sent previously, in this project we are seeking to analyse the determinants of workplace occupational health and safety (OHS) practice in different Member States from the perspective of the influence of national contexts and environments in which this practice is situated. We are especially trying to explain some of the differences in OHS management practice between Member States that were suggested by the results of the European Survey of Enterprises on New and Emerging Risks (ESENER). And we are doing so by considering the influence on OHS management practice of national social, economic and regulatory contexts.

This document outlines a suggested Framework for the papers focusing on the selected Member States that will help us to do this. It is intended as a guide to the areas we think it is important to consider including. However, it is not meant to be either exhaustive or rigid: if particular areas are of less importance to your country's context and environment you might want to consider simply giving a short explanation about why this is rather than trying to go into great detail; similarly, you may feel we have missed areas that are important – if so please do add them in. In short, therefore, we have tried to provide a general starting guide which we hope you will find is a useful base from which to expand and elaborate.

The overall aim of each paper is to address, for that Member State, the following question:

How do characteristics of the regulatory framework and employment relations tradition affect establishments' management of health and safety at work?

In order to address this question, please use both national sources (such as qualitative and quantitative research literature, survey data and information from bodies such as the regulatory authorities, insurance organisations etc.) and European level survey data (e.g. Eurofound etc.), as well as any contacts you may have in key areas.

You will see that we have included some information from the ESENER dataset in a separate accompanying document. In common with all surveys of this type, this dataset has some limitations. Its strength in this instance, however, is that it provides comparable data not only for all of the Member States included in the project, but also for the whole of the European Union. It is important that we do refer to the dataset because our work is essentially a follow-up to the ESENER survey, but we are aware that in some countries there are both more detailed and probably more accurate survey findings, as well as qualitative data, which will improve our understanding of the national situation in relation to the aims of our study. It is, of course, for you to decide how best to do this in your paper.

The Framework below identifies seven broad areas of interest (as well as the background and conclusion). For each, we have tried to give some very brief indication of the kinds of issues you might want to explore. As before, however, please do feel free to expand on and/or alter our suggestions as appropriate.

Similarly, we do not want to be prescriptive about the length or style of the paper. The only things we would suggest you bear in mind are: a) following the Workshop in May, you may wish to submit your paper to *Policy and Practice in Health and Safety*ⁱⁱ, which is unlikely to accept papers of less than 5000 or more than 9000 words in length; and b) you will need to be able to present your work at the Workshop in about 20-30 minutes with an accompanying PowerPoint presentation. Please do also remember that if you are interested in writing with a view to publication, like most peer reviewed journals *Policy and Practice in Health and Safety* is unlikely to accept a paper that is written in the style of a report under the headings given in the Framework below, which are intended only as a guide to the areas you need to cover. Therefore you will need to think about presenting your paper as a more analytical and policy and/or practice

ⁱⁱ The Journal's guidance for contributors can be accessed here: http://www.iosh.co.uk/information_and_resources/buy_our_books/our_journal_-_pphs/guidance_for_contributors.aspx

discourse related account. If you prefer to present it in report format and work it into something else following the workshop, this of course is also acceptable.

You should already have received a copy of the project's Protocol, which provides some further

background information, together with details of the approach we are taking. If you have any questions, would like to discuss anything, or need any other support from us, please do not hesitate to contact us.

Framework

- 1. Background**
 - a. 'Thumbnail' sketches of relevant:
 - i. Industrial, economic and political history
 - ii. European Union membership (length and changes / developments as a result)
 - iii. Implementation of the Framework Directive
- 2. Regulatory regime**
 - a. Regulatory framework
 - i. Processed-based / prescriptive approach (history, length of time following this approach)
 - b. Industrial relations traditions
 - c. National regulatory regime
 - i. General
 - ii. OHS
- 3. Infrastructure for OHS support**
 - a. Services (availability, competence)
 - b. Training
 - c. Information
- 4. Social protection systems**
 - a. Compensation systems and legislation (work-related injury and illness, sick leave, return to work, rehabilitation and invalidity)
- 5. Labour relations**
 - a. Workplace representation
 - i. Worker representation, consultation and direct participation
 - ii. Regulatory support for representing, informing and consulting workers in workplace relations
 - b. Trade unions
 - i. Penetration (extent and form)
 - ii. Policies (on OHS)
 - c. Employers' organisations
 - i. Penetration (extent and form)
 - ii. Policies (on OHS)
 - d. Social dialogue
 - i. National, sectoral and local arrangements
- 6. Wider context**
 - a. Economic climate (national, European)
 - b. Labour market (structure, organisation, recent trends and changes)
 - c. Labour force training and skills qualification
- 7. Approaches to OHS management at the workplace level**
 - a. Differences by sector, enterprise size etc.
 - b. Support for and barriers to adopting and using OHS measures
- 8. Working conditions and environment**
 - a. OHS outcomes (accidents, injuries, work-related ill-health)
 - b. OHS performance (inspections, compliance, attitudes to OHS)
- 9. Summary and conclusions**
 - a. Key determinants of workplace OHS practice: What does the evidence suggest are the influences of the above elements of context and environment on the determinants of effectiveness or otherwise?

3. Workshop

Determinants of Workplace OSH Workshop

Cardiff Work Environment Research Centre,
Cardiff University

9-10th May 2012

Committee Rooms, Glamorgan Building



Programme

TIME	WEDNESDAY 9th	TIME	THURSDAY 10th
9.30-10.00	REGISTRATION	9.15-9.30	INTRODUCTION + AIMS
10.00-10.30	WELCOME + AIMS	9.30-9.45	Advisor's commentary: SPAIN
10.30-11.00	Country presentation: SPAIN	9.45-10.00	Advisor's commentary: FRANCE
11.00-11.30	Country presentation: CYPRUS	10.15-10.30	Advisor's commentary: LATVIA
11.30-11.45	BREAK	10.30-10.45	Advisor's commentary: SWEDEN
11.45-12.15	Country presentation: FRANCE	10.45-11.00	BREAK
12.15-12.45	Country presentation: GERMANY	11.00-11.15	Advisor's commentary: GERMANY
12.45-1.45	LUNCH	11.15-11.30	Advisor's commentary: CYPRUS
1.45-2.15	Country presentation: BULGARIA	11.30-11.45	Advisor's commentary: UNITED KINGDOM
2.15-2.45	Country presentation: LATVIA	11.45-12.00	Advisor's commentary: BULGARIA
2.45-3.00	BREAK	12.00-12.30	DISCUSSION + CLOSE
3.30-4.00	Country presentation: NETHERLANDS	12.30-1.30	LUNCH
4.00-4.30	Country presentation: SWEDEN		
4.30-5.00	EU overview: Laurent Vogel		
Evening	Evening Meal for attendees		

Determinants of Workplace OSH Workshop

Cardiff Work Environment Research Centre,
Cardiff University

9-10th May 2012

Committee Rooms, Glamorgan Building



Delegates

	DELEGATE	POSITION		DELEGATE	POSITION
BULGARIA	Svetla Karova	National Expert	SPAIN	Manuel Velázquez	Advisory Board Member
CYPRUS	George Boustras	National Expert	SWEDEN	Kaj Frick	National Expert
	Aristos Economides	Advisory Board Member		Peter Westerholm	Advisory Board Member
FRANCE	Christophe Martin	National Expert	UNITED KINGDOM	Emma Wadsworth	National Expert
	Thomas Coutrot	Advisory Board Member		David Walters	National Expert
GERMANY	Ralf Pieper	National Expert		Theo Nichols	Advisory Board Member
	Kai Seiler	Advisory Board Member	EU	Laurent Vogel	Advisory Board Member
LATVIA	Charles Woolfson	National Expert	EU-OSHA	William Cockburn	EU-OSHA
	Ivars Vanadzins	Advisory Board Member		Xabi Irastorza	EU-OSHA
NETHERLANDS	Miriam Gärtner	National Expert	CWERC	Katie Webb	CWERC
				Vicky Parkin	CWERC

4. Country reports

BULGARIA

Svetla Karova



1. Introduction

Striving towards integration into Europe, and the assumption of European values, Bulgaria has travelled a long and uneasy path. During the last 22 years in Bulgaria there have been periods of rise and fall. The country strives for European values while attempting to avoid the responsibilities that come with them. However, during the final years of the transition Bulgaria has generally embraced the democratic changes in Europe, which have led to the setting of clear priorities for the future of the country.

Putting aside the substantial background data that should be mentioned in order to give more transparency to the activities in the health and safety sphere as a part of Bulgaria's efforts toward integration, and which relate directly to the economic and social developments in Bulgaria, I will briefly outline a few key points, namely:

- the stabilisation of the macro-parameters and establishment of prerequisites for the implementation of real reforms in the economy;
- the privatisation processes which were abruptly accelerated;
- and the building of democratic society institutions.

The award for the attained came on 10th December 1999 when Bulgaria was invited to start negotiations for accession to the European Union (EU), and, which it finally did in 2007.

As part of this European orientation over the past few years Bulgaria has given priority to the issues of harmonization of Bulgarian legislation with the European legal model, the values and standards of the European social model, the transposition of the EU criteria, Recommendations and Directives, an integral part of which is European health and safety legislation, as a major modern instrument for the defence of rights and interests of working people. However, in order to

provide a more vivid and understandable picture of the present and the future of health and safety in Bulgaria, I believe it would be useful to first give a brief retrospective analysis of the past as to what was done for the country to become a member of the EU, and what is the current situation.

2. History

Founded in 681, Bulgaria is one of the oldest European states. The area was populated as early as the Palaeolithic period. The Republic of Bulgaria is situated in South-eastern Europe, to the right of the lower reaches of the Danube River, between Romania, Turkey, Greece, Macedonia and Serbia.

In 864 AD, during the rule of Prince Boris I Michail (852-889 AD), the Bulgarians adopted Christianity as their official religion. This act abolished the ethnic differences between Proto-Bulgarians and Slavs, and started building a unified Bulgarian nation.

In the second half of the 9th century brothers Cyril (Constantine the Philosopher) and Methodius created and disseminated the Cyrillic alphabet. From Bulgaria the Cyrillic script spread to other Slavic lands as well - present-day Serbia and Russia. The cities of Ochrida and Pliska, and subsequently the new capital city Veliki Preslav, became centres of Bulgarian and Slav culture.

In 1878, Bulgaria became a constitutional monarchy with a democratic governmental system and a rapidly growing economy.

Having fought on the losing side in both World Wars, Bulgaria fell within the Soviet sphere of influence and became a People's Republic in 1946.

Communist domination ended in 1991 with the dissolution of the USSR, and Bulgaria began the contentious process of moving toward political democracy and a market economy.

3. Economic, political and social situation

Bulgaria's economy and industry contracted dramatically after 1989 with the collapse of the socialism system and the loss of the Soviet market, to which the Bulgarian economy had been closely tied. The standard of living fell by about 40%. In addition, UN sanctions against Serbia (1992-95) and Iraq took a heavy toll on the Bulgarian economy. The first signs of recovery emerged when Gross Domestic Product (GDP) grew 1.4% in 1994 for the first time since 1988, and 2.5% in 1995. Inflation surged in 1994 to 122%, and fell to 32.9% in 1995. During 1996, however, the economy collapsed due to the BSP's go-slow, mismanaged economic reforms, disastrous agricultural policy, and an unstable and recapitalized banking system, which led to inflation of 311% and the collapse of the lev. When pro-reform forces came to power in the spring of 1997, an ambitious economic reform package, including the introduction of a currency board regime, was agreed with the International Monetary Fund and the World Bank, following which the economy began to stabilise.

The central Government continued to implement measures that helped sustain stable economic growth and curb unemployment. Measures introduced by the government were targeted at reducing corporate and individual taxes, curtailing corruption, and attracting foreign investment. The government also restructured the country's foreign debt, revived the local stock market, and moved ahead with the long-delayed privatization of some major state monopolies. In October 2002 as a result of this progress the European Commission declared that Bulgaria had a "functioning market economy."

Successive governments continued these reforms and in 2007 the country joined the European Union. In early 2007, to attract additional foreign investment, the Bulgarian Government lowered corporate tax rates to 10%, reportedly the lowest rate in Europe.

In Bulgaria the financial and economic crisis started six months later than in other EU countries. Firstly the situation in Bulgaria was comparatively stable due to its Currency Board – stable macroeconomic indices and banking system. However in autumn 2008 the first signs of the crisis became apparent in the country and in 2009 the consequences of the crisis became visible in the economic and social sectors. The sectors of activity most affected by the crisis were mining, metalwork and metal extraction, chemicals, construction and production of construction materials, clothing and textiles, real estate and, to some extent, tourism. The most obvious effects of the crisis were the

reduction in GDP growth (-5.5% for 2009), the decrease in foreign investments (-40%), the increase in unemployment (from 5.5% in 2008 to 7.59% in 2009 and 10.2% in 2010), and the number of bankruptcies (17% of companies went bankrupt by mid-2009).

At the same time an intensive discussion was initiated between the social partners on the issues of employment, working time and social insurance. The social partners put forward their suggestions for a plan to deal with the crisis. The Council of ministers proposed setting up a National Council for monitoring the crisis, with the participation of the social partners.

The global financial crisis significantly reduced the flow of new investments, which had previously supported strong economic growth. Domestic consumption remained weak, and in 2011 the recovery in export growth slowed, reflecting signs of recession in Bulgaria's major EU trading partners. Faced with tough budget decisions, the government continues to maintain fiscal discipline and a policy of budget deficit reduction by planning a deficit of 1.3% of GDP in 2012. In contrast to some Euro-zone states, Bulgaria's public finances are not overwhelmed by huge international debt, and its level of government debt (12% as of November 2011) remains one of the lowest within the EU.

3.1 Labour market

Since 1989, when the dismantling of the centrally planned economies started in Central and Eastern Europe, the labour market has undergone dramatic changes. The high rate of inflation, the absence of a modern social framework, the restructuring of the artificially supported system of full employment and the mass redundancies of the labour force, severely undermined the living standards of the population and seriously affected all groups, including workers over 45.

The **country's population decreased** from 7,796,694 in 2000 to 7,543,325 in 2012. In 2008, the population decreased by 42,841, and for the period from 2004 to 2009 the population decreased by 627,166. Over the last 20 years the population has fallen by 1,203,598. This is equal to the disappearance of the entire population of the capital city Sofia. Lack of choices and opportunities, poor pay and little job satisfaction have, in recent times, forced young specialists to migrate to big cities or abroad. This results in a lack of motivation to struggle for better working conditions on the one hand, and a loss of skilled young workers in small towns and villages on the other. This young-worker brain drain and the ageing of workers in whole regions of the country will add to health and safety risks at work, and deepen the demographic crisis.

A consequence of this demographic problem and crisis is a reduction in the active work force aged between 15 and 64. This work force peaked in 2008, and since then there has been a steady downward trend. Young people under 34 years have been most seriously affected by the crisis, especially those in the 25-34 age group.

The ratio between the active work force and the number of pensioners in the country has moved from 1545 in the third quarter of 2010 to 1484 in the second quarter of 2011, and is getting worse.

The **dynamics of employment** very closely follow the processes of restructuring of the economy, privatisation, reform in the budget sector, the closing

down and liquidation of enterprises and the overall macroeconomic situation in the country. Studies show that when compared with the EU average, there has been a reduction of employment possibilities since 2008 in Bulgaria. It is now similar to that of countries with serious debt problems such as Greece and Spain.¹

In 2010 the employment coefficient (employed people aged 15 and above) reached 46.7% or 2.7 percentage points lower compared to 2009. This is due entirely to the crisis in the country (see table 1). Over the past five years between 45% and 53% of new workers have no qualifications. This reality helps to partially relieve the current situation in the labour market, but it creates future risks and problems as regards strategic planning for development.

Figure 1: Employment tendencies for the period 2007 to 2010 (Source NSI)

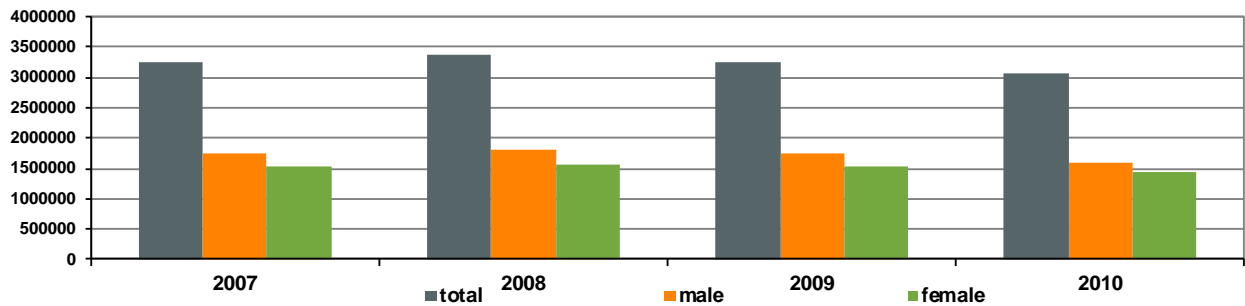


Table 1: Employment status for the period 2007 to 2010

ЗАЕТИ ЛИЦА 15+ ПО ПОЛ, ВЪЗРАСТ, СТАТУС НА ЗАЕТОСТ, СТЕПЕН НА ОБРАЗОВАНИЕ И ИКОНОМИЧЕСКИ СЕКТОРИ													
Employed 15+ by sex, age, employment status, level of education and economic activities													
(Средногодишен брой) (Average annual number)													
	2007			2008			2009			2010			
	общо total	мъже male	жени female	общо total	мъже male	жени female	общо total	мъже male	жени female	общо total	мъже male	жени female	
Заети лица - хиляди / Employed, thousands													
Общо	3253	1732	1521	3361	1793	1568	3254	1733	1521	3053	1608	1445	Total
Групи по възраст / Groups by age													
15-24	250	141	109	263	150	113	240	139	101	208	122	86	15-24
25-34	731	403	328	737	412	326	691	393	298	620	354	266	25-34
35-44	949	489	450	966	501	465	965	496	469	937	474	463	35-44
45-54	866	433	433	887	439	448	857	427	430	825	405	420	45-54
55-64	414	235	179	453	253	200	452	244	208	421	224	197	55-64
65 и повече	44	31	13	55	37	17	49	34	15	42	29	13	65 and more
По статус на заетост / By professional status													
Работодатели	132	96	36	123	87	36	113	82	31	115	81	34	Employers
Самостоятелно заети лица, без наети	234	152	82	260	165	96	260	165	95	243	149	94	Own-account workers without employees
Наети	2849	1471	1378	2944	1530	1414	2848	1476	1372	2663	1368	1295	Employees
Неплатени семейни работници	38	13	25	34	10	24	33	10	23	32	10	22	Unpaid family workers
По степен на образование / By level of education													
Висше	829	341	488	857	357	490	859	354	505	831	330	501	Higher
Средно	1952	1113	839	2003	1140	862	1925	1100	825	1838	1054	784	Upper secondary
Основно	420	248	172	435	257	178	416	245	171	346	202	144	Secondary
Начално и по-ниско	52	29	23	66	39	27	54	33	21	38	22	16	Lower secondary
По икономически сектори / Economic activity groupings													
Аграрен сектор	245	159	86	251	160	91	231	149	82	208	132	76	Agriculture
Индустрия	1155	721	434	1224	774	450	1146	737	409	1015	657	358	Industry
Услуги	1853	1852	1001	1885	858	1027	1877	847	1030	1830	819	1011	Services
Коефициент на заетост / Employment coefficient - %													
Заети лица - общо	49,0	54,4	44,0	50,8	56,5	45,5	49,4	54,9	44,4	46,7	51,3	42,4	Employed - total
Групи по възраст / By age													
15-24	24,5	27,1	21,8	26,3	29,3	23,1	24,8	28,0	21,4	22,2	25,4	18,9	15-24
25-34	76,2	81,9	70,2	78,2	84,1	71,7	75,1	82,2	67,5	70,7	76,2	64,5	25-34
35-44	82,8	85,1	80,6	84,6	87,3	81,8	82,6	85,2	80,1	79,4	81,3	77,5	35-44
45-54	78,4	80,4	76,6	80,6	82,5	78,8	79,0	80,3	77,8	75,8	76,6	76,1	45-54
55-64	42,6	51,8	34,5	46,1	55,8	37,7	46,1	54,1	39,2	43,5	50,3	37,7	55-64
65 и повече	3,0	5,1	1,5	3,8	6,1	2,1	3,3	5,5	1,8	2,8	4,7	1,5	65 and more
По степен на образование / By level of education													
Висше	72,6	72,9	72,3	73,8	75,0	72,9	72,7	74,3	71,5	70,1	70,1	70,1	Higher
Средно	63,0	69,3	56,3	64,4	70,7	57,7	61,6	67,3	55,3	57,7	63,1	51,6	Upper secondary
Основно	22,4	27,1	17,9	23,7	28,8	19,0	23,2	28,3	18,4	20,0	24,3	16,1	Secondary
Начално и по-ниско	9,9	15,1	6,9	12,8	20,0	8,5	11,2	18,3	6,9	8,5	13,5	5,6	Lower secondary

Unemployment has been one of the most serious problems for the country during the transition period as well as in the crisis period, with grave economic and social consequences. The number of people registered as unemployed and the unemployment rates reveal a trend of steady increase. From 1990-2010 the unemployment rate rose progressively from 1.2% to 71%, with certain annual and monthly fluctuations over the period. One potential source of employment is in the “grey” sector of the economy.

According to data from the National Statistics Institute (NSI) the number of unemployed people increased by 85.1% in 2011 when compared with 2008, with 47 thousand of these registered at the National Employment Agency (NEA) (see tables 2 and 3).

This puts severe pressure on the labour market, and on salary levels in sectors and jobs which do not require high professional competence.

Figure 2: Unemployment tendencies for the period 2007 to 2010 (Source NSI)

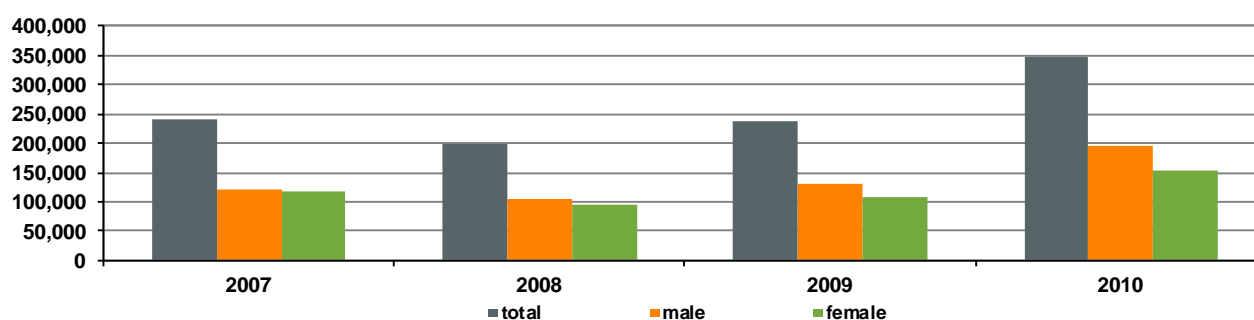


Table 2: Unemployed by sex, age and duration of unemployment for the period 2007 to 2010

БЕЗРАБОТНИ ЛИЦА 15 + ПО ПОЛ, ВЪЗРАСТ, И ПРОДЪЛЖИТЕЛНОСТ НА БЕЗРАБОТИЦАТА													
Unemployed by sex, age and duration of unemployment													
	2007			2008			2009			2010			
	общо total	мъже male	жени female	общо total	мъже male	жени female	общо total	мъже male	жени female	общо total	мъже male	жени female	
Хиляди / Thousands													
Безработни лица	240	121	119	200	104	96	238	130	108	348	196	152	Unemployed
Групи по възраст													Groups by age:
15-24	45	24	21	38	24	14	46	30	16	62	38	24	15-24
25-34	52	28	24	44	26	17	51	28	23	80	47	33	25-34
35-44	58	28	30	43	20	24	57	30	27	82	43	39	35-44
45-54	54	24	30	46	21	25	52	26	26	79	43	36	45-54
55 и повече	31	17	14	28	14	14	32	16	16	45	25	20	55 and more
По степен на образование													By level of education:
висше	21	9	12	20	7	13	26	10	16	39	16	23	Higher
средно	119	63	56	95	52	43	126	72	54	197	115	82	Upper secondary
основно и по-ниско	100	49	51	85	45	40	86	48	38	112	65	47	Secondary and lower secondary
Продължителност на безработицата													Duration of unemployment:
До 5 месеца	63	34	29	67	36	31	91	51	40	113	64	49	under 5 months
6 - 11 месеца	35	18	17	30	16	14	44	26	18	73	41	32	6-11 months
12 - 23 месеца	38	23	15	32	18	15	40	21	19	75	43	32	12-23 months
2 и повече години	104	50	54	71	35	37	63	32	31	87	48	39	2 years and over
Лица извън работна сила по причина за неактивност - обезкураженост за намиране на работа	205	108	97	152	77	75	186	97	89	224	121	103	Persons out of labour force by reason of inactivity - discouragement to find job
Коефициент на безработица / Unemployment coefficient - %													
Общо	6,9	6,5	7,3	5,6	5,5	5,8	6,8	7,0	6,6	10,2	10,9	9,5	Total
Групи по възраст													Groups by age
15-24	15,1	14,5	15,9	12,7	13,7	11,4	16,2	17,8	13,8	23,2	24,1	21,7	15-24
25-34	6,7	6,6	6,8	5,7	5,9	5,4	6,9	6,7	7,2	11,4	11,7	11,0	25-34
35-44	5,7	5,4	6,1	4,3	3,8	4,9	5,5	5,6	5,4	8,1	8,3	7,8	35-44
45-54	5,9	5,2	6,6	4,9	4,6	5,4	5,8	5,8	5,7	8,7	9,6	7,8	45-54
55 и повече	6,4	6,0	7,1	5,2	4,6	6,0	5,9	5,4	6,6	8,9	9,0	8,7	55 and more

Източник: НСИ, Наблюдение за заетост и безработица

Source: NSI, Observation for employment and unemployment

4. European Union Membership

Like all central and eastern European candidate countries, Bulgaria has faced the double challenge of completing transition towards a fully-fledged democracy and preparing for EU membership.

Overall, Bulgaria has made great strides in its preparation for EU membership. This process was a long and difficult adaptation of people and institutions. This required a change to workers' and employers' mentality, as there were now demands for increased productivity of labour and increased incomes, as well as improvements in labour culture at the workplace.

Bulgaria's preparation for accession to the EU involved acceptance of the basic rights of workers' representatives established in the European Social Charter (ESCh) and European principles on health and safety at work. However, the process of harmonisation of Bulgarian legislation with EU law started several years earlier with the signature of the European agreement in 1995.

As a result of the demand by trade unions the state began work on the development of a new policy aimed at reforming Occupational Safety and Health (OSH). The economic changes coupled with the EU accession process also required the restructuring of the system of Health and Safety at work (H&S). In this regard the EU Commission provided support to Bulgaria via the project "Restructuring the system of Occupational health" implemented under the PHARE programme. After consultation with the social partners in 1996 the **Law on Health and Safety at Work** (LHSW) was adopted by the National Assembly on 16th December 1997 and took effect on 1st January 1998.

The Act transposes into Bulgarian law the principles of the EU framework Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work and is the legal base for the transposition and implementation of all the other EU directives concerning health and safety at work.

The reform of health and safety legislation was launched based on a consensus among the social partners.

In 2008 Bulgaria adopted a **National Strategy on Safety and Health at Work 2008-2012**.² The Ministry of Labour and Social Policy (MLSP) stipulates that there must be an annual review and report on its implementation, to be carried out by the National Programme on Safety and Health at Work (NPSHW). The aim is to provide information to the government

for achieving the objectives outlined in the OSH Strategy, considered an integral part of achieving the common goal of economic development - namely, increasing prosperity and quality of life for all social groups in society. Bulgarian legislation in the field of Health and Safety at work has now been fully harmonised with EU requirements.³

There is now a framework of standards, requirements and obligations. However, this is not in one document but in nearly 100 separate normative acts. This makes implementation difficult and extremely ineffective.

The International Labour Organisation (ILO) Standards are the other rules fundamental to occupational health and safety. The ILO has 189 Conventions and 183 Recommendations, more than 50% of which relate to occupational health and safety.⁴ Bulgaria became an ILO member on 6 December 1920. Bulgaria ratified 99 of the ILO Conventions, but only 4 basic ones in the area of OSH. These are Convention No.13 regarding white lead/painting (1921); Convention No.81 regarding Labour Inspection (1947); Convention No.127 regarding maximum weight (1967); and Convention No.161: Occupational Health Services (1985). All of these have been implemented in practice. Some parts of other ILO Conventions (for example Conventions No. 155 and No. 161) though not ratified by Bulgaria have been transposed into the Labour Code (LC), the Social Insurance Code (SIC) and the LHSW of the country. These are also applied and implemented in practice.

Parts of other non-ratified Conventions, for example those regarding the use of asbestos and benzyl, are applied in practice, though not in entirety because of certain technical and economic reasons.

Bulgaria participates actively in the activities of the European Agency on Safety and Health at Work based in Bilbao (Spain) and the European Foundation for the Improvement of Living and Working Conditions based in Dublin (Ireland).

5. Occupational Health and Safety policy

Due to the present European orientation of Bulgaria, priority is given to the issues of harmonisation and implementation of the Bulgarian legislation following the European Union model covering the issues of:

- the values and standards of the European social model;
- the acceptance of the EU criteria, recommendations and directives - an integral

part of which is the European health and safety legislation - as a major modern instrument for the defence of the rights and interests of the working people.

In 1905 the first Labour Law for the protection of women and children working in industrial enterprises was adopted. Those working in trade and agricultural sectors were not covered by this law. Further, in 1907 the Act for the Labour Inspectorate in Industry, Trade and Crafts was adopted.

An important step towards health and safety at work was made in 1917 through the adoption of the Law for Hygiene and Safety at Work. This law was in force until 1951 when the basic law settling the labour relations was adopted, namely – the Labour Code (LC). From 1973 to 1991 complete control regarding labour legislation in all sectors and activities was placed in the hands of the Central Council of the Bulgarian Trade Unions. However, control over labour hygiene was still under the control of the Ministry of Public Health. From 1984 every industrial workplace had to create a working conditions passport - a special booklet with tables and diagrams in which the most important data on working conditions measurements (temperature, noise, lighting, vibration, concentration of chemicals, etc.) for each workplace was noted. Based upon data contained in these passports, one-year and five-year plans for the improvement of working conditions were developed.

The changes in the political situation and the transition from a planned to a market economy led to the adoption of several amendments to the Constitution and the LC after 1989.

According to the present constitution of the Republic of Bulgaria, workers and employees have the right to healthy and safe working conditions, minimum labour remuneration and payment according to work carried out, as well as the right to rest and take leave under the conditions and in the order established by the law (Article 48 /5/).

The changes in the LC made in 1992 enacted the operation of a new complex set of regulators for industrial relations. These also affected issues concerning working conditions. Most of the state regulatory mechanisms, typical of a centrally planned economy, were left to companies and became the subject of collective labour agreements. Regardless of the fact that the state retained much of its power through a high number of state control bodies, it became clear that it was impossible to resolve problems related to working conditions solely by

means of state dictate. In other words, legal grounds were established for a working social partnership.

At present, the LC regulates matters related to social dialogue;

- labour relations and labour agreements;
- the organisation of work (working time, breaks and leave);
- special protection for some categories of employees (persons under 18 years of age, women, those with reduced working capacity);
- safety and health at work;
- control over compliance with labour legislation;
- individual labour disputes (including judicial procedure for cases in the field of labour relations), etc.

In Chapter Thirteen of the LC, the universal rights and obligations for safety and health at work are established as follows:

- all workers and employees are to be instructed and trained in safe methods of work;
- employers are obliged to provide sanitary and medical services to employees in accordance with sanitary norms and requirements;
- the employer provides special work clothes and personal protective equipment free of charge to employees who work with hazardous machines, equipment, liquids, gases, melted metals, heated objects and the like;
- workers and employees engaged in production which is hazardous to health receive, at the expense of the employer, free protection meals, anti-toxins and other means of neutralizing the harmful effects of the working environment;
- workers and employees have the right to refuse performance or to stop work when a serious and immediate hazard arises that threatens their immediate manager without delay;
- a maximum number of years is determined for work in particularly hazardous types of production, after which employees are to be transferred to other suitable work;
- all employees and workers are subject to mandatory periodical medical check-ups. These medical check-ups are to be covered by the employer;
- the employer is obliged to provide data on the safety and health conditions of work in his enterprise annually;
- employers have to take measures for the protection and reduction of occupational injuries and professional illness.

The LHSW transposes the principles of the EU framework Directive 89/391/EEC and is the legal basis for the transposition and implementation of all other EU directives concerning health and safety at work. This law is to be applied in all enterprises and places where work or training is carried out, regardless of the form of organisation, type of ownership, or legal grounds on which the work or the training is performed, without prejudice to the obligations of the Republic of Bulgaria referred to in any other law or international agreement.

The Law also provides for the new philosophy and principles in the health and safety sphere, which covers:

- Establishing preventive policy according to EU law;
- Priority to the prevention of any risks related to the working environment;
- Institutionalisation of management and workers' bodies at the firm level – the establishment of Working Conditions Committees and Groups (WCC/WCG) (this process started before the adoption of the LHSW through Decree No 87 in 1997 on the establishment of bodies for the development and implementation of health and safety policy);
- Institutionalisation of National, Branch and Regional Councils of Working Conditions with a tripartite management;
- Setting up of a Working Conditions National Fund with a tripartite management;
- Planning of appropriate measures for risk elimination according to risk assessment results;
- Employers' provision of Occupational Health Services (OHS) for their employees;
- Introduction of economic mechanisms, including duty and tax concessions, to force and give impetus to employers to invest in working conditions, namely:
 - The establishment of customs duties concessions for the import of working equipment, technologies, substances and preparations

providing better working conditions, as well as for the import of measurement and personal protective equipment not manufactured in the country;

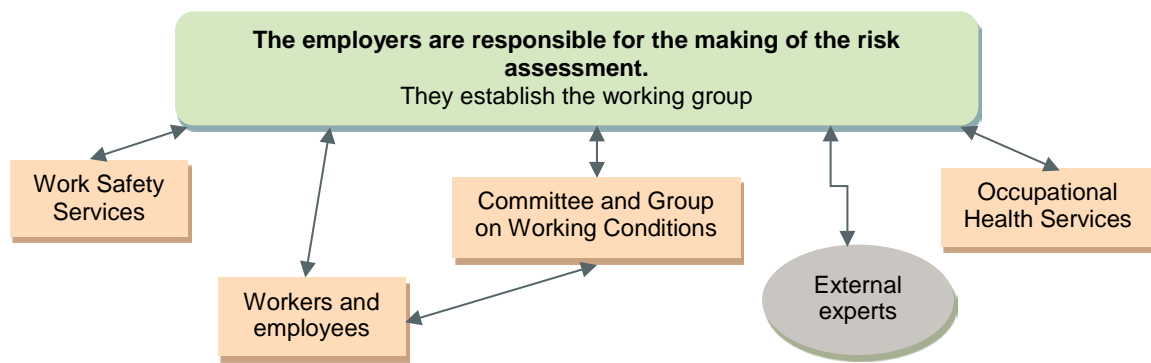
- tax concessions for the production and supply of personal protective equipment and collective protection devices, measurement equipment, and educational materials for training in the field of healthy and safe working conditions.

These economic incentives for the improvement of working conditions cannot be applied in practice due to the absence of acts and regulations for the application of LHSW (Article 53). The LHSW emphasises the obligation for the establishment of risk assessments in all enterprises to provide maximum protection in coordination with the occupational health and safety management system. The initial stage of this activity is the performance of risk assessment. The adoption of the basis of Ordinance No. 5 on the Order, Way and Periodicity of Risk Assessment (1999) has been delayed for two years, which slowed down reform in the area of occupational health and safety. Risk assessment covers the working process, working equipment, workplaces, the organisation of work, the use of substances and materials and other factors which can provoke risk.

The results from the risk assessment are an initial base for the planning of future activities and the allocation of all necessary resources for its realisation (technical, technological, organisational, financial, human, time, etc.). In most cases risk assessment is conducted by Occupational Health Services (OHS) or by bodies responsible for safety in enterprises. Assessment is very often subjective and the risks at work are often neglected either purposefully or due to incompetence.

In Bulgaria 98% of enterprises are small or micro-sized enterprises (76% of the workforce is employed in SMEs) and not many are trade-unionised – so do not have union demands for the conduct of these assessments.

Figure 3: Risk assessment management



More often than not risk assessment is a mere formality because the people who carry it out (risk assessors) do not have the necessary qualifications. Recent changes to the legislation oblige OHS to make these assessments and to support the employer in outlining measures for risk limitation. This suggests a greater responsibility and role for OHS. The supervision of these obligations is exercised solely by the bodies of the Ministry of Health (MH), which are not competent enough to assess to what extent the OHS has assessed the risk of techniques and technologies used in the enterprise. A serious step forward for a qualitative assessment of risk at work is that control over the activities of OHS is under the direction of the General Labour Inspectorate - Executive Agency (GLI - EA). With this change of the legislation the legislator gives the opportunity for the control of infringement of OHS rules to inspectors of GLI EA.

The European Survey of Enterprises on New and Emerging Risks (ESENER)⁵ conducted in 2009 provides comparative data for Bulgaria. The survey shows that 93% of respondents from Bulgarian enterprises reported that workplaces in their establishment were regularly checked for safety and health as part of a risk assessment or similar measure, compared to the EU average of 87%. In addition, 86% of respondents reported that these risk assessments or workplace checks were carried out at regular intervals without any specific cause. The EU average is 83%. The table below gives proportions of respondents reporting that these risk assessments or workplace checks were mostly carried out by their own staff and/or by externally contracted providers for both Bulgaria and the EU-27.

Who mostly conducts risk assessments or workplace checks?	Bulgaria %	EU-27 %
Conducted by own staff	13	45
Contracted to external providers	47	36
Both about equally	40	19

Data from inspection activity in 2010⁸ show that risk assessment is done in 95% of all verified companies, and that 26,448 enterprises adopted a program of concrete measures to eliminate occupational risks in the workplace. Ninety-eight per cent of businesses have an established risk assessment program.

The majority of enterprises do many things regarding H&S but risk assessment costs are high and most enterprises do not have the money to carry out this activity because of the country's economic situation. For various reasons there are few investments for the replacement of old technology.

Trade unions (TUs) take part only when the results from risk assessments are discussed in Working Conditions Committees (WCC) or when they initiate risk assessment in enterprises. Often TUs' representatives do not exercise their rights because they are afraid to lose their jobs.

There are not many enterprises providing real and well-funded programs for decreasing risks at work. These are mainly larger enterprises. Most employers still do not understand the economic nature of safe and healthy work conditions. It is hoped that they will soon comprehend that accidents can lead to significant financial losses, and destroy the image of the enterprise.

According to Ordinance No 3 (27.07.1998) on the functions and tasks of officials and of specialised authorities at enterprises for organizing the implementation of activities relating to the protection and prevention of occupational risks, the employer has to appoint one or more officers with appropriate training and qualifications or appoint a specialized service – **Work Safety Services (WSS)** to organize and carry out activities related to the protection and prevention of occupational risks taking into account the nature and the scope of work, and the characteristics of occupational risks.

The quality of work of the officials as regards assessing safety and health in the work place depends on the employer's attitude towards this activity. In small and in particular in medium-sized enterprises, in most cases this function is conducted by the employer himself or by a specialist. This shows that the activity for achieving safety and health at work has not found its place among the main priorities of enterprises and this is a significant prerequisite for the assessment of safety and health at work to be done properly rather than as a mere formality.

A GLI - EA report⁸ found that there were WSS in 89% of companies checked in 2008, 91% of those surveyed 2009 and 97% of those surveyed in 2010. In accordance with ordinance No. 3 on the order and conditions for the activity of **Occupational Health Services (OHS)** (2008) employers should provide OHS for their employees. OHS are units with mainly preventive functions and do not deal with curative medicine (as was the case before 1989). Employers can establish them independently or jointly or through another legal entity. In a case where it is practically impossible for the employer to create OHS independently or jointly, he/she shall contract a health establishment which carries out these functions. The new central philosophy is to replace the existing curative system which focuses on the individual worker with a preventive system focusing on the workplace itself. The minimum composition of OHS includes a medical doctor specializing in labour medicine, an expert with higher technical education and three years professional experience in occupational safety and health, and a technical executor with at least secondary education. OHS staff may include other specialists such as ergonomists, toxicologists, and psychologists, as well as other auxiliary staff.

The LHSW and Ordinance No. 3 outline the procedures for registration, monitoring and sanctions of OHS. State Health Control exercises control over OHS. The GLI - EA controls everything relating to employment, including the working conditions of workers in OHS.

By March 2012 there were 521 registered Services with 212 physicians qualified in labour medicine and management of H&S activity. The lack of proper oversight of their activity leads poor standards and quality of work. For example, one and the same medical service serves enterprises far removed from each other both geographically and as regards their productive activity. There is a lack of a good communication between OHS and clinics on

occupational diseases. This shows that performance of these duties is merely a formality. Many employers do not seriously observe the basic commitments of OHS and procure the cheapest service possible. As a consequence, the service is of poor quality and the employer is sometimes forced, through sanction, to have the service carried out again. Although the employer is the contracting party of these medical services, the service is for the employees.

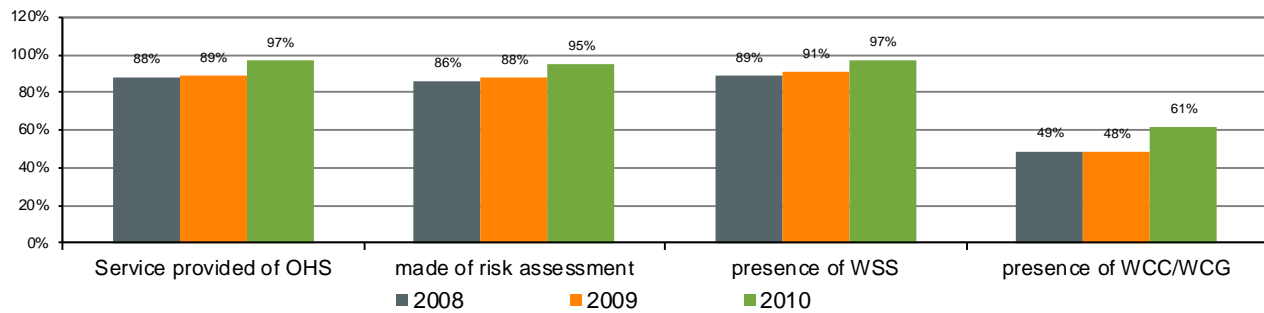
Health monitoring is a significant part of preventive OHS and is closely related to the monitoring of risks at work and should adequately reflect the existing risks in an enterprise. A very small number of enterprises analyse the health status of their workers. There is also the case of ineffective medical check-ups from some services and "hidden" occupational diseases. The fear of change in the work place, remaining or becoming unemployed, forces some workers to conceal the fact that they are suffering from and working with occupational diseases. There is therefore the need for a direct link between general practitioners and employees working in the OHS.

The results of inspection⁸ found that for 2010 97% of inspected enterprises have such services compared with 89% for 2009. A few companies have organized their own OHS. Most of them rely on external services, which in many cases do not have specialized trained professionals to serve enterprises in the chemical, metallurgy and silicate industries.

The tripartite conference last year shows that activities of OHS have been excluded from the Strategy for Health. It is necessary that the electronic health cards of employees show the health record of employees as regards their occupation. OHS should be responsible for ensuring this. There is little information about good practice and few tools for risk assessment exist (guidelines, methodologies, etc.). Ordinance No.3 needs updating to stipulate preliminary and periodic examinations of employees and tests that are not related to working conditions, risk assessment and occupational health. Also, there needs to be an adequate number of specialists in occupational medicine working with OHS.

The graph in figure 4 shows the proportion of the enterprises from the total number of the inspected enterprises which have implemented the requirements of LHSW for the period 2008 – 2010.

Figure 4: Proportion of enterprises which implemented LHSW requirements (2008-2010) (Source: GLI – EA)



5.1 Training of H&S

The Institute for Trade Union Problems and The National Institute of Labour Safety and Ergonomics were closed down in 1989. The Centre of Work Safety was placed within the State Labour Inspectorate at the Ministry of Labour and Social Care after 1991. The Centre of Work Safety at the Ministry of Labour and Social Policy was gradually closed between 1990 and 1998. The National Centre of Public Health and Analysis (NCPHA), apart from its research activities in the labour hygiene sphere, undertakes training in occupational medicine, the hygiene of labour and industry intoxication specialists employed by OHS using a specially designed curricula and conducted by trainers from the Centre since 1989. Since 2008 all Medical Universities in Bulgaria conduct specialized courses on "Occupational Medicine."

The subject of H&S has also been included in the curriculum in all higher schools and colleges which educate industrial specialists. According to the approved plan for the admission of students for the academic year 2010-2011, 5330 students are being trained in this field.

Training in the field of OHS is regulated by the LC, LHSW *Ordinance No 7 on minimum requirements for safety and health at work in workplaces and for the use of working equipment; and Ordinance No RD 07-2 (16/12/2009) on the order and way for conducting periodic training and instruction of workers and employees under the rules to ensure healthy and safe working conditions* (in force from 01/01/2010), along with other specific regulations such as, establishing procedures and rules for the safe operation of machinery and equipment and manufacturing processes with heightened risk. H&S training covers all sectors. According to LHSW (Art.30) Employees' representatives in WCC/WCG must be trained according to curricula, procedures and conditions defined in special *Ordinance No 4 (03/11/1998) concerning the training of representatives in WCC/WCG in enterprises*, that was enacted on 11/02/1999.

The main regulations for the training of WCC and WCG members include:

- training is obligatory (Art. 30 of HSWL)
- initial training should be no less than 30 hours (carried out no later than 1 month after the election of members)
- initial training aims are the acquisition of the knowledge and skills necessary for the realisation of rights and obligations under the HSWL
- training should take place during normal working hours without loss of income
- All costs associated with the training of representatives should be borne by the employer
- In addition to initial training, the employer should provide regular annual training of representatives. This training is to be a minimum of 6 hours
- *The initial training includes themes, as follows:*
 - State policy, legislative framework and management of activities related to H&S at national level;
 - Company policy and organisation of activities for the promotion of healthy and safe working conditions in the company;
 - Rights and obligations of participants in the production process related to OSH;
 - Occupational risks, risk prevention and measures for health promotion;
 - Risk assessments and information sources;
 - Occupational accidents and diseases and related health, social and economic consequences;
 - Social partnership, rights and obligations of representatives, team work, the main tasks of WCC and WCG;

- Requirements for training, instruction and information for employees on H&S issues;
- Special protection of some categories of workers;
- Organisation of control.
- Annual training includes the following themes:
 - Updating of knowledge;
 - Increasing effectiveness of representatives and development of personal skills;
 - Changes in legislation and regulations related to H&S at work;
 - Improvement of methods for the realisation of their activities.
 - Training providers should be registered in the General Labour Inspectorate – Executive Agency (GLI-EA) trade companies, organizations, professional centres and employers
 - Upon completion of initial training participants receive a certificate, and the training organisations prepare an annual report to be presented to the District directorate of the GLI-EA.
 - The GLI-EA is responsible for the overall control of representatives' training.

The National Working conditions (WC) Fund managed on the tripartite principle also provides funding for training organised by employers' organizations, trade unions and the representatives of Ministries. There are also private companies that organize and conduct training on H&S at work.

In addition, some training and the development of training materials are also funded in the framework of projects of the employers' organisations and trade unions, and by some NGOs (e.g., the Friederich Ebert Foundation).

The social partners, both employers' organisations and TUs at national and sector/branch levels, also organise training for their affiliated members on H&S issues, namely on legislative development, specific issues and good practice in different industries and companies. There is also the possibility of training being included in collective agreements, which according to legislation must be more favourable than those stipulated in Ordinance 4.

The 2008/108471 Health, Safety and Environment (HSE) in the Work place Bulgarian project survey⁶ findings show that workers' representatives in some industries (see table 3) did not participate in any training in the 12 months prior to the survey. In most cases training was organised by employers. However, in some branches TUs have also been active in organising training for workers' representatives in WCC & WCG, especially TUs in healthcare, metallurgy and maritime transport.

Table 3: Participation in training in the 12 months preceding the survey (% of cases) (Source: ISTUR survey 2009)

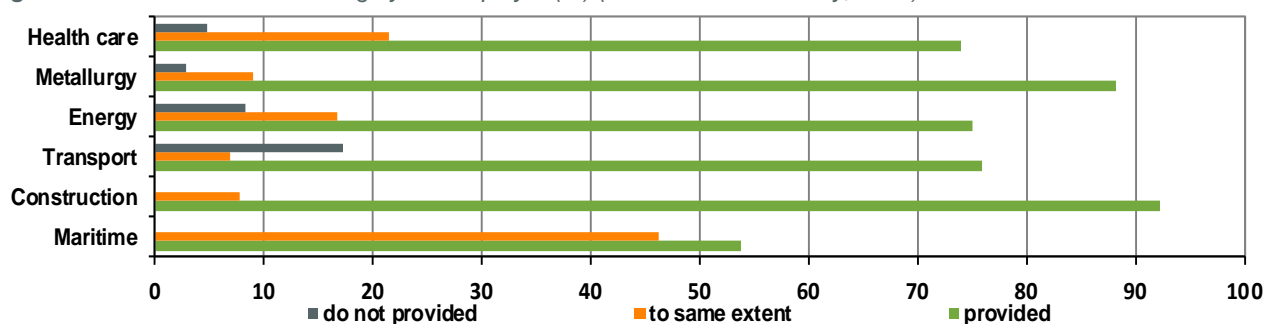
	Health care	Metallurgy	Energy	Transport	Construction	Maritime transport
Organised by the employer	62,2	81,3	65,4	76,5	63,8	24,0
Organised by the trade unions	55,5	37,5	3,8	11,8	19,0	24,0
Organised by others	4,2	3,1	3,8	11,8	12,1	-
Did not participate	0,8	3,1	26,9	5,9	13,8	56,0

Note: The responses exceed 100% as the respondents have multiple choices

The survey results show that in some companies the binding requirement for initial and further annual training of members of WCC & WCG is not realized. Between 54% and 88% of respondents to the survey indicated that the employer provides conditions for participation in initial training in the different fields. The data show that employers in metallurgy (88.2%) and construction (92.3%) comply best with the

legislative requirements for the provision of initial training of WCC and WCG members, while there are grounds for serious concern in the healthcare, energy and transport sectors, with some ¼ of respondents stating that the employer provides initial training, and in particular in the maritime transport sector with just about half of the respondents stating the same (see Figure 5).

Figure 5: Provision of initial training by the employer (%) (Source: ISTUR survey, 2009)



5.2 Social protection system

Other employer obligations include taking measures to detect, investigate and record all work accidents and cases of occupational diseases in accordance with legal provisions laid down in the Social Insurance Code (SIC) (adopted by Parliament on 02/12/1999, in force since 01/01/2000); *the Ordinance for detection, investigation, registration and reporting of labour accidents* (adopted by Decree No.263, 30/12/1999, in force since 01/01/2000); and the *Ordinance for the procedures of notification, registration, verification, claims and reporting of occupational disease* (adopted by Decree No.169, 2008). The SIC puts emphasis upon:

- Risk prevention, aimed at eliminating the causes of industrial accidents and occupational diseases;
- Introduction of differentiated contributions for the different types of insurers based on the performance of the company in respect to labour accidents and occupational diseases, actual conditions of work and the introduction of necessary measures, etc.
- Determination of rules and establishment of the responsible bodies in the system of detection, investigation, registration and reporting of labour accidents and occupational diseases. For the first time in the recent decades the National Social Security Institute (NSSI) has been given a leading role in this area.

The new point and philosophy is that during the investigation of a labour accident the injured person has the right to be present or appoint a worker or employee of the same profession, a family member, a relative, a representative of their professional trade union, or a representative of the workers and the employees in the WCC/WCG, to be present. These rights are at the disposal of the heirs of an injured or killed person, and in cases where the health of the injured person does not allow them to determine a

representative. Other general economic mechanisms are the rates of the insurance payments for the "Labour Accident and Occupational Disease" Fund.

The rate of compulsory insurance payments is determined every year on the basis of the basic activity of the enterprise, the frequency and gravity of labour accidents and professional diseases, the number and gravity of violations in regard to ensuring healthy and safe working conditions, the implementation of investment programmes and the organisation of activities for ensuring healthy and safe working conditions depending on the level of professional risk. This law came into force on 01/01/2004.

Since 2005, firms pay different insurance payments for labour accidents and occupational diseases, depending on the degree of occupational risk in the business. For high-risk production (15 branches) payment was 1.1%, while for low-risk production it was 0.4%. From 2004, all enterprises paid the same rate of 0.7%. According to Decree № 24 (06.02.2006) on the adoption of the Ordinance on compulsory insurance of workers and employees for the risk "labour accident" every year the Minister of MLSP publishes the Ordinance for the coefficient of occupational injuries. In 2006 the ratio was 1.51. This coefficient has been decreasing, and stands at 0.84 for 2012.

Over the last 11 years the number of labour accidents in the country has decreased from 6,391 in 2000 to 2,752 in 2011. This is according to data provided by the statistics system for labour accidents at the National Statistics Institute (NSI) in all sectors without any limitations. There has also been a reduction in working days lost due to labour accidents from 302,758 in 2000 to 154,006 in 2011 (see Figures 6 and 7 below).

Figure 6: Total labour accidents (Source:NSSI)

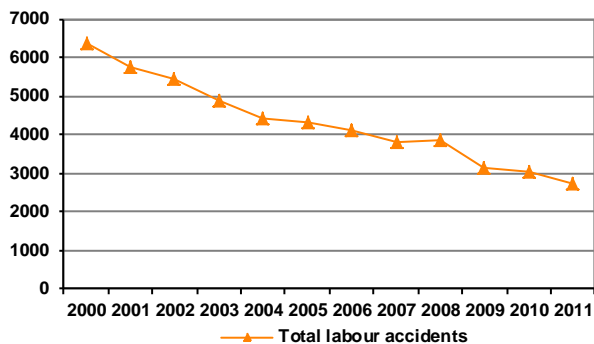


Figure 7: Working days lost to labour accidents (Source:NSSI)⁷



Since 2000, there has been a steady decline in occupational accidents in Bulgaria. In accordance with the statistical data on labour accidents there has been a plateau in the rates or even a slight decline, resulting from:

- a sudden decrease in the numbers employed in the sectors sampled;
- lack of or insufficient information about the extent of these problems in the grey economy (which accounts for 30% of the Bulgarian economy);
- a sudden shrinking of production, which varies from 30% to 50% in different industries;
- a severe investment and financial deficit, which does not all for improvement in the employment;
- there is deliberate concealment of labour accidents by employers as this negatively affects the interests of the employee the positions of the NSSI are infringed;
- there are hundreds of employers who do not pay their insurance revenues, violating the SIC and thus depriving their workers of any compensation for insurance risk, labour accident and occupational disease.

In 2009 the NSSI established and maintains an information system for occupational diseases and labour accidents. They deliver this information to the MH, Ministry of Labour and Social Policy (MLSP) and the NSI. In recent years, the regulation and system servicing occupational diseases were changed. This change had some consequences including:

- closing the preventive pathological consulting rooms;
- ineffective medical check-ups on behalf of some OHS;
- bad communication between OHS and clinics dealing with occupational diseases;
- incomplete informing of occupational diseases due to poorly qualified physicians authorized to deal with them;
- termination of monitoring of occupational pulmonary diseases;
- there are many “hidden” professional diseases due to the presence of certain professional hazards, and to the high general diseases rate of those working within the risk industries;
- lack of strategy for funding the medical activity of occupational diseases.

According to data provided by the NCPHA2 for the period 2004 - 2005, the total number of registered persons with occupational diseases was 2178, of which 1292 were men and 886 women. In both years, most cases of occupational morbidity were observed in workers who had been working for 20 to 30 years. There were few cases of occupational diseases of workers with work experience of over 30 and up to 40 years (231 in 2004 and 230 in 2005). The statistics show that working in one profession for 10 to 20 years provoked most cases of occupational diseases – 647. And for the period of over 30 to 40 years in the same profession, the number of cases was 75 for both years.

The work environment factors that led to the most cases of occupational diseases in 2004-2005 were: mechanical vibration - 541 cases, motor-monotonic and repetitive work - 174 cases, work with great speed - 173 cases; noise - 166 cases; working postures - 158 cases; dust - 153 cases; and carrying and lifting weights – 112 cases.

The Act amending the Labour Code and putting an end to disputes from previous years related to the so-called **hazardous work conditions compensation system**, led an approach aimed at preventing health risks, while motivating workers and employers to employ measures for safe work. At the same time, full conformity with the principles of the ESCh on the right to decent working conditions was achieved, introducing reduced working time and/or additional

paid leave for workers where the risks to their lives and health cannot be eliminated or substantially reduced.

Realization of these ideas was possible through the three fundamentally new Regulations covering: the definition of the types of work that qualify for reduced working time; and for additional annual leave; and the definition of the terms and the order for provision of food vouchers and/or food allowances. The system for early retirement was also saved, with the most risky professions retaining their right to a 10 or 5-year early retirement, based on the capital scheme for early retirement. The specific allowances for working conditions do not affect the basic salary paid and thus workers' interests were not seriously harmed.

Some shortcomings notwithstanding, these regulations preserved some rights. At the same time, they demonstrated to employers that not all risks had been eliminated, that much remained to be done to improve work conditions, and that those workers' rights should be properly protected.

5.3 Social Dialogue in H&S

Social dialogue between employers and TUs was introduced after 1990 and functioned on an institutional level as a major driver of the country's development. A specific model for health and safety at work was developed and has been implemented at national, regional, industry and company levels. The activities of all actors in this process are based on the tripartite principle. The **National Working Conditions Council** (NWCC) was set up to handle coordination and consultation on framing state policies on health and safety at work. Representatives of state bodies (many Ministries and NSSI), nationally representative employers' and workers' organizations also sit on the Council.

The Council is chaired by the Minister of Labour and Social Policy. The representative of the workers' organisations (trade unions) and the representative of the employers' organization are vice-chairs. The decision making process is based on consensus. All general issues related to H&S are discussed. From all reports, the NWCC works very well (see Figure 9)

With the effective operation of the **National Focal Point for Safety and Health at Work** (which actively includes the representatives of employers' and employees' organizations) it is easier to support and implement safety and health policy.

Twenty-five Branch Working Conditions Councils (BWCC) in all major sectors of the economy have been established so far in Bulgaria. They are composed of

representatives from the national and sectoral/branch federations and trade unions, the representative of the workers' organizations from the sectoral/branch structures, the representative of the employers' organizations, and an equal numbers of representatives from the relevant ministry or government agency.

Sixty-eight Regional Working Conditions Councils (RWCC) (regional and municipal) have also been set up, composed of representatives from regional unions or organizations, representatives of the workers'/employees' organizations and the employers' organizations, and equal numbers of representatives from regional or local government. To date, 28 Regional and 40 Municipal Working Conditions Councils are in operation.

Company-level cooperation between employees and employers on health and safety at work has been implemented through **WCC/WCG**, set up as a statutory requirement under the LHSW. Unlike other countries the representation of workers in health and safety matters is realised only through elected workers' H&S representatives in WCC/WCG.

Labour legislation does not provide special protection against dismissal of members of WCC/WCG as is provided for the trade union leadership and the employee representatives for information and consultation. However, the HSWL provides employees' representatives with protection against their being placed in a more unfavourable position due to their engagement with H&S.

Both the establishment of WCC/WCG and the training of representatives are binding for all workers' and employers' representatives in work places with more than 5 employees. Thus, the regulatory base exists for the wide participation of all representatives and for their capacity building.

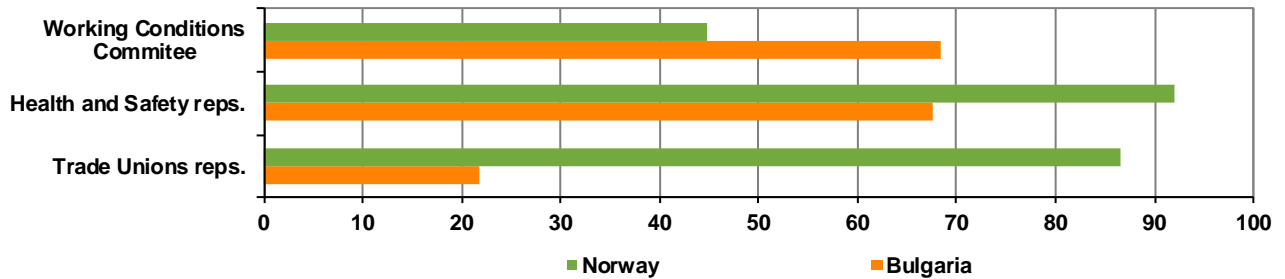
While trade union organisations in enterprises are very strongly involved in all issues related to working conditions, in enterprises without trade union organisations the WCC/WCG is one of the main channels for worker representation and participation in H&S matters.

The tripartite and bipartite bodies for social dialogue established at all levels of the industrial relations system also tackle issues related to health and safety at work. Collective agreements at enterprise and sector/branch levels contain some provisions on H&S, including training, under a special chapter, 'Healthy and safe working conditions'.

According to ESENER⁵, Bulgaria is one of the countries in the EU with the highest formal OSH representation, as well as where WCC are most frequently reported (68%). As can be seen from the data presented in the

Figure below, trade union representation in Bulgarian is comparatively low at about 22% (compared to Norway, the country with the highest rate of trade union representation).

Figure 8: Formal trade union and H&S representation (%) (Source: ESENER)⁵



The regular annual reports⁸ on activities and national campaigns in different branches of the GLI-EA contain some information on the establishment of WCC/WCG in the enterprises inspected. For 2010, the GLI reported the establishment of WCC/WCG in 97.5 % of inspected enterprises (over 38,000), more than 80% of which were small and medium-sized enterprises (SMEs). According to GLI inspections, in small companies violations of the H&S requirements are frequent and the implementation of the OSH framework is delayed and incomplete. The GLI decries the slow pace of setting up WCC/WCG in the areas of retail trade, forestry, hotels and restaurants, real estate, renting activities and business services; all areas where SMEs prevail. The GLI-EA reports also stress that not all WCC/WCG function well, and in many SMEs the involvement of worker representatives is only “on paper”, fulfilling a mere administrative formality.

One of the results of the Project Health, Environment and Safety (HES) in the workplace, is that Bulgaria⁶ used innovative measures for improving and monitoring working conditions based on good practices and examples from Norway, in the establishment of 6 pilot WCC’s networks in the following sectors: transport, metallurgy, healthcare, energy, construction and maritime transport. Another result was the improved implementation of the LHSW in Bulgaria.

Regarding the development and coordination of state policy in the labour inspection field, and in accordance with the law on Labour Inspection, the tripartite **Labour Inspection National Council** was established.

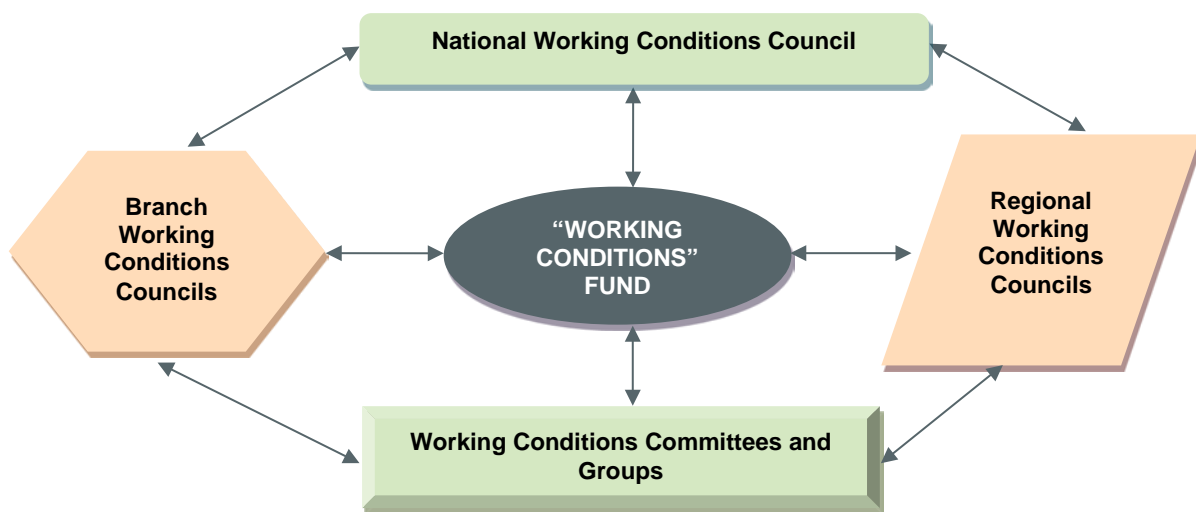
The “Cooperation Agreement for the Protection of employees’ rights in a crisis”, signed between the GLI-EA, the Trade Unions Confederations – CITUB and

“Podkrepa” LC, and the “**Agreement on the establishment of an Expert Council**” to advise the Executive Director of the GLI-EA, both play an important role in improving working conditions and in the observation of labour rights at the workplace.

The Bulgarian experience with cooperation and resource allocation for key priorities at national and company levels deserves special attention. A “**Working Conditions” Fund** (“WC” Fund) was established in the MLSP to finance activities and actions for the improvement of working conditions in line with LHSW requirements. The fund’s resources are allocated according to the explicit decision of the social partners to fund projects and programmes for:

- training workers’ and employers’ representatives, members of WCC/G and specialists in OSH at enterprises on H&S issues;
- drawing up regulations, methods and methodologies on health and safety at work;
- co-financing company investment projects for improving working conditions. In recent years, more than 200 companies have received over 12 million BGN in financial support for the implementation of certain projects with clearly defined criteria and procedures. The results are more than encouraging and show that, with proper funding, results can be achieved;
- national conferences, meetings, seminars and other events relating to health and safety at work and preparation, printing and distribution of educational and other information materials.

Figure 9: Social dialogue in the H&S field



6. Occupational health and safety structures

The **Council of Ministers of Bulgaria**, as one of the main elements of the system, defines and implements the policy for ensuring healthy and safe working conditions.

The **Ministry of Labour and Social Policy (MLSP)** develops, coordinates and implements state policy in this field. Through the “WC” Fund the Ministry supports activities and actions to improve working conditions and provide health and safety at work.

The General Labour Inspectorate - Executive Agency (GLI-EA) is a state body responsible for the overall monitoring of the observation of labour legislation. The GLI-EA was set up and is supervised by the Ministry of Labour and Social Policy to ensure the fulfilment of the requirements of the LC, LWCA, the Law on Employment Promotion and the Law of State Employee. The role of the GLI consists of controlling and giving advice to employers and workers on safe and healthy working conditions, and ensuring that workplaces are designed to meet the same. These operative goals, mentioned in the concept of integrated labour inspection, require that labour inspectors know the labour legislation regarding specific branches of industry. The GLI-EA is supported by government budget and by its own funds and its structure comprises 31 directorates, 28 of which are regional directorates. It has a staff of 491 regular employees.

Bulgaria is the first country in Central and Eastern Europe to have introduced integrated labour

inspection. The **Ministry of Health (MH)** manages and coordinates the activity related to preventive health and health promotion at work.

The relevant and competent institutions in the system of MH are: *the National Centre for Radiobiology and Radiation Protection, the Regional Inspectorates for the Protection and Control of Public Health, and the National Centre for Public Health and Analyses.*

The **National Social Security Institute (NSSI)**, through its Regional Offices, provides administrative services for all insured social risks, except for the investigation of working capacity, labour accidents and occupational diseases, and maintenance of the information system for labour accidents and occupational diseases.

Others: the State Agency for Metrology and Technical Supervision, the Directorate for National Construction Supervision, the "Fire, Safety and Rescue" Directorate General etc.

There is a well-developed infrastructure of services for assisting employers in implementing their duties and obligations to provide health and safety at work, including labour medicine offices, laboratories for working conditions measurement, and training and consultation centres on issues related to health and safety at work.

Around 21.2% of Bulgaria’s employees are **union members** (the total workforce in 2011 was 2,949.6 thousand). There are two main trade union confederations. The United Workers Professional Union was created in September 1944 under the leadership of the Bulgarian Workers’ Union (communists). After the nationalization of private

property and the liquidation of the multiparty system, conditions were created for the introduction of the Soviet system in all spheres of public and economic life, including the trade union movement. The Soviet model of trade unions was transferred to Bulgaria, where the central role of the trade unions was working as a link between the communist party, the state, and employees. This defined the specific ratio between creative and defensive function with the predominance of the former.

The ruling party undertook attempts to infringe self-government of labour as well as its organizers. The Independent Trade Union "Podkrepa" (later CL "Podkrepa") was formed in 1989. It was the first alternative trade union. Following the changes of November 1989, the Central Council of Bulgarian Trade Unions declared its independence and changed its name to the Independent Bulgarian Trade Union.

The first attempts at social partnership were made at that time. In February 1990, on the basis of some of the old structures of the official trade unions, a new organisation was formed – the Confederation of Independent Trade Unions of Bulgaria (CITUB). Thus the CITUB – Podkrepa axis was formed, which has provided the backbone of the trade union movement and is the major source of dynamics for the development of social dialogue.

Currently the CITUB (which had 328,232 members in 2008) is the larger of these two Trade Unions. They now work together reasonably well, especially in the area of OSH, but CITUB takes a more active role in these issues.

Apart from their cooperation on the transposition and implementation of EU legislation in Bulgaria, and their participation in social dialogue, the TUs work in specific ways to create the new culture in the area of OSH.

To deal with the real issues involved and promote compliance with labour laws as regards social security, and health and safety at work, trade unions in Bulgaria have been running a CITUB-instigated national Campaign for the protection of fundamental rights at the work place for the past 11 years. The campaign has singled out companies that have seriously violated the right to healthy and safe work, while praising those that have implemented good practices and reached European and world standards. The CITUB specific approach was also to write the so-called "black" and "grey" books on violations of labour and social security laws in the Republic of Bulgaria. They were prepared based on the campaign with the participation and cooperation of the "General Labour Inspectorate" Executive Agency.

In 2007 the CITUB initiated the award of the annual "Prometeya" prize for contributions to improved working conditions in firms. The prize has been awarded to many firms from different branches of industry that have successfully implemented health and safety management systems at work. Through this prize the trade unions want to acknowledge those employers who invest in and work to improve the working conditions and wellbeing of their workers.

In late 2009, the CITUB held training seminars for workers and employee representatives in WCC6 and beginning last year "Podkrepa" CL initiated a national campaign - "Health and safety at work" - creating the project "National network for Decent work."¹⁰

Bulgarian trade unions, in collaboration with all the social partners, have for the past 15 years been duly honouring 28th April – the International Commemoration day for dead and injured workers. At the TUs initiative, more than 35 memorials have been erected for those killed in work accidents. Hundreds of media events have been staged on preventing work-related injuries. Those campaigns run jointly with the social partners are the Bulgarian contribution to strengthened European and world practice in this area.

Employers' organisations participate in many tripartite councils like the NWCC. They are also members of the Economic and Social Council.

At present, there are four employer organisations that are recognised as representative at national level, namely the Bulgarian Industrial Association (BIA) (which is most actively involved in social dialogue, partnership, collective bargaining and OSH at sectoral/branch levels), the oldest employer organisation, the *Bulgarian Chamber of Commerce and Industry* (BCCI) (which actively participates in social dialogue at national and regional levels), the *Bulgarian Industrial Capital Association* (BICA) (which represents the interests of holding and investment companies, branch chambers and industrial enterprises), and the *Confederation of Employers and Industrialists in Bulgaria* (CEIBG) (which supports social dialogue at the territorial level).

All organisations provide, although to varying degrees, a variety of services for their members: training (with the financial support of "WC" Fund); expert advice and consultation (including in the area of OSH); licensing; provision of statistical and economic information; and analyses, studies, H&S, and environmental protection among others.

In recent times the employers' organisations, namely BIA and BCCI, have been very active in providing

assistance to members in project preparation under the operative programmes supported by the European Social Fund, other EU budget lines or European employers' organisations. All these organisations have increased their activity in providing training and capacity building especially in the area of H&S. BIA is the most actively involved employer organisation in the collective bargaining process at sectoral/branch level, as well as in H&S activity and training. The remainder of the employer organisations are not fully involved in collective bargaining and H&S field.

7. Conclusions

Over the last 22 years industrial relations in Bulgaria have been influenced by the radical changes in the political, economic and cultural environment. Some of the most important are changes in the form of property, the industrial structures, and the attitudes of the population after the obliteration of the communist government.

The harmonization of legislation and the adjustments in the organization of labour are related to a change in mentality, a rise in productivity and improvements in the culture of labour and in the incomes of the population. This all requires a long and complicated process of adaptation for people and institutions. It is not an exaggeration to say that for Bulgarian society there is no other task more important than this one. It is an issue organically linked to the ensuring of a healthy and safe working environment for Bulgarian citizens, regardless of whether they work in Bulgaria or any other European country or EU Member State.

Since the beginning of the reforms, social partner organizations have proved that they are strong enough to fulfil their responsibilities at the national level and have actively participated in the consultation process on the implementation of employment and social policies. Tripartite dialogue has contributed to the successful and peaceful implementation of economic and social reforms and the democratic nature of the transition process.

According to the social partners, social dialogue on working conditions at the national level is successful. As a result of this, Bulgarian legislation is considered to be fully harmonized with the EU Framework Directive (89/391/EEC) and other Directives in this field. These are very important provisions for improving working conditions, providing safety and health at work, and increasing labour attractiveness and effectiveness, as well as the competitiveness of the Bulgarian economy.

The positive impacts of the implementation of legislation on H&S in Bulgaria include the following:

- The practice shows that general H&S requirements and regulations are not only well written on paper but are actually applied in enterprises. In accordance with the LHSW, partner agencies in social dialogue on working conditions are created at all levels of the industrial relations' system.
- Labour inspectors report that there is evidence of a general improvement and increase in activity to ensure healthy and safe working conditions in the country.
- In the last few years, good practice has spread in many Bulgarian enterprises. Firms in different branches and sectors of the economy have made serious headway with quality management, environmental issues and OHS in recent years through ISO 9000, ISO 14 000, and OHSAS 18001 certification. Today, in excess of 1050 firms are up to European norms and standards. This approach delivers the results needed by participants in the work process – management has made substantial investments, and in so doing has prepared companies for a competitive business environment.
- The number of companies that invest in technology and safe work equipment is constantly increasing.
- Significant experience has been gained in the preparation of risk assessments and this is reflected in their better quality, and the increase in enterprises (95%) that have implemented programs to eliminate and minimize risk in production.
- 97% of inspected enterprises have official H&S and OHS provision, and WCC/WCG have been established in 61% of them.
- Many enterprises have developed and approved internal regulations covering: rules for the internal work order, rules and instructions for safe operation, rules for the organization of wages, etc.
- The building of infrastructure for supporting employers in fulfilling their duty for providing safety and health at work continues. The tendency for the decrease in accidents at work is very positive. A procedure has been adopted to assess the influence of the introduction of EU-legislated labour standards.

Notwithstanding the positive results mentioned above, working conditions in Bulgaria are still facing a number of problems and challenges including:

- The **lack of investment** for the creation of new jobs in high technology and trend-setting industries. Most highly-qualified workers entering the labour market are forced into sectors in which labour productivity is low and working conditions do not correspond to their skills and qualifications;
 - The level of **unemployment**, seen in the context of the right to safety and health at work, reduces personal motivation to struggle for better working conditions. Worse still, this helps in the continuous generation of conditions for social dumping and supports the existence of a “grey” sector in the economy. Bulgarian workers who are not socially secured and insured will pay the price with their life and health.
 - In the current period of economic crisis, average **wages** in Bulgaria are very low. At the same time, the urgent need of most Bulgarian firms to invest in new technologies and humanize the working environment will hold down pay rises and improvements in hard-won social benefits.
 - The state of **working conditions in SMEs** is extremely alarming. In a significant number of SMEs in the sectors of building, light industry, services, and engineering, among others, there is not only a great need for the improvement of working conditions, but there is also visible degradation.
 - A great number of Bulgarian **employers** do not understand the economic nature of safe and healthy working conditions, or do not have a real sense of the expenses needed in meeting European standards and requirements.
 - Active tax and customs relief for enterprises **investing** in safety and health at work have not yet been introduced.
 - Women's participation in the labour market continues to grow. It is necessary to pay particular attention to **aspects of health and safety which affect women**.
- Stress due to work overload – 65.4%
 - shift and night work – 60.4%
 - high risk to health – 44.2%
 - working with biological substances – 43.7 %
 - stress due to lack of time – 40.5%
 - tiring or painful working positions - 33.5 %
 - noise - 32.5%
 - harmful radiation - 28.9%
 - repetitive movements – 25.9 %
 - working with chemicals – 25.4 %
 - violence or violent treatment - 23.4%
 - bullying, harassment - 22.8%
 - high risk of fatality - 19.3%
 - carrying heavy loads - 12.7 %
 - high temperatures - 11.2%
 - vibrations - 3.6%

These figures are borne out by both the sociological investigations carried out by the trade unions⁶ and the data supplied by various OHS surveys,¹¹ as well as the GLI-EA. Workers receiving an allowance for work in high-risk and specific working conditions also confirm these figures.

The implementation of the new national health and safety at work strategy is not only the introduction of European legislation into the national framework. It is more important to apply it authentically in economic establishments. This needs the development of a modern infrastructure for control through the restructured GLI-EA. As regards control, emphasis should be placed on creating the legal mechanism to ensure that advisory, supportive and informative functions are realised.

These challenges' in the field of health and safety are connected to demographic changes such as, the aging workforce, new trends in employment (including self-employment and employment in SMEs), and the tendency of increasing working hours and work intensity, all leading to increased stress in the workplace. All of this is very important and should be central in the state's and social partners' effort when designing policies.

As has been the case during this crisis period, the coming years will find many Bulgarian workers still contending with **traditional workplace risks**, namely:

References

- ¹Analysis of the Current Situation and Tendencies on the Labour Market and Workforce in Bulgaria, (2010)
<http://en.competencemap.bg/labour+market-analysis+of+the+current+situation+and+tendencies+on+the+labour+market+and+workforce+in+bulgaria/1/YdK3clenc9eXl1OjYRe3YNibIVKbYZeTc5KrM9OPcdaLIJKnlNe3YRa-cRabIRKTIzafMJenYnKbcxej>
- ²National Strategy on Safety and Health at Work 2008-2012, (2008)
<http://www.mfsp.government.bg/bg/docs/indexstr.htm>
- ³A register of the Bulgarian legislation transposing the directives in the sector of H&S
http://www.mfsp.government.bg/en/integration/euro/chapter-13/euro/10.Safety%20and%20Health%20at%20Work/index_bg.htm Accessed 2012-03-05
- ⁴List of Ratification of International Labour Conventions in Bulgaria <http://webfusion.ilo.org/public/applis/appl-byCtry.cfm?lang=EN&CTYCHOICE=0100&hdroff=1>
- ⁵ESENER (European Survey of Enterprises on New and Emerging Risks) (2009)
<http://osha.europa.eu/en/riskobservatory/enterprise-survey>
- ⁶2008/108471 project: Health, Safety and Environment (HSE) in the Work place, Bulgaria (2011)“The Working Conditions Committee: looking insite, Main results and conclusions from the study of Working Conditions Committees and Groups” www.hse-bg.org
- ⁷Statistic information of labour accidents in ISSI
<http://www.noi.bg/aboutbg/st/statistic/154-tzpb>
- ⁸Annual report on the work of GLI- EA (2010)
<http://www.gli.government.bg/bg/page/284> Accessed 2012-03-05
- ⁹The Final report of the Project (2007) is available at:
http://www.workinglives.org/londonmet/library/k90595_3.pdf
- ¹⁰Project “National network for Decent work” (2011)
http://www.podkrepa.org/content/menu_91.php?estate=iaticbex
- ¹¹ National Working Condition Survey in Bulgaria” under the project, BG051PO001,„Preventions and Safety at work”, (2011)

CYPRUS

Georgios Boustras & Aristodemos Economides



1. Abstract

This paper is a part of a wider study – funded by OSHA –with a central aim to describe how the characteristics of the regulatory framework and employment relations tradition affect establishments' management of health and safety at work. In this quest, a number of countries have been chosen, among them Cyprus, and this paper attempts to present an answer to the aforementioned question. The methodology is focused on the analysis and comparison of secondary data at local, National and EU level (ESENER). The results of the study suggest that monitoring of the health of employees is lower than the European average, and the number of workplace accidents for the period 2007 – 2011 has been reduced by 11.5%.

2. Introduction

Cyprus, located in the South Eastern part of Europe, gained its independence in 1960. Administratively, Cyprus is divided into six districts, the same as the number of the major cities. The administrative capital of each district is the city with the same name. The largest district both in area and population is the district of Nicosia which is the capital city. The other districts are Limassol, Larnaca, Famagusta, Kyrenia and Paphos. The governmental system is Presidential. The President is elected by universal suffrage for a five-year term. Executive power is exercised through an 11-member Council of Ministers appointed by the President. The Turkish Cypriots refuse to participate in the government since 1963.

The per capita gross domestic product in 2007 was 80.2% of the EU-27 average. The Republic of Cyprus entered the EU on May 1, 2004. The country entered the Euro zone since January the 1st 2008 adopting the Euro as the official national currency. The average rate of economic growth during 2004 - 2009 was 3.1%. The rate of inflation at the same period was 2.9% and the rate of unemployment during the same period was 3.4%; in 2011 inflation was 3.1%. The growth rate is provisionally anticipated to increase by 0.5% for 2011 and 1.1% for 2010, compared to the decrease of -1.9% in 2009 [Cyprus Statistical Service,

National Economic Accounts 2011, Provisional Estimates]. According to the Cyprus Statistical Service, for the 1st Quarter of 2012 the total number of the workforce in Cyprus was 379,104, of which 65,008 are self-employed. In 2011 (1st Quarter), according to the same source, the total number of employees in Cyprus was 388,949 out of which 66,728 were self-employed. Table 1 below presents the distribution of employees by sector of economic activity.

In a recent interview to Cyprus News Agency [16], the Minister of Labour and Social Insurance, Mrs Sotiroula Charalambous stated that according to statistics (from Minsitry inspections in work premises) 25% of the Cypriot workforce is undeclared, a percentage that rises to 30% for EU (non-Cypriot) Citizens. In particular, in the hospitality industry, undeclared work for EU (non-Cypriot) Citizens rises up to 35%.

The Department of Labour Inspection (DLI), is the body in Cyprus responsible for the health and safety at work except for safety and health in the shipping sector, where the enforcement of the provisions of national legislation relating to EU Directives 93/103/EC concerning the minimum safety and health requirements for work on board fishing vessels and 92/29/EEC on the minimum safety and health requirements for improved medical treatment on board vessels is carried out by the Department of Merchant Shipping. The Fire Service has also a role in promoting non statutory fire prevention standards in workplaces by providing relevant advice to employers, in collaboration with the DLI.

The Pancyprian Safety and Health Council which is a tripartite consultative body on safety and health at work presided by the Director of the Department of Labour Inspection, advises the Minister on all matters related to health and safety at work, including proposals for legislation and standards, the protection of the public from work activity risks and the promotion of safety awareness and safety consciousness among the workers and the public in general. This Council was originally introduced in 1988 by specific legislation. Later these provisions were incorporated into the Safety and Health at Work Law.

Table 1 – Gainfully employed and economically active population by section of economic activity 2006 – 2010 [in thousands] (reproduced from Labour Statistics, Report no 29, Cyprus Statistical Service, 2012)

	2006	2007	2008	2009	2010
Agriculture, Forestry, Fishing	29.0	27.6	26.6	27.3	27.9
Mining and Quarrying	0.5	0.6	0.6	0.7	0.7
Manufacturing	34.9	35.3	35.7	34.9	33.8
Electricity, Gas, Steam, AC Supply	1.4	1.4	1.4	1.5	1.6
Water Supply	2.0	2.1	2.2	2.2	2.3
Construction	37.3	39.4	40.5	38.6	36.3
Wholesale and Retail trade	63.8	66.4	69.1	66.9	66.4
Transportation and storage	18.1	18.4	18.1	17.1	16.9
Accommodation and Food service activities	36.0	36.8	37.0	34.8	34.6
Information and Communication	8.2	8.5	8.8	8.9	8.8
Financial and Insurance Activities	16.0	16.7	17.1	17.3	17.6
Real Estate Activities	1.5	1.6	1.7	1.6	1.5
Professional Scientific and Technical activities	13.8	14.9	15.4	15.6	16.4
Administrative and support service activities	6.2	6.3	6.4	6.3	6.1
Public administration and defence	26.4	26.7	27.8	28.6	29.0
Education	19.4	19.9	20.6	21.8	22.4
Human Health and Social Work	13.8	14.1	14.8	15.1	15.3
Arts, Entertainment, Recreation	4.7	4.8	4.8	4.6	4.8
Other Service Activities	8.3	8.8	9.3	9.0	8.9
Activities of Households as employers	16.7	17.5	20.0	22.6	24.8
Activities of Extra territorial organizations	2.8	2.8	2.8	2.8	2.7

The national policy on safety and health at work is reviewed at the Pancyprian Safety and Health Council on a regular basis. The Safety and Health at Work Law covers all branches of economic activity and provides not only for the protection of employed persons but also for the protection of self-employed and third persons at work. Furthermore, this law imposes requirements on designers, manufacturers, importers and sellers of articles and substances, which must be free of risks when used at work.

Those of the provisions of the Framework Directive 89/391/EEC which were not included in the original text of the law have been consequently transposed into national law with the introduction under the Safety and Health at Work Law of the Management of Safety and Health Issues at Work Regulations of 2002.

The Health and Safety law applies to any workplace and in any other case where an enterprise is in operation or an activity is carried on. This means that the legislation applies, inter alia, in the following cases:

- To all workplaces where industrial, agricultural, manufacturing and commercial activities (factories, agricultural or animal husbandry, building, construction, offices,

shops, warehouses, banks, supermarkets, quarries etc.) are carried out.

- In places in which administrative, educational, cultural activities (municipalities, conference rooms, schools, etc.) are carried out.
- In public and private sectors of activity.
- In any other case where business or other activity is carried out for the purpose of profit.
- In leisure, recreation and leisure venues, e.g. golf, cinemas, water parks, playgrounds etc.
- In works performed by or on behalf of the Republic of Cyprus

The general duty provisions of the Health and Safety Law include:

- The provision of adequate premises, installations and work equipment.
- The implementation of safe systems and methods of work.
- Arrangements for ensuring safety and health in relation to the use, storage and transport of objects and substances.
- The provision of information, education, instruction and supervision.

- The provision of adequate means and protection measures.
- The keeping of work areas, including access areas and exits, in a safe condition and without risks to health.
- The maintenance of proper and adequate arrangements for the welfare of the workers.
- The setting up of the necessary organization.
- Adjustment of the protective and preventive measures according to the changes in the work environment.
- The consultation with employee representatives on health and safety at work issues.

According to the Health and Safety Law, An employer/self-employed person should implement, among others, the following principles:

- Avoid risks.
- Assess risks that cannot be avoided.
- Combat the risks at the source.
- Adapt the work to the worker.
- Monitor the development of technology.
- Set priority in taking collective measures of protection against taking individual ones.

Every employer or self-employed person must prepare a written risk assessment of risks to health and safety of employees or himself/herself and of other affected persons.

Risk assessment is required, among others, for the following:

- Selection of work equipment (including machinery and devices);
- Use of chemicals or preparations;
- Layout/suitability of the workplace.

The written risk assessment determines:

- Persons at risk;
- Preventive and protective measures;
- Organizational measures/education; and
- Materials/protective equipment.

The Labour Advisory Board, which is the highest advisory tripartite body in Cyprus chaired by the Minister of Labour and Social Insurance, is the forum in which labour and social protection legislation and policy is discussed, prior to the final decision by the Minister of Labour and Social Insurance. Also, the members of the Labour Advisory Board discuss and submit proposals on new or amending safety and health at work legislation in order to achieve maximum

possible consensus among the employers and employees before a new piece of legislation is forwarded to the Council of Ministers for approval.

The first ever law regarding the protection of workers was enacted in 1947 by the then Colonial ruler. A first attempt to form a PanCyprian Safety Council was made in 1964. In February 1966 the first ever “safety promotion week” took place. Until 1996, the main legal framework for occupational safety and health consisted of the Factories Law Cap. 134, which was introduced in 1956. This law was amended from time to time and the various Regulations were issued there under. However, the extent of this legislation was limited to certain branches of economic activity namely the manufacturing industry, construction, agriculture, and dock works while mining and quarrying was covered by the Mines and Quarries Law Cap. 270 and Regulations issued under it. After the submission by the Government of Cyprus of an application to become a member of the European Union, an active policy to harmonise the Cyprus legal framework with the “acquis communautaire” was undertaken. As a result to this the Safety and Health at Work Law, was enacted in 1996. This law incorporated most of the provisions of the Framework Directive 89/391/EC and is in line with all the provisions of the I.L.O. Convention No. 155 concerning the Occupational Safety and Health and the Working Environment. The law has been amended since 1996; 2011 was the last amendment.

Currently, work for the introduction of additional legislation on Occupational Health and Safety is in progress. A number of other sets of Regulations, in particular draft Regulations covering, medical examinations and health surveillance issues are under preparation.

3. Occupational Safety and Health Infrastructure

The Cypriot OSH enforcement relies on the Department of Labour Inspection (DLI) of the Republic. The mission of the DLI is the safeguarding of adequate levels of safety and health at work, the protection of the public against risks arising from activities at work, the protection of the public and the environment with the effective control of industrial pollution, the risks from major accidents, the chemical substances and the protection of the workers, the public, the patients and the environment from risks that arise from the use of ionising radiation, and the preservation of the quality of those parts of the atmosphere of Cyprus where it is acceptable and its improvement in those parts where it is needed.

Labour Inspectors are public officers and they are recruited according to a legal procedure applied to public employees in Cyprus. The procedure is based on the Public Service Laws. Applicants must possess the following qualifications:

- (a) Labour Inspectors must be holders of a Diploma of at least three years academic studies of a tertiary level institution, leading to a degree of the Higher Technical Institute of Cyprus or equivalent in engineering, industrial hygiene, chemistry, environmental chemistry / technology, ergonomics. At least two years of work experience constitutes an advantage.
- (b) Labour Inspection Officers must be holders of a Bachelor's University Degree in one of the above mentioned fields of study. At least two years of work experience and/or a postgraduate university degree constitutes an advantage.

Written examinations are organised by the Department and interviews are carried out by the Public Service Commission, which takes the final decision. This Commission is an independent Body established by the Constitution of the Republic of Cyprus. The decisions of the Commission are subject to Appeal in the Supreme Court. A two-year probation period follows the first appointment. After that, the Labour Inspector or the Labour Inspection Officer becomes officially a public officer and his/her position is permanent.

Following their recruitment, Inspectors are provided with sufficient and suitable training first at the Headquarters, to enable them to attain the levels of competence necessary to fulfil their duties. The training programme, prepared by the Occupational Safety and Health Training Centre of the DLI, covers the following subjects:

- Introduction to Labour Inspection.
- Legislation (detailed analysis of the existing laws and regulations, and directions-guidance with regard to implementation).

- Inspection techniques and practices.
- Electrical, mechanical and construction safety.
- Ergonomics.
- Accident, occupational diseases and dangerous occurrences investigation (combined with practical field training by participating in actual investigation).
- Role and powers of Inspectors.
- Occupational hygiene (physical, chemical and biological agents, ventilation, temperature, PPE).
- Occupational health.
- Report writing.
- Legal proceedings.
- Dangerous substances.
- Industrial pollution control and quality of air.
- European Union legislation in the field of health and safety at work.
- Risk assessment.
- Consultation.
- Radiation protection.
- Psychosocial factors.
- First aids at work.

All Inspectors are also trained on how to use the IT System (FIS) of the DLI. All Inspectors regularly attend retraining seminars and courses to keep them up to date with advances in technology and developments in the law and in good practice. This retraining is implemented by the Department or by other bodies. A number of Inspectors have benefited from internal and external executive training as well as secondments in other EU Member State Inspectorates.

Inspector staffing levels in 2009 at the Headquarters and the District Offices are given in Table 2. In this table there is a distinction between Headquarters and District Offices.

Table 2. Current staff of the DLI (excluding secretarial and supporting staff) that works solely for OSH, adjusted to take account of part-time work.

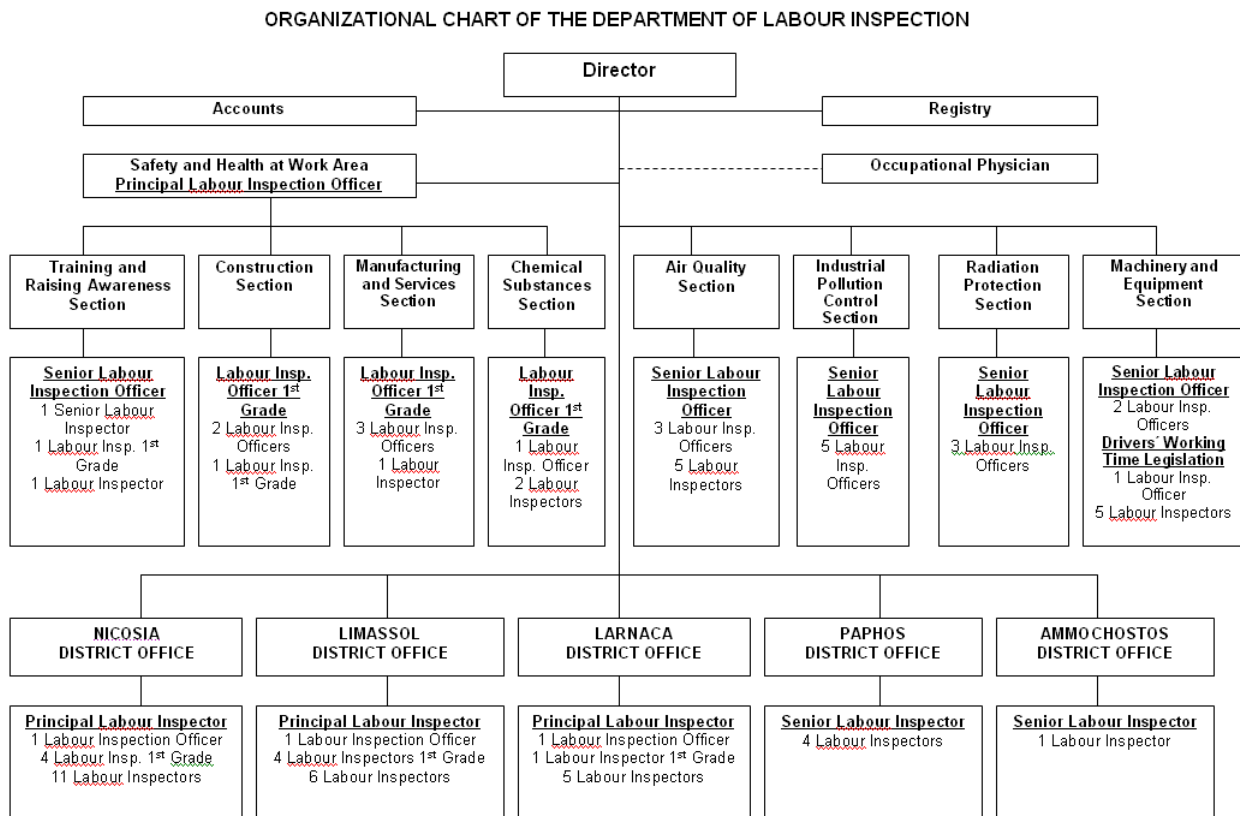
	Grade	Current staff		Permanent Posts
		Male	Female	
Headquarters	Principal Labour Inspection Officer	-	-	1
	Senior Labour Inspection Officer	1.5	-	1.5
	Labour Inspection Officer	3	3	6
	Inspector	2	3	5
District Offices	Head Officer	3.25	-	3.25
	Coordinator	1	1	2
	Inspector	16.5	9	29
	Advisor Occupational Physician	1	-	1

In 2009, DLI staff that dealt with health and safety consisted of 25.5 field Inspectors (35% female), 5.25 Head Officers and Coordinators based in the District Offices (20% female) and 13.5 Labour Inspection Officers and Inspectors based in the Headquarters (44% female). In the Headquarters there is also one Advisor Occupational Physician. Administrative staff is not included in these figures. This equates to 1 field

Inspector or coordinator every 13,750 workers of the working population (a total of 377,948 in 2007).

In addition, 6.25 Inspectors are fully occupied in the inspection of inspectable machinery and pressure vessels such as Boilers, Lifts and Cranes and are not included in the above table because their duties are not exclusively relevant to OSH.

Figure 1. Current Organogram of the Department of Labour Inspection



The Safety and Health at Work Sector with its 4 Sections enforces the law. Inspection Campaigns are planned in the DLI Headquarters and are executed by the District Offices. Areas, that Inspectors, focus upon during the campaign can be described as:

- Sectors with high frequency accident rates
- High risk sectors (e.g. chemical's storage sites, SEVESO Installations, extractive installations)
- SLIC and / or EU – OSHA campaigns
- New and emerging risks
- Health Issues
- Matters raised by social partners
- Complaints

It should be noted that results from the Implementation of the National Strategy are incorporated in the inspection process. As the National Strategy is constantly monitored, targets are reconsidered.

The Strategy of Cyprus on safety and health at work, which was designed on the basis of the European Union Strategy 2007 – 2012 [1], has as a target the reduction of the Frequency of Work Accidents by 25% and the control and reduction of occupational diseases. The fundamental pillars of this strategy are the following [1]:

- The existence of a suitable Institutional Framework.
- The existence of a suitable Legislative Framework harmonized fully with the respective European Acquis.
- Operation of a suitable and adequate Labour Inspection System.
- Operation of a suitable health surveillance system of the workers.
- Operation of suitable supporting institutions.
- Promotion of accidents prevention through guidance, information and training.

- Mainstreaming of safety and health at work issues into other policy areas, such as Education, Employment, Agriculture, Environment, Transportation, etc.
- Encouragement of scientific progress and research.
- Close cooperation with the social partners and other stakeholders.
- Active participation at the bodies and activities of the E.U.
- Implementation of targeted awareness raising Campaigns.

The National Strategy [1] has been approved by the Council of Ministers and has been signed by all the main social partners.

The short- and medium-term Strategy in the field operations is incorporated in the biannual inspection programme [1]. This programme is based on data from inspections, accidents as well as surveys among the workers. The key economic activity sectors are targeted e.g. manufacturing, construction, mines and quarries, services including health services, retail, playgrounds etc. The goal is to prepare a realistic programme that will guide the inspection activities providing maximum impact on prevention. This programme supports directly the implementation of the National Strategy in the field of inspection. The realisation of the programme is constantly monitored through the IT System (known as Factory Information System-FIS). The Field Operations Sections (Construction, Manufacturing and Services Sections) activities include the implementation of the biannual inspection programme, inspection reporting, inspection campaigns in various economic activity sectors, the promotion of various programmes and projects in order to improve the compliance of duty holders with the legislation and raise awareness. Also its activities include drafting of legislation, preparation of Best Practice Guides and other guiding publications, administration of the IT System, carries out management of statistical data on occupational accidents, management of inspections and enforcement actions. Moreover it deals with all issues related to occupational accidents and diseases, promotes the development and implementation of Health Surveillance, enforces the legislation for the major hazard installations and occupational diseases and manages all issues related to OSH.

The actual field inspections are carried out by the Labour Inspectors at the five District Offices. Their staff consists of various grades of Labour Inspectors. The Heads of the District Offices are responsible for supervising the Inspectors and all activities of their

Office. In the three biggest District Offices, namely in Nicosia, Limassol and Larnaca, Senior Inspectors are assigned as Coordinators of teams of Labour Inspectors for the construction sector and the provision of expertise to Labour Inspectors in the preparation of prosecutions.

Being an integral part of the Public Sector, the DLI promotes its cooperation with other governmental services, such as the Police, the Cyprus Fire Service, the Department of Labour (Employment) etc, as well as semi-Governmental Organizations and other Bodies / Institutions. To this end, the DLI issues circular letters covering aspects of the implementation and enforcement of the Safety and Health at Work Law and distributes them in the various governmental Departments and Agencies. It also promotes the mainstreaming of the issues of safety and health at work into other policy areas.

4. Social Protection and Labour Relations

The Social Insurance Scheme applies to all employed and self-employed workers. A voluntary insurance system is in place for persons who wish to extend their insurance after a prescribed period of compulsory period or to persons who work abroad in the service of Cypriot employers [2].

The first Social Insurance Scheme in Cyprus was introduced in January 1957 [2]. It covered all employed persons on a compulsory basis, with the exception of certain categories of agricultural workers. Self-employed persons and those workers exempted from compulsory insurance were given the right to be insured voluntarily. The Scheme of 1957 provided for: marriage, maternity and funeral grants, sickness and unemployment benefits, old age and widow's pensions and orphan's benefit. All, contributions and benefits were flat-rate, irrespective of the insured earnings. The Scheme [2] was financed through three equal contributions, i.e. from the employed persons, the employers and the State. Further to a number of substantial changes in 1964 and 1973, the finalised – current – system of social insurance is in place since 1980. The current Social Insurance Scheme[2] has incorporated the previous flat-rate scheme in a modified structure providing in addition supplementary earnings related benefits. The Scheme [2] is divided into two parts: the basic part, corresponding to the repealed flat-rate scheme, and the earnings-related part. The Social Insurance Scheme is financed by contributions paid by the employers, by the insured persons and by the State. In the case of

employed persons, the contribution is 17,9% on their insurable earnings and it is divided to contributions paid by the employer, the employee and the State in the proportion of 6.8%, 6.8% and 4.3%, respectively [3]. In the case of self-employed persons, the contribution is 16.9% on the insurable income of the person concerned. Out of 16.9%, 12.6% is paid by the self-employed himself and 4.3% by the State [3]. The Scheme provides for the following benefits:

- (a) Marriage grant
- (b) Maternity grant
- (c) Funeral grant
- (d) Maternity allowance
- (e) Sickness benefit
- (f) Unemployment benefit
- (g) Invalidity pension
- (h) Old age pension
- (i) Widow's pension
- (j) Orphan's benefit
- (k) Missing person's allowance
- (l) Employment injury benefit, which includes:
 - (i) Temporary incapacity (injury benefit);
 - (ii) Disablement benefit; and
 - (iii) Death benefit.

The Cyprus Social Insurance System relies heavily on Government support [3]. Total expenditures for social insurance per capita as well as a percentage of the annual gross domestic product have been increasing constantly [3]. The Government spent approximately Euro 1.84 million for employment injury benefits in 2010 [3]. This was 26% less than that of 2009 [3]. All periodical benefits, i.e. benefits excluding grants, are composed of (i) the basic benefit and (ii) a supplementary benefit. The supplementary benefit is related to the insurable earnings of the person concerned in the upper band. The period for which sickness benefit is payable cannot exceed 156 days for each period of interruption of employment. The weekly rate of benefit is 60% of the insurable earnings up to the basic earnings, increased by 1/3 for a dependant spouse and by 1/6 for other dependants (maximum two dependants), plus 50% of the insurable earnings in excess of the basic earnings up to a maximum of two times the basic insurable earnings. A spouse (male or female) is a dependant if he/she is not working or is not receiving any benefit from the Social Insurance Fund.

The benefits for industrial accidents and occupational diseases are as follows:

- Temporary incapacity (injury benefit)
- Disablement benefit
- Death benefit

Injury benefit is payable to any employed person who is incapable of work as a result of an industrial accident

or occupational disease. The benefit is payable for up to 12 months from the date of accident or contraction of the disease. Disablement benefit is payable to any employed person, who as a result of an employment injury, suffers a loss of physical or mental faculty of a degree of not less than 10% with the exception of disablement due to pneumoconiosis, which is compensated from 1%. The disablement pension consists of (i) the basic pension and (ii) the supplementary pension.

As stated in the introduction, the Health and Safety consultative system in Cyprus is based on the tripartite system. Tripartite co-operation in the field of health and safety at work is widely practised in Cyprus both for the formulation of policy as well as for the introduction of new legislation and standards, the successful operation of various programmes and the application of the necessary measures. This co-operation in Cyprus is exercised at the national, regional and local level.

- The Pancyprian Safety and Health Council and the Labour Advisory Board operate at a National Level.
- The Regional Advisory Committees operate on the regional level. These are tripartite committees that have an advisory role, mainly in cooperation with the five District Offices of the DLI.
- Safety Committees operate at the enterprise level.

The current National Strategy for Health and Safety 2007-2012 [1] is signed by all three parties. Based on ESENER data, Respondents were also asked about a number of forms of worker representation. Table 3 below shows proportions of respondents from Cypriot enterprises reporting each form of representation, together with proportions for the EU-27 overall.

Table 3– Workers Representation

Presence of forms of worker representation	Cyprus %	EU-27 %
Works council	NA	36
Shop-floor trade union representative	42	24
Internal health and safety representative	52	65
Health and safety committee	44	28

The Trade Union system in Cyprus is particularly strong; approximately 58% of the workforce is enrolled in a Trade Union [4], this number increased by 5.7% in 2008 [4]. Despite this small increase of 5.7%, overall, Trade Union participation has fallen from a historic

high of 76% in the early 90's [5]. The main national trade unions are the following:

- Pancyprian Workers Federation (PEO)
- Cyprus Workers' Confederation (SEK)
- Democratic Labour Federation of Cyprus (DEOK)
- Pancyprian Federation of Independent Trade Unions (POAS), an independent group of small trade unions organising workers in smaller enterprises, the British Sovereign Bases of the island and workers of some semi-governmental organisations.

Table 4 – Trade Union Participation 2003 – 2008 (from European Industrial Relations Observatory On-Line)

Confederations, trade union centres and 'other' unions	2003	2008	Change over period
PEO	74,646	81,473	+9.1%
SEK	71,98	71,574	-0.6%
DEOK	7,903	8,807	+11.4%
POAS	206	164	-20.4%
Others	39,948	43,834	+9.7%
Total	194,683	205,852	+5.7%

The Cyprus Union of Bank Employees (ETYK) is a union with a healthy membership, collective bargaining coverage and bargaining power. In the public sector, four trade unions bargain independently with the government, with little, if any, cooperation and coordination among them:

- Pancyprian Public Employees Trade Union (PASYDY), representing the civil servants and by far the biggest and strongest trade union in terms of membership and power in the public sector
- Pancyprian Organisation of Greek Teachers (POED), representing primary school teachers
- Organisation of Greek Secondary Education Teachers (OELMEK), representing secondary school teachers
- Organisation of Greek Technical Education Teachers (OLTEK), representing teachers in technical schools.

The largest employer organisations in Cyprus are the following:

- Cyprus Employers' and Industrialists' Federation (OEB)
- Cyprus Federation of the Associations of Building Contractors (OSEOK)
- Cyprus Association of Bank Employers (KEST)
- Pancyprian Association of Hoteliers (PASYXE);

- Cyprus Chamber of Commerce and Industry (CCCI)

With regards to workers participation, ESENER Respondents were asked about a number of forms of worker representation. Table 5 shows proportions of respondents from Cypriot enterprises reporting each form of representation, together with proportions for the EU-27 overall.

Table 5 – Worker representation (from ESENER)

Presence of forms of worker representation	Cyprus %	EU-27 %
Works council	NA	36
Shop-floor trade union representative	42	24
Internal health and safety representative	52	65
Health and safety committee	44	28

The main challenges ahead for the workforce are common as those in the majority of the European countries. The importance of aging in the population as well as the workforce has been highlighted in literature [8]. This is also apparent in the case of Cyprus where the average life expectancy is 77.9 years for men and 82.4 for women [9]. This already has an effect on the insurance and benefit system of the country, a fact that is anticipated to increase in the years to come.

Immigration and the large number of occupational safety incidents – at least in relation to the local workforce – is another point of concern. It has been shown that migrants are more prone to occupational accidents than local colleagues [10-14]. According to the statistics held by the Department of Labour Inspection of the Republic of Cyprus, the number of fatal accidents at work of non-EU nationals for 2010 was 4. The number of fatal accidents of Cypriot workforce for 2010 was 1.

5. Approaches to OHS management at the workplace level

ESENER's data for Cyprus [7], comprised interviews with 510 respondents, 98% from a single independent company or organisation with no further branch offices, production units or sales units, and 1% from establishments that were one of a number of different establishments at different locations (a small number of respondents gave no response or did not know). Some of the main findings of the data for Cyprus are presented below. Respondents were asked about their use of health and safety services. Table 6 shows the

proportion of respondents from Cypriot establishments reporting the use of five types of service, together with proportions for the EU-27 as a whole.

Table 6 – Use of H&S services (from ESENER)

Use of health and safety services	Cyprus %	EU-27 %
Occupational health doctor	20	69
Safety expert	50	71
Psychologist	8	16
Ergonomics expert	27	28
General health and safety consultancy	36	62
At least 1 of the above	70	92

Respondents were asked whether their establishment had a documented policy [7], established management system or action plan on health and safety. Among respondents from Cypriot enterprises 53% agreed that they had, compared with 76% for the EU-27.

In terms of sickness absence [7], 41% of Cypriot respondents reported that their establishment routinely analysed the causes of sickness absence, with 56% reporting that their establishment took measures to support employees' return to work following a long-term sickness absence. Comparable EU-27 figures were 50% and 64% respectively. When asked whether the health of employees was monitored through regular medical examinations [7], 30% of respondents from Cypriot enterprises reported that this was the case, compared to 68% for the EU-27.

Considering risk assessment, 88% of respondents from Cypriot enterprises reported that workplaces in their establishment were regularly checked for safety and health as part of a risk assessment or similar measure, compared to 87% for the EU-27. In addition, 80% of respondents from Cyprus reported that these risk assessments or workplace checks were carried out at regular intervals without any specific cause, compared to 83% for the EU-27.

ESENER respondents were asked about whether their establishment had procedures to deal with work-related stress, bullying or harassment, and work-related violence. Table 7 shows the proportions of respondents from Cypriot establishments reporting that each of these policies was in place in their enterprise, together with proportions for the EU-27.

Table 7 – Psychosocial risk policies (from ESENER)

Presence of policies on psychosocial risks	Cyprus %	EU-27 %
Work-related stress	17	26
Bullying or harassment	9	30
Work-related violence	10	26
At least 1 of the above	24	41

Among respondents from Cypriot enterprises, 38% reported that their establishment took action if individual employees worked excessively long or irregular hours, compared to 40% for the EU-27. In addition, 40% of respondents from Cypriot enterprises reported informing employees about psychosocial risks and their effect on health and safety, with 55% confirming that employees had been informed about whom to address in case of work-related psychosocial problems. Comparable figures for the EU-27 were 53% and 69% respectively.

Finally, with regards to the role of employees in psychosocial risk management, 49% of Cypriot respondents reported that employees had been consulted regarding measures to deal with psychosocial risks and 63% that employees were encouraged to participate actively in the implementation and evaluation of these measures. This compared with 54% and 67% for the EU-27 Member States.

6. Occupational Health and Safety Outcomes

Actual figures of fatal and non-fatal work accidents are presented in the annual reports of the DLI from data available in the Department's Database. Figure 2 shows the mean value of the annual work accident frequency index for the period 2003-2011. This index is discerning over the past twenty years. The same trend can be further analysed by observing the frequency indices of work accidents by economic activity sector for the years 2008-2011 in Figure 3. In some large sectors like the manufacturing and construction sectors a downward trend of the index appears. For some other sectors there is no clear discernible trend of the index. It is important to note though that due to the size of the economy, the work accidents in small sectors cannot produce reliable statistics, because even a small number of work accidents can greatly affect the above indices. A more detailed analysis of the notified work accidents and the accident frequency indices by economic activity for the year 2011 is presented in Table 9.

The above work accident statistics show no significant regional differences mainly due to the uniformity of the small economy of the island. Although the trend for the work accidents is clear, no safe conclusion can be reached about the fatal accidents per economic activity because their number is very small compared to the labour force, with large variations over the years. The total number of fatalities for the period 2004-2011 is presented in Figure 4.

6.1 National Priorities

Certain sectors of the Cyprus economy employ a considerable number of foreign workers. According to Christodoulou et al [17]: *“Most immigrants work in domestic work, service industry - mainly tourism and trade- , manufacturing industry, agriculture, construction work and, generally, in low-status and low-paid jobs. Especially domestic work and agriculture are almost entirely made up of migrant workers while in the construction industry around 50% are migrants, mainly from EU”*. A comparison between the annual work accident frequency indices for Cypriot and non-Cypriot Nationals per economic activity sector is presented in Figure 5. During 2010 the total work related accidents on Cypriot nationals were 1647, and on non-Cypriot nationals (EU and non-EU Nationals) 547. These numbers correspond to the ratios of Cypriots and non-Cypriots in the Labour force. The incidence frequency index for non-Cypriots in the Construction sector is higher than the corresponding rate for Cypriots, since foreign workers are often engaged in high risk activities, sometimes without the proper guidance and instruction.

The DLI prepared a booklet in 7 foreign languages in order to promote the health and safety issues among non-Cypriot workers. The Department has issued leaflets, flyers and posters with pictograms that can convey occupational health and safety messages to all workers, especially in the construction sector, regardless of their language or nationality.

6.2 Enforcement Actions

Table 8 shows the number of inspections per District (region). The number of inspections reflects the capacity of the District Labour Inspection Offices. The enforcement actions undertaken by the DLI during the inspections include the issuing of warning letters, Improvement and Prohibition Notices and Prosecutions. Table 10 shows the enforcement actions taken by the DLI. The increase of enforcement actions relates to the new policy of the Department to increase compliance with the legislation by reducing the tolerance to contraventions. Table 12 shows the fines charged for legal proceedings in Euros, while Table 11

shows the total number of completed legal proceedings for the past four years.

According to Section 44 of the Safety and Health at Work Law, the main powers of Inspectors during a campaign can be summarised as:

- to enter, without obstruction and without any advance notice, any place of work, excluding domestic premises, which he has reasonable cause to believe it is necessary for him to enter at any reasonable time, or at any other time he believes there exists a condition that may cause imminent danger of serious personal harm or damage to the environment; Provided that entry into domestic premises can be effected after securing the consent of the owner.
- to make such examinations, tests, inspections and investigations, as may be necessary, in order to verify compliance with the provisions of this Law and to make arrangements so that any other person can carry out tests, examinations and measurements as they are deemed necessary in exercising his powers.
- to require the presentation of any record, certificate, notification or document which is kept for the purposes of this Law as well as any other book or document, which we should examine for the purposes of any inspection, examination or investigation and to inspect, examine and copy any of the above.
- to require any person, whom he has reasonable cause to believe to be able to give any information relevant to any inspection or examination, investigation or clarification, to answer relevant questions alone or in the presence of any other person whom the Inspector may allow to be present and to require the person to sign a declaration of the truth of his answers.
- safe access to any part of the premises, and
- any other reasonably available means to carry out any tests measurements, inspections, or examinations he deems reasonably necessary for exercising his powers.
- to take such measurements or photographs and make such recordings as he/she considers necessary for the purpose of any inspection, examination, investigation or survey in accordance with this Section.
- to take or remove samples of any article or substances found in any premises and from the atmosphere in or in the vicinity of any such premises.
- in the case of any article or substance found in any premises which he has reasonable cause to believe that they may have imposed or will

impose risk, to require them to be dismantled or to be subjected to any process or test but not in a way to cause them damage or destruction unless this is in the circumstances necessary for the purposes of this subsection.

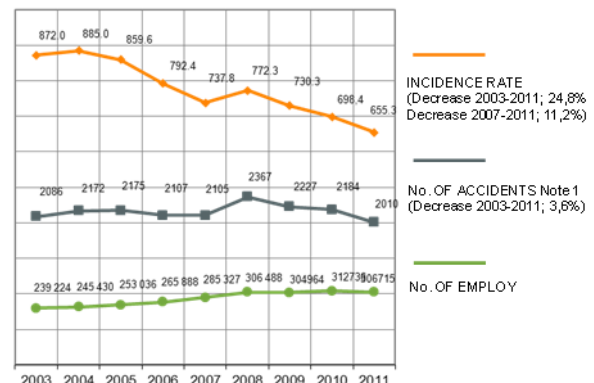
- in the case of any article or substance to take possession of it and detain it for so long as is reasonably necessary for any of the following purposes:
 - i. to examine it or to do to it anything which he has power to do
 - ii. to ensure that it is not tampered with before his examination of it is completed
 - iii. to ensure that it is available for use as evidence in any proceedings for an offence under this Law.

6.3 Health Trends

During the year 2006 within the framework of the campaign for the prevention of noise at work, thirty nine cases of noise induced hearing loss, related to exposure to noise at work, were registered. Additionally, in 2006 twenty four cases of

mesothelioma and one case of musculoskeletal disorder were registered. In the year 2007 sixty five new cases of work related diseases were recorded. These diseases included thirty eight cases of noise induced hearing loss, related to exposure to noise at work, twenty six cases of mesothelioma and one case of musculoskeletal disorder.

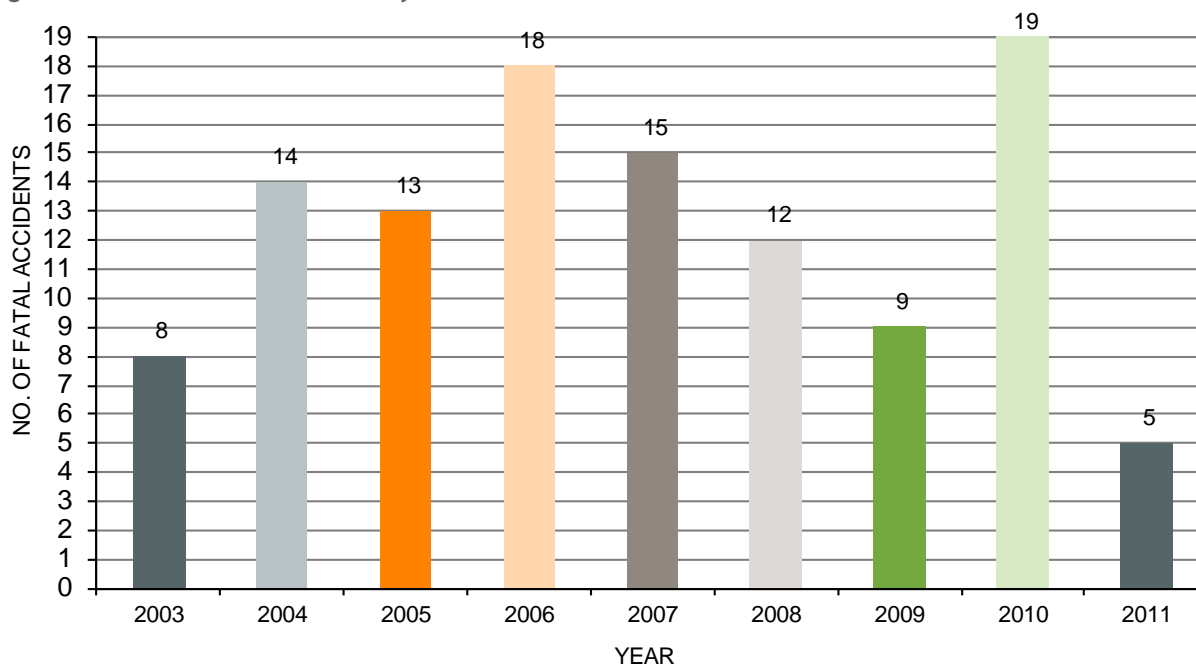
Figure 2 – Mean Value of the Annual Work Accident Frequency Index for the Period 2003-2011



Note 1: Number of accidents refer to accidents that occurred to employees during their work and reported to the Department of Labour Inspection.

Figure 3 - The annual accident frequency indices of work accidents by economic activity sector for the years 2008-2011.

A/A	ECONOMIC ACTIVITY (NACE 2)	2008			2009			2010			2011		
		Accidents	No of Empl	Freq. Rate	Accidents	No of Empl	Freq. Rate	Accidents	No of Empl	Freq. Rate	Accidents	No of Empl	Freq. Rate
1	SECTION A — AGRICULTURE, FORESTRY AND FISHING	50	3390	1474,93	59	2921	2019,86	48	4379	1096,14	38	4618,67	822,75
2	SECTION B — MINING AND QUARRYING	17	499	3406,81	24	714	3361,34	20	648	3086,42	11	876	1255,71
3	SECTION C — MANUFACTURING	550	30252	1818,06	549	28470	1928,35	488	25977	1878,58	413	24353,7	1695,84
4	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	13	2612	497,703	13	3290	395,14	18	1558	1155,33	33	1359	2428,26
5	SECTION E — WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	41	1807	2268,95	30	1395	2150,54	34	2023	1680,67	30	3460	867,05
6	SECTION F — CONSTRUCTION	649	34192	1898,1	562	32591	1724,40	540	33052	1633,79	418	34688,3	1205,02
7	SECTION G — WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	300	54702	548,426	272	56715	479,59	272	59100	460,237	286	56273	508,24
8	SECTION H — TRANSPORTATION AND STORAGE	114	11439	996,591	119	13232	899,33	134	13289	1008,35	113	12564	899,40
9	SECTION I — ACCOMMODATION AND FOOD SERVICE ACTIVITIES	333	20830	1598,66	301	22723	1324,65	309	22995	1343,77	339	21085,7	1607,73
10	SECTION J — INFORMATION AND COMMUNICATION	14	8302	168,634	13	7912	164,31	20	7682	260,349	15	8473,67	177,02
11	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	23	18543	124,036	11	17437	63,08	26	18589	139,868	18	18401	97,82
12	SECTION L — REAL ESTATE ACTIVITIES	7	1913	365,917	0	1335	0,00	1	1174	85,1789	4	715	559,44
13	SECTION M — PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	19	16108	117,954	10	15815	63,23	14	16140	86,741	16	16256,3	98,42
14	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	26	6190	420,032	28	7958	351,85	27	6324	426,945	29	5052,67	573,95
15	SECTION O — PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	112	30570	366,372	127	28961	438,52	122	28918	421,883	142	26633	533,17
16	SECTION P — EDUCATION	15	24886	60,2749	21	22809	92,07	15	24925	60,1805	20	26446,3	75,62
17	SECTION Q — HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	33	12384	266,473	35	12968	269,90	39	13226	294,874	36	12527	287,38
18	SECTION R — ARTS, ENTERTAINMENT AND RECREATION	19	2509	757,274	15	3342	448,83	18	5085	353,982	12	5537	216,72
19	SECTION S — OTHER SERVICE ACTIVITIES	16	5955	268,682	14	5501	254,50	13	5574	233,226	21	6330	331,75
20	SECTION T — ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	14	16789	83,3879	14	16599	84,34	17	20103	84,5645	12	20425,3	58,75
21	SECTION U — ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	2	2616	76,4526	10	2276	439,37	9	1975	455,696	4	1638	244,20
	TOTAL / MEAN RATE	2367	306488	772,30	2227	304964	730,25	2184	312736	698,35	2010	307714	653,20

Figure 4 - Fatal work accidents for the years 2003 – 2011**Figure 5 - Accident frequency index for the year 2009 - 2010 for Cypriot and non-Cypriot nationals per economic activity sector.**

Nationality	Number of Accidents	Number of Employees	Frequency Rate
Cypriots	1 647	197 195	835.2 (866.7)*
Other EU Citizens	423	55 250	765.6 (784.3)
Outside EU	114	61 600	185.1 (238.1)
Total	2 184	314 045	695.4 (730.3)

*This includes 2009 Rates

Table 8 - Number of inspections for the years 2003-2011 per District

DISTRICT	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nicosia	2266	2023	1647	1536	2196	2327	2195	2629	2626
Limassol	1623	1581	1496	1652	1665	1499	1335	1525	1336
Larnaca	1248	1290	1079	1462	1499	1047	883	1062	1723
Famagusta						361	269	296	872
Paphos	719	655	466	346	510	571	549	518	639
TOTAL	5856	5549	4688	4996	5870	5805	5231	6030	7196

Table 9 - notified work accidents and the accident frequency indices by economic activity for the year 2011

No	ECONOMIC ACTIVITY SECTOR	NUMBER OF ACCIDENTS	NUMBER OF	FREQUENCY
			EMPLOYED PERSONS	INDEX
			(Note 1)	(Note 2)
1	SECTION A — AGRICULTURE, FORESTRY AND FISHING	38	4619	822,75
2	SECTION B — MINING AND QUARRYING	11	876	1255,71
3	SECTION C — MANUFACTURING	413	24354	1695,84
4	SECTION D — ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	33	1359	2428,26
5	SECTION E — WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	30	3460	867,05
6	SECTION F — CONSTRUCTION	418	34688	1205,02
7	SECTION G — WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	286	56273	508,24
8	SECTION H — TRANSPORTATION AND STORAGE	113	12564	899,40
9	SECTION I — ACCOMMODATION AND FOOD SERVICE ACTIVITIES	339	21086	1607,73
10	SECTION J — INFORMATION AND COMMUNICATION	15	8474	177,02
11	SECTION K — FINANCIAL AND INSURANCE ACTIVITIES	18	18401	97,82
12	SECTION L — REAL ESTATE ACTIVITIES	4	715	559,44
13	SECTION M — PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	16	16256	98,42
14	SECTION N — ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	29	5053	573,95
15	SECTION O — PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	142	26633	533,17
16	SECTION P — EDUCATION	20	26446	75,62
17	SECTION Q — HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	36	12527	287,38
18	SECTION R — ARTS, ENTERTAINMENT AND RECREATION	12	5537	216,72
19	SECTION S — OTHER SERVICE ACTIVITIES	21	6330	331,75
20	SECTION T — ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	12	20425	58,75
21	SECTION U — ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES	4	1638	244,20
	TOTAL / MEAN VALUE	2010	307714	653,20

Notes:

1. Results are Preliminary and not Final, as number of employed persons are according to the data of the Labour Force Survey of the Statistics Department, for the first, second and third quarter average of the year and not the year average. Final results will be issued soon after the year average will be available.

2. Frequency Index = (Number of Accidents / Number of Employed Persons) X 100.000.

Table 10 - Enforcement actions for the years 2002-2007.

Enforcement Action	2002	2003	2004	2005	2006	2007
Inspections	4569	5856	5549	4688	4996	5870
Improvement Notices	31	36	36	146	80	70
Prohibition Notices	81	82	115	201	155	148
New Prosecutions	20	22	21	31	38	57
Warning Letters	n/a	n/a	n/a	473	383	302

Table 11 - Number of completed legal proceedings.

Year	2004	2005	2006	2007
Number of completed cases	21	31	38	104

Table 12 – Fines charged for law violations

No	Law/Regulations	Fines charged for completed prosecutions in Euros				
		2003	2004	2005	2006	2007
1	The Safety and Health at Work Law	19410	63218	36137	16420	113759
2	The Buildings and Works of Engineering Construction (Safety, Health and Welfare) Regulations of 1973	1025	-	-	-	2050
3	The Factories Law of 1957, Cap. 134	513	256	1367	342	256
4	The Maternity Protection Law of 1997 - 2002	1367	854	-	137	2136
5	The Accidents and Occupational Diseases (Notification) Law of 1953, Cap. 176	1094	205	2990	308	2683
6	The Occupational Safety and Health in Dockwork Regulations of 1991	1709	-	-	-	-
7	The Asbestos (Safety and Health of Persons at Work) Law of 1993 and 2000	410	342	-	-	-
8	The Private Employment Agencies Law of 1997 and 2002	171	-	-	-	205
9	The Management of Safety and Health Issues at Work Regulations of 2002	-	-	-	1538	2187
10	The Safety and Health (Minimum Requirements for Temporary or Mobile Construction Sites) Regulations of 2002	-	4272	4664	22391	90915
11	The Electricity in Factories Special Regulations	-	-	-	-	256
12	The Safety and Health at Work (Manual Handling of Loads) Regulations of 2001	-	-	-	-	991
13	The Employer's Liability (Compulsory Insurance) Laws	-	-	-	-	889
14	The Minimum Requirements for Safety and Health (Use of Personal Protective Equipment at Work) Regulations	-	427	-	683	1913
15	The Minimum Requirements for Safety and Health Signs at Work Regulations	-	769	-	-	-
16	The Minimum Requirements for Safety and Health (Use of Work Equipment at Work) Regulations of 2001	-	854	-	10764	20674
17	The Minimum Requirements for Safety and Health at the Workplace Regulations of 2002 and 2004	-	-	-	8970	2478
	Total	25699	71197	45158	61553	241392

7. Conclusions

This paper attempts to present, in a limited space, the determinants of the workplace occupational health and safety in Cyprus. Although under-reporting of accidents is a wider European phenomenon, the cooperation of the Department of Labour Inspection with the Social Insurance Services of the Ministry of Labour and Social Insurance ensure that collected data is of high standard. The analysis preceding this section presents a view of the current situation in Cyprus. A small economy with a very large number of micro companies, a large number of which are family run businesses. Hence, although a few indicators point to one direction (Tables 6 and 7) the number of accidents (injuries and deaths) do not support this view. It should be noted at this point that in particular reference to Table 7 (psychosocial risks) the Department of Labour Inspection – in the light of ESENER data [7] – has put in place targeted campaigns in the workplace that have already had a positive effect as the recently published data from the European Agency for Health and Safety at work for 2010 suggest. In relation to the above, the issue of safety culture has had a wider shake-up. Occupational Health and Safety has been mainstreamed into other policy areas including education with the introduction of a new lesson which includes Health and Safety in its syllabus (entitled “Health Education”).

The total number of fatal accidents for 2011 was 5 (4 foreign and 1 Cypriot). Despite this fact, the number of non-fatal accidents occurring in 2010 (according to Department of Labour Inspection data for 2010) was 75.4% for Cypriots, 19.46% for EU Citizens and the remaining 5.2% occurred to non-EU Citizens. The majority of the fatal accidents occurred in the construction sector, a sector that traditionally employs a large number of non-EU employees.

A closely monitored and safeguarded health and safety system - as the data in Tables 8, 9 and 12 suggest – result in a relatively small number of accidents. It should be noted that the relatively low existence of external OSH services (Table 6) is due to the fact that this institution was established further to accession to the EU in 2004. ESENER Data dates back to 2009.

Monitoring of health of employees is rather low according to ESENER data [7]. This has resulted to a recent change of legislation in order to support the aims of the National Strategy for Health and Safety, and is anticipated to have a positive effect in the foreseeable future. As discussed in the introduction the aim of the National Strategy is to reduce accidents by 25%. While this has to be achieved for 2007 – 2012 (the frequency rate for 2007 – 2011 is recorded at 11.5%), in the period 2003-2011 is indeed recorded to 25%. The progress of the National Strategy for Health and Safety is monitored by the Department of Labour Inspection, based on a number of measurable criteria.

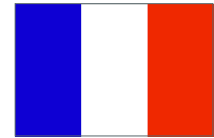
References

1. Ministry of Labour and Social Insurance, Republic of Cyprus [homepage on the internet], Nicosia, Cyprus, *National Strategy on Health and Safety 2007 - 2012*, Available at: <http://www.mlsi.gov.cy/mlsi/dli/dli.nsf/All/B567C0DA BC3FB692C22573EE0043E519?OpenDocument>
2. Ministry of Labour and Social Insurance, Republic of Cyprus [homepage on the internet], Nicosia, Cyprus, *Social Insurance in Cyprus*, Available at: [http://www.mlsi.gov.cy/mlsi/sid/sid.nsf/All/51157ED3 9DD79043C2256F6500451186/\\$file/Social%20Insuran ce.pdf?OpenElement. Accessed April 2012](http://www.mlsi.gov.cy/mlsi/sid/sid.nsf/All/51157ED3 9DD79043C2256F6500451186/$file/Social%20Insuran ce.pdf?OpenElement. Accessed April 2012)
3. Ministry of Labour and Social Insurance, Republic of Cyprus [homepage on the internet], Nicosia, Cyprus, *Statistics relevant to Social Insurance in Cyprus*, Available at: <http://www.mlsi.gov.cy/mlsi/sid/sid.nsf/All/E4A2C580 1674940AC22579B3005250F9?OpenDocument. Accessed April 2012>
4. Carley M, Trade union membership 2003–2008, European Industrial Relations Observatory On-Line, Spire Associates/IRRU, University of Warwick, Available at: <http://www.eurofound.europa.eu/eiro/studies/tn090 4019s/tn0904019s.htm#hd2>
5. Dobre-Baron O, *Incomes and expenditures of the system of social protection in the European Union*, Annals of the University of Petrosani, Economics, 7 (2007), 107-114
6. Ioakimoglou, E. and Soumeli, E., *Wages in Cyprus: determining factors and wage inequalities*, Nicosia, Cyprus Labour Institute, 2008
7. European Survey of Enterprises on New and Emerging Risks (ESENER), *Managing safety and health at work*, EU-OSHA
8. Borys, D. Else, D., Legget, S. (2009) “The fifth age of safety: the adaptive age” *Journal of Health and Safety Research and Practice*, Vol. 1, No. 1, 19-27

9. Statistical Service of the Republic of Cyprus, [homepage on the internet], Nicosia, Cyprus Annual Report 2009. Available at: http://www.mof.gov.cy/mof/cystat/statistics.nsf/populationcondition_26main_gr/populationcondition_26main_gr?OpenForm&sub=6&sel=2
10. Ahonen, E. Q., & Benavides, F. G. (2006). Risk of fatal and non-fatal occupational injury in foreign workers in Spain. *Journal of Epidemiology and Community Health*, 60(5), 424-426.
11. Carballo, M., Cottler, S., & Smith, C. (2008). Migrant men's occupational health. *Journal of Men's Health*, 5(2), 113-115.
12. Corvalan, C. F., Driscoll, T. R., & Harrison, J. E. (1994). Role of migrant factors in work-related fatalities in Australia. *Scandinavian Journal of Work, Environment and Health*, 20(5), 364-370.
13. Elders, L. A. M., Burdorf, A., & Öry, F. G. (2004). Ethnic differences in disability risk between Dutch and Turkish scaffolders. *Journal of Occupational Health*, 46(5), 391-397.
14. Hämmäläinen, P. (2009). The effect of globalization on occupational accidents. *Safety Science*, 47(6), 733-742
15. Sinclair, S. A., Smith, G. A., & Xiang, H. (2006). A comparison of nonfatal unintentional injuries in the United States among U.S.-born and foreign-born persons. *Journal of Community Health*, 31(4), 303-325.
16. Simerini Newspaper (2012). An effort to combat undeclared work, interview with the Minister of Labour and Social Insurance, 29 March 2012, <http://www.sigmalive.com/simerini/business/news/476977>, accessed on 30/07/2012 Accessed April 2012
17. Christodoulou C, Diamantopoulou A, Dourida V, Michalakieli A, Papantoniou-Frangouli M (2011). TRAFFICKING FOR LABOUR IN CYPRUS, Prepared in the frame of the project: Combating trafficking in human beings- going beyond coordinated by CCME. Athens February 2011.

FRANCE

Christophe Martin



1. Abstract

This article highlights the economic and social determinants of occupational risk prevention in France a country strongly influenced by the leading role played by the State. It first describes the national regulatory framework for risk prevention in the context of European Union legislation. The second part presents the institutional framework of occupational health and safety in France. The third part discusses the various forms of employer and employee representation and the role played by unions. The final section offers a perspective on occupational health and safety with reference to the economic situation in France and changing employment conditions in which job insecurity is an important variable to take into account.

Keywords: French administration, job insecurity, occupational health and safety, staff representation, state intervention, unions, occupational accidents, occupational illness.

2. Introduction

The issue of occupational health and safety is not new. France, which has long been an industrial power, faced the problem of industrial accidents as early as the nineteenth century, when French labour law addressed the issue. Some of the initial French legislation was aimed at protecting vulnerable workers, children and young women in the mining industry. However the issue has received renewed attention in recent years. Pushed to act by the European Union, France has made significant changes to its employment law and made health and safety in the workplace a national priority. The asbestos crisis¹ and the discovery that France lagged behind its European neighbours in this domain have played a significant role in improving understanding of workplace risk, and specifically the various risks that are the cause of occupational illness.

French health and safety legislation has developed in several major stages. Developments have coincided with the establishment of institutions and prevention systems during the major phases of the country's industrialization. If France is compared to its European

neighbours, two characteristics emerge. On the one hand the State plays a pervasive and leading role in the preparation of policy guidelines and regulations, on the other, the social security system recognizes and pays compensation for occupational accidents and illnesses. At the heart of this institutional network is a particular feature of the French system — occupational health services, funded by the employer. However, despite all these efforts, deteriorating working standards have had a detrimental impact on occupational health and safety issues and it is important to understand the policies that have been pursued over the past decade in an economic context.

This article first describes the evolution of the French regulatory context. It highlights the historical dimension of the issue of occupational health together with recent changes in the French Labour Code that are related to developments at the European level. The second part focuses on the institutional context, which is strongly influenced by governmental action at various institutional levels. Unions and employers' organizations are involved in the management of institutions and are partners in collective bargaining agreements. However, the role of unions has diminished and they cannot be compared with their cousins in northern Europe. In the current context, the occupational physician has emerged as a key actor. Nevertheless, the concept of occupational medicine has yet to develop a multidisciplinary approach and the introduction of new practices is finding resistance from organizations that question the independence of medical practitioners, their capabilities and their ability to meet the objectives set for them. The third part of this article discusses the various forms of staff representation; social partners, trade unions and employers' organizations. Finally, the changing roles of the various actors must be understood in an economic context marked by a shift towards the casualization of labour, which has undermined job security and has had a detrimental effect on working conditions. This issue is discussed in the fourth part of the article.

3. Heir to the country's industrial history

French labour law originates in the nineteenth century. The decree of 3rd January, 1813 which prohibited

children under the age of ten from working in mines was the first text governing child labour. This was followed by the laws of 22nd March, 1841 and 19th March, 1874 regulating working conditions for children and young girls. The late nineteenth, and the first part of the twentieth century was marked by legislation that incorporated the need to both protect vulnerable workers, women and children and introduced mechanisms for employer liability. The post-war period saw the establishment of organizations to provide compensation to employees and others dedicated to the improvement of working conditions. During the post-war boom, a number of large institutions were created, notably the occupational physician (*Médecine du travail*), the National Institute for Occupational Health and Safety (*Institut national pour la santé et sécurité au travail*), and the National Agency for the Improvement of Working Conditions (*Agence Nationale pour l'Amélioration des Conditions de Travail*).

3.1 European legislation: the catalyst for reforms

It was not until the European Framework Directive of 12th June, 1989 (Directive 89/391/EEC) and the guidelines derived from it, that French employment law (specifically, the Labour Code) offered coherent, general principles for the prevention of occupational risk.² The law of 31st December, 1991³ that transposed the directive into national law was a major breakthrough. Subsequently, a Decree issued in November 2001⁴ (implemented in the Circular of April 2002),⁵ made the assessment of occupational risk a legal requirement, and it became one of the main drivers of prevention approaches. Although risk assessment was seen as the principal innovation of the Framework Directive, it also marked the beginning of a national awareness that would bring about further progress. In giving employers responsibility for risk prevention, the circular effectively reiterated legal precedents set by the French courts that had been established as a result of asbestos litigation. These precedents emphasized that fact that the employer must respect certain obligations, which could not be shirked.* These binding obligations, never far from the minds of business owners, now have a powerful

* In a decision dated 28th February, 2002, the French Appeal Court stated, "that under the contract of employment binding on the employee, the employer is obliged to provide safe working conditions, particularly with respect to occupational illnesses contracted by the employee that are due to the products manufactured or used by the business; failure to do so is considered to be gross negligence under the definition provided by Article L 452-1 of the Social Security Code, which states that the employer knew or should have been aware of the danger to which the employee was exposed, and had not taken necessary precautions".

influence on the implementation of prevention mechanisms.

The 2001 Decree brought another important innovation; the idea that risk prevention is a multidisciplinary activity. As will be discussed in the next section, the introduction of this multidisciplinary dimension fundamentally affected institutional reforms in health services.

3.2 A new political dynamic

In line with these legislative and regulatory changes, the first national Occupational Health Plan was launched in 2005 with the aim of reforming and improving the visibility of occupational risk prevention mechanisms. This plan noted that although there had been a significant reduction in the number of occupational accidents in France since 1970, progress was still insufficient; it also highlighted the crucial role of social partners in assessing potentially demanding working conditions. The plan set four ambitious goals: to increase knowledge of hazards and risks; to strengthen the effectiveness of monitoring; to remove barriers between the administration and businesses; and to encourage companies to actively manage occupational health. It enabled the coordination of training measures and information campaigns at a regional level. It also highlighted the various private and public sector actors and established conditions for collaboration on common research themes.

In the same spirit, the second Occupational Health Plan (2010-2014)⁶ reiterated the desire to find common ground between actors in risk prevention. The plan was marked by a drive to involve all stakeholders in the process and to put staff at all levels — managers, workers and employee organizations at the heart of the prevention approach. This plan aimed to translate European occupational health strategy and implement Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations in the French context.

The second Plan covered four main areas⁷:

- scientific research into occupational health and safety;
- the development of preventive measures for companies with fewer than 50 employees;
- the development of preventive measures for risks identified as priorities; and
- the implementation of health service reform.

Although occupational health had been a political, legislative and institutional challenge for over a century, the European directive of 1989 gave a major boost to occupational risk prevention. In a national

context strongly marked by the asbestos crisis, European legislation played a significant role in bringing French law closer to existing regulations in northern European countries. These regulations pre-empted the implementation of multi-year plans which put the issue on the national agenda, set objectives for the implementation of systems and initiated reforms in the health sector. More broadly, they provided consistency in a complex institutional environment that will be discussed in the next section.

4. An evolving institutional environment

The French system of risk prevention is strongly marked by state intervention that has led to the establishment of a Directorate-General of Work and a Directorate of Social Security which come under the responsibility of the Ministry of Work, Employment and Health. The declared intention of the first and second Health Plans was to ensure that risk prevention was properly handled. A National Steering Committee on Working Conditions, which brought together the State, social partners and businesses was established to meet this need. This tripartite body comprises representatives from the government, unions and employers, and it has an advisory role in the development of occupational health and safety legislation.

Another example of the significant role played by the State in this system is demonstrated by two public institutions that complement each other; the Work Inspectorate (*l'inspection du travail*) and social security bodies.

4.1 The Work Inspectorate: an institution in a phase of self-examination

This state organ is composed of a corps of inspectors who have the power to monitor industry compliance with employment law. The Inspectorate operates at a national level; it has the right to enter businesses and has enforcement powers. Since the publication of the 2001 Decree on risk assessment mechanisms it has also developed an advisory role for employees, personnel representatives and business owners. This important support role opened a debate within the Inspectorate on the dual principles of monitoring and advice. The debate focussed on whether the two roles were compatible and whether risk assessment (as envisaged in the Decree) challenged the status and role of the Inspectorate. It was not clear if an inspector could be both a co-author of the risk assessment and at the same time ensure compliance. It also raised the

question of whether the process should be monitored, or its means.⁸ This debate was typical of changes that resulted from the transposition of European legislation into the French system. These changes created a direct conflict in a state body disconcerted by a novel approach that gave the employer greater scope for action and they were the precursor for developments that would impact other large institutions. Consequently, one of the objectives set by the 2010-2014 Occupational Health Plan was to consolidate the activities of the Work Inspectorate and promote plans for its modernization and development.

4.2 Health insurance bodies: instigators, information disseminators and providers of compensation

Along with the Work Inspectorate, national and regional insurance funds for health and work-related accidents are another tool used by government to prevent occupational risk. Under the umbrella of the National Health Insurance Fund for Salaried Employees (*la Caisse nationale de l'assurance maladie des travailleurs salariés*), these social security agencies aim to prevent risk, to compensate employees who suffer from work-related injuries or an occupational illness and to determine employers' contributions to the fund according to the nature of the business.

There are 16 regional funds. In addition to the role they play in the identification of occupational illness and accidents and their compensation, they participate in Health, Safety and Working Conditions Committees (*Comités Hygiène de Sécurité et des Conditions de Travail*) at company level; they can also visit companies and they play a role in providing information and training to employees. The system was recently reformed, and the majority are now known as Occupational Pension and Health Insurance Funds (*Caisses d'Assurances Retraites et de Santé au Travail*; CARSAT). This reform is indicative of developments at the national level in occupational health and safety. The aim was to raise the profile of occupational accidents and illness and to give social partners a voice in the development of the funds' prevention policy at a regional level. The CARSATs also have an advisory and monitoring role. They provide industry with consultants and safety specialists who are experienced in the company's line of business. Trainers are also used to disseminate business methods and risk prevention tools. These funds are financed by both the contributions of employers and employees.

The 2010 Social Security Finance Act⁹ modernized the existing financial incentive scheme. The aim was to encourage companies to become more involved in the risk prevention process. SMEs were a particular focus;

those companies that invested in risk prevention could benefit from subsidies while contributions could be increased for others that had not taken action. Companies were made aware of the average cost of occupational accidents and illnesses. They were also told how contributions were calculated; in particular the fact that they depended directly on the severity of accidents and illnesses experienced in previous years. This reform of social security contributions came into force at the beginning of 2012.

4.3 Prevention bodies: the actors closest to the action

French institutional mechanisms are also based on several research and prevention organizations created during the twentieth century, which are under state supervision or have agreements with the State. These include the National Agency for Food Safety, Environment and Work (*Agence Nationale de Sécurité Sanitaire de l'Alimentation de l'Environnement et du Travail*), the Institute for Public Health Monitoring (*Institut de veille sanitaire*), the National Research and Safety Institute (*Institut National de Recherches et de Sécurité*; INRS), the National Agency for the Improvement of Working Conditions (*Agence Nationale pour l'Amélioration des Conditions de Travail*; ANACT) and its regional network, the Institute for Radiological Protection and Nuclear Safety (*Institut de Radioprotection et de Sécurité Nucléaire*), and OPPBTP (*Organisme Professionnel de Prévention du Bâtiment et des Travaux Publics*), an independent organization for risk prevention in construction and public works. Although space does not permit details of each of these organizations to be provided, they all play a key role in disseminating knowledge to employees and business owners. All have seen changes in their role and an increase in their audience since the 2001 Decree came into force.

ANACT was created in 1973.¹⁰ Coming under the responsibility of the Ministry of Work, Employment and Health it coordinates a regional network of associations managed jointly by employer and employee organizations. ANACT's mission is to improve working conditions and more broadly to raise the profile of health and safety issues to the same level as other business functions. It focusses its activities on small and micro-businesses, social partners and intermediaries working within companies, particularly human resource managers.

INRS¹¹ is a research organization funded by occupational accident and illness insurers.⁹ It is managed by representatives of employer and employee organizations. Its missions are varied. It offers tools and information to businesses, employees

and professionals working in the area of occupational risk, but it also carries out research in the field of risk prevention and provides training for various stakeholders (business owners, employees and students). INRS is one of the cornerstones of the system, both through the role it plays in disseminating information but also through its proactive role in undertaking research aimed at risk identification and new risk prevention measures.

The OPPBTP¹² is a more specialized organization. It is jointly managed by organizations representing employers and employees. It is funded by construction companies that are required to join. Its mission is to contribute to the prevention of occupational accidents and illness through providing advice, training and information to industry professionals. The OPPBTP also offers tools tailored to the construction industry.

All of these prevention organizations share the common feature that they are managed in partnership by trade unions and employers' organizations. Between them, they offer a wide range of tools and are closely involved in the dissemination of information and training. Linked to these services, another key role is played by occupational physicians who work more closely with the company.

4.4 The occupational physician: controversial reforms

The occupational physician is a key actor in health and safety issues at company level. The position was officially created in 1946, although the function has existed for much longer. The occupational physician has played a pivotal role in prevention mechanisms.¹³ However, the transposition of the 1989 Framework Directive into French law provided the impetus for further evolution as it introduced a multidisciplinary approach that expanded the concept of the occupational physician into that of occupational health services.

The occupational physician was made mandatory for all companies by the 1946 Social Security law. Occupational physicians hold qualifications both as a general practitioner and as an occupational physician. While they are supervised by the Ministry of Work, Employment and Health, they are funded by the employer. There are two types of occupational physicians, those who work on a business-to-business basis and those who work for an individual company. They cannot issue prescriptions and their mission is to participate in risk prevention mechanisms.

They also have a broader mission of surveillance and health monitoring. They are actively involved in

national surveys and in the assessment of risks associated with the handling of chemicals. Occupational physicians act as advisors to employee and employers' representatives in matters of improvements to working conditions, the adaptation of workstations, training and providing information to employees. For each company they work for, they must submit a document detailing the risks faced by employees. This document is made available to employees by staff representatives or through the company's Health and Safety Committee. It is also available to the Work Inspectorate. Finally, all employees must be seen by the occupational physician upon hire and undergo periodic check-ups at intervals determined by the company's area of activity and the employee's job. Bound by confidentiality rules, the occupational physician determines whether the employee is capable (or not) of undertaking the duties assigned to them. This special role played by the occupational physician in France explains why the country holds first place in the ESENER¹⁴ survey on the use of occupational health and safety services, in a position well above the European average^{*,+}. However, the fact that the service is financed by the employer and has the power to deliver a certificate of fitness has long been the subject of criticism from unions who see the occupational physician as the employer's doctor.

Furthermore, occupational medicine (a minor medical specialty) is trying to re-establish itself in the context of a declining demographic and the 2002 reforms that introduced a multidisciplinary approach. Practitioners,¹⁵ who now find themselves at the heart of a system composed of nurses, occupational risk prevention specialists, ergonomists and psychologists, fear a loss of autonomy. The decision to abandon the practice of a mandatory annual check-up and the introduction of the use of private doctors resulted in loud protests. On the one hand occupational physicians are concerned that they will lose their independence; on the other hand there is renewed suspicion from employees who are concerned about a loss of medical confidentiality¹⁶ (non-medical practitioners are not subject to the same constraints as doctors and may have access to employee information). Changes to occupational health services are the subject of debate within the industry itself. These debates are reminiscent of the questions raised about workplace inspections following the introduction of risk

assessments in 2001. The changing role of occupational physicians effectively puts them into competition with other prevention agencies. Consequently, one of the objectives of the second Occupational Health Plan was to make the role of this institutional mechanism clearer and more coherent; a second was to bring more social partners on board.

The following section discusses the various forms of personnel representation and highlights a particular French paradox — while the country has one of the lowest unionization rates in Europe it also has one of the highest rates of union representation in companies.

5. Staff representation, unions and employers' associations: the heart of business prevention

Recent developments in risk prevention mechanisms have reaffirmed the role of staff representatives in improving working conditions. Staff representation in France is composed of elected representatives and appointed representatives (shop stewards). In addition to these traditional forms of employee representation, some companies operate a Health, Safety and Working Conditions Committee, whose role will be discussed below.¹⁷

Two forms of elected representatives can be distinguished; staff representatives and Works' Council (*comité d'entreprise*) representatives. Whether there are staff representatives or not depends on the size of the company. Companies with more than 11 employees must hold elections for staff representatives. These representatives are mandated to represent the company's employees and, in the absence of a Works' Council they may be consulted on dismissals, working hours and professional training. In the company, they are the main interlocutor for the work inspector, and in order to carry out their duties they are allocated official time and have freedom of movement within the company.

Companies with more than 50 employees must establish a Works' Council consisting of elected representatives. The Works' Council is chaired by the business owner. The committee has social and cultural responsibilities as well as financial powers. It is consulted on issues affecting the organization, management, working hours, and conditions of employment and work. It is consulted should the company find itself in difficulty and prior to any decisions being taken on redundancy.

* 92% of French employees mentioned the occupational physician as part of their use of occupational health and safety services, compared to a European average of 69%.

+ When asked 'do you have regular medical check-ups?' 84% of French employees said that was the case compared to the European average of 68%.

A French survey highlighted the fact that between the late 1990s and 2004-2005 the presence of staff representatives was consolidated in establishments with more than 20 employees. By the end of this period 77% of establishments had a staff representative, compared to 74% in 1998-1999. In 2004-2005, 81% of establishments with more than 50 employees had either staff representatives or a Works' Council.

Alongside elected representatives are designated representatives. Designated representatives are trade union officials who may be appointed in a company with more than 50 employees. In smaller companies employee representatives may be designated as union stewards for a fixed term. Their function is to represent their union in negotiations with their employer. Following the Act of 4th May, 2004, companies without trade union representation may enter into agreements with staff representatives.¹⁸

5.1 Union representatives: the French paradox

It is difficult to understand the role of union representatives without first describing the place of unions in French companies. The percentage of unionized employees in France tends to hover around 8%, making it one of the lowest rates in Europe.¹⁹ However, the decline in union membership that began in the mid-1970s masks a paradox. While French unions are notable for their low membership, unions remain very prevalent in the workplace. In 2005, 41% of private sector and government employees reported that there was a union representative in their workplace, compared to 37.5% in 1996.²⁰

This union presence is related to the size of the business. It is particularly strong in businesses with more than 100 employees (public or private) where it exceeds 60%. It is less evident in companies with 50-99 employees and even less prevalent in companies with fewer than 50 employees. These figures are comparable between the public and the private sectors; however, there are marked differences in membership rates between the private and public sectors. In public companies union membership is around 15.4%, while it is just 5.1% in private companies. Another feature of French trade unions is that managers are more likely to be unionized than workers. This is true both for the public and private sectors. While 7.7% of managers are unionized, only 4.6% of workers are.²¹

The presence of unions continues to increase, particularly in those sectors where unionization is a traditionally well-established. In industry, half of businesses have a union representative; this is also

true in the education and health sectors. However, the union presence is weak in construction and commerce; in these sectors only a quarter of organizations had a shop steward in 2004-2005. In general, as with other forms of staff representation, the presence of union representatives has increased in both public and private sector companies.

Although there are differences in the mandates of staff representatives, they have very similar themes. Survey results have shown that in matters of concern to employees, working conditions were fourth (behind wages, working hours, employment and dismissal) and more important than labour relations and professional training. The same study showed that although employees have a positive opinion of the role of staff and union representatives they preferred to negotiate directly with their manager and department. Although employees thought that their representatives were effective spokespeople, many thought that they carried little weight in the decisions taken by management.

In addition to traditional forms of employee representation, some companies operate a dedicated body known as the Health, Safety and Working Conditions Committee, whose role will be explained and discussed below.

5.2 The Health, Safety and Working Conditions Committee: a decision-making body with an expanding role

Among the bodies representing staff, the Health, Safety and Working Conditions Committee (HSWCC) has a particular focus on health and safety matters. Established in 1982, the HSWCC saw its role expand following reform of the Labour Code and the introduction of the systematic assessment of occupational risk. It is mandatory in all companies with 50 employees or more and in organizations where the nature of the work requires it. The HSWCC performs tasks such as the analysis of working conditions, compliance verification, the implementation of training and awareness measures, and analysis of the causes of industrial accidents. In general, the HSWCC is consulted before any changes are made to workstations, work-rates or the introduction of significant new technology. The HSWCC is comprised of the employer or their representative, personnel representatives, and the occupational physician (who has an advisory role). The work inspector and a CARSAT representative can also participate. In the absence of a HSWCC, staff representatives undertake the same responsibilities.²² The 2004-2005 survey showed that, of the total number of establishments required to have Committee only 72% reported its existence. If these results are refined, it becomes clear that 95% of companies with

more than 500 employees had one, compared to only 59% of companies employing 50-100 staff (which leaves out a lot of small businesses under 50 employees).

The existence of an HSWCC has played a significant role in developing risk assessment documentation and its dissemination. In establishments with more than 20 employees, more than three-quarters claim to have carried out a risk assessment and in 2004, 64% of establishments reported having held discussions with social partners about working conditions. In companies that have a HSWCC, 94% of staff have access to risk assessment documentation, while in 18% of small businesses that have carried out the exercise, management has not distributed it to anyone. However as with other staff bodies, although employees approve the actions of the Committee they do not make much use of it, preferring to deal directly with their immediate manager and their department.

5.3 Employers' organizations: an intermediate actor in staff training

The role of employers' organizations and the attitude they take to working conditions is key in improving risk prevention. They are the social partners with whom trade unions negotiate and reach agreements. The most immediate consequence of this situation is the results of these negotiations impact a large number of employees — including those who are not unionized. Moreover, they may be extended across an entire industry and affect the whole workforce. Employers' organizations also share a management role with trade unions in prevention and insurance bodies and they participate extensively in the development of the legal framework. Again, this gives them significant weight, despite their small membership.

The consequence of transferring responsibility for risk prevention to the employer is that the majority now undertake internal occupational risk assessments. The fact that risk assessment tends to be carried out internally (rather than by external services) is due to the large number of small companies in the French economy. Since 2001, many professional associations have offered their members special training in the legislative aspects of risk prevention. Tailored training courses have also been set up to help their members fulfil risk assessment obligations. The objective of such training is to suggest methods and tools that can be understood by, and adapted to businesses in different sectors.

All these activities on the part of the State and social partners are necessary in order to cope with an economic context marked by changing employment standards and working conditions.

6. The current status of occupational health and safety in a context of increasingly unstable employment standards

The overall picture of occupational accidents and illnesses has shown significant progress over the last decade. However new risks have appeared in a deteriorating business environment.

According to the Social Security Code,²³ an accident "is considered as an occupational accident whatever the cause, whether the accident is due to or in connection with work, to any person employed or working in any capacity whatsoever for one or more business owners". Compensation for occupational accidents, accidents that occur during work-related travel and occupational illness is available from the moment the employee is hired. This compensation takes into account personal injuries and lost wages. Illness is recognized as an occupational illness if it appears in the table of illnesses that form an appendix to the Social Security Code. Typically such occupational illnesses are the direct result of exposure to physical, chemical or biological risk, or arise from the conditions in which work is carried out. As the relationship between cause and effect can be difficult to establish, it is often presumed from the type of work. A committee of experts is sometimes asked to make a ruling. Following an absence of three weeks or more, the return to work is subject to a medical examination. If the employee makes a full recovery, the employer must reinstate the employee in the same or an equivalent position. If the employee is incapable of returning to their previous position, the employer is required to find an alternative position within the company. A return to work on a part-time basis is also possible when there are medical reasons.

Despite a satisfactory reduction in the number of accidents, employee exposure remains high in certain sectors. In terms of overall change in the rate of occupational accidents there has been a decline since 2000; specifically, the rate has declined from 44 per 1000 in 2000 to 36 per 1000 in 2010.

However, the accident rate in the construction sector is 73 per 1000 which is twice the national average. Construction remains the sector where the number of serious accidents is the highest, with 8,299 occupational accidents causing a permanent disability and 118 resulting in death in 2010. Overall, the category most affected by a high accident rate is blue-collar workers in all sectors. Furthermore, men and young people are more affected than women and older workers, and medium-sized establishments suffer from

an above-average accident rate. The probability of experiencing an accident decreases with age; however, those that do occur are more severe.²⁴

As for occupational illness, over 90% of illnesses recognized by the National Health Insurance Fund are either musculoskeletal disorders (78%) or asbestos-related illnesses (15%). Over the three year period 2007-2010 the incidence of occupational illness slowed; particularly asbestos-related illnesses. Although the rate of asbestos-related occupational cancer fell during this period, rates for other cancers increased between 2009 and 2010. A comparison of men and women shows that occupational illness is more prevalent in women than in men, although it is more severe in men. The rate of occupational illness resulting in a partial disability is higher among men. In general, men are more likely to suffer from occupational cancers than women, whereas the latter have a greater probability of suffering from a musculoskeletal disorder.^{25, 26}

The measurement of occupational illness is problematic for two reasons. Many illnesses are not reported either by the employer or the employee and others are not recognized as occupational illnesses. Furthermore, the employment of older workers is made more difficult by health problems.²⁷ A study of older workers on the relationship between health problems and job loss showed that one in five attributed a decline in health to an occupational accident or illness related to their former occupation. Blue-collar workers were the category most affected. In this category, the study found that more than 50% of these workers claimed to suffer from a health problem likely to limit their ability to work. Musculoskeletal problems were the disorders most commonly cited, but nearly 4% suffered from psychological disorders.

Among the risks faced by employees, psycho-social risks play a significant role. Following a 2007 national conference on working conditions, stress has become a major concern, together with the broader risks that come under this heading, such as physical and verbal abuse, various types of harassment, addictive behaviour, and burnout. Media coverage of work-related suicides and research in this area has considerably changed the attitude of trade unions and employers' organizations. The Agreement of 2nd July, 2008 which transposed into French law the European Framework Agreement of 8th October, 2004 is a major advance in this area. The Agreement, signed by all the organizations concerned aims to remind employers and workers of their responsibilities, and provide ways to identify and prevent problems arising.²⁸

However, beyond the objectives set by national plans and collective bargaining agreements, work-related burnout and the deterioration in working conditions takes on a particular meaning in the context of declining employment standards. For some employees, job insecurity has had the effect of degrading working conditions and increasing burnout.

In a difficult economic context, the labour market excludes some categories of employees. According to the International Labor Organization, the overall French unemployment rate for the fourth quarter of 2011 was 9.4% (9.2% for men and 9.7% for women). Young people (15-24 year-olds) were most affected; their unemployment rate was 22.4%. Five per cent of the population was underemployed, and 6.8% held fixed-term or temporary contracts.²⁹

The increase in unemployment over the past four years, the fact that fewer people are in permanent jobs and the increase in those on temporary or fixed-term contracts, reinforces feelings of dissatisfaction or insecurity in employment. 27% of employees felt vulnerable in their place of employment and had experienced deteriorating working conditions. Another striking survey result is that 23% of employees in fixed-term contracts claim not to have received safety training, compared to 12% of workers in stable employment. Employees on permanent contracts who find themselves underemployed and those who fear losing their jobs have more limited access to occupational risk prevention mechanisms. These groups are more likely to report increased physical demands and greater exposure to occupational risk. The same study mentioned that these groups are significantly more likely to experience a work-related accident than employees in stable employment.³⁰

This accumulation of strains that include variations in working hours, a higher work-rate, a lack of autonomy and a lack of collective support results in an increased risk of deterioration in the physical and mental health of employees. Those employees who experience job insecurity suffer from daily uncertainty which is the cause of stress that impacts both their personal lives and their experience of work.³¹

7. Conclusion

Spurred on by the European Union, France has made considerable progress in the domain of occupational health and safety over the past decade. Although awareness of the issue already existed, the European regulatory framework set a schedule, initiated a general approach for the overall reform of institutional

mechanisms and increased participation at company level. Although working conditions have been a matter of concern for French unions since their foundation, the issue of health and safety appears to have been dominated by state bodies and the occupational physician. The latter, often perceived as the employer's doctor has suffered from a lack of independence and legitimacy in the eyes of unions. Despite strong opposition to the various reforms, the institutional changes that France has gone through since the transposition of the 1989 Framework Directive have resulted in a general improvement in indicators. Over the past ten years the reduction in the rate of occupational accidents and to a lesser extent a reduction in occupational illness shows that the reform package has not been without effect. The requirement imposed on companies to assess and prevent risk has enhanced the legitimacy of the HSWCC and more generally, has enabled social partners to take ownership of the issue. The consultation process that preceded the drafting of the 2010-2014 Occupational Health Plan is indicative of these changes.

Since the implementation of national plans that are consistent with broader public health and environmental issues, the shortcomings of the French system have become more apparent. Consequently,

the objectives defined by both Occupational Health Plans aim for continuous improvement in risk detection, the development of initial and ongoing training and the provision of information and support to companies.

Despite the existence of political will and rapid regulatory changes some essential points remain to be addressed in the coming years. First, significant gaps remain between practices in small businesses with fewer than 50 employees and the remainder of French companies. These organizations have been identified as a priority by all prevention bodies; they must now make the effort to profit from the results of research carried out at international and European level. Secondly, differences in the rate of occupational accidents and their severity, between activity sectors raises questions about the provision of initial and ongoing training, and the quality of employment and employee representation in certain domains. Finally, job insecurity remains a powerful threat to improvements in working conditions. The danger is that a dual labour market is created, which would result in an increase in the number of workers highly exposed to risk, and for whom existing mechanisms are either irrelevant or inapplicable.

References

1. Thébaud-Mony A, Daubas Letourneux V, Frigul N, Jobin P. *Santé au travail approches critiques*. Paris, la découverte coll recherches, 2012.
2. Direction Générale du Travail. Conditions de Travail, Bilan 2010. Paris. Bilan et Rapports, Ministère du travail de l'Emploi et de la santé, 2011.
3. Loi n°91-1414 modifiant le code du travail et le code de la santé publique en vue de favoriser la prévention des risques professionnels et portant transcription des directives européennes relatives à la santé et à la sécurité
4. Décret n° 2001-1016 du 5 novembre 2001 portant création d'un document relatif à l'évaluation des risques pour la santé et sécurité des travailleurs.
5. Circulaire N° 6 DRT du 18 avril 2002, prise pour l'application du décret n° 2001-1016 portant création d'un document relatif à l'évaluation des risques pour la santé et sécurité des travailleurs,
6. <http://www.travail-emploi-sante.gouv.fr/IMG/pdf/PST.pdf>; viewed 25 February 2012
7. <http://www.travail-emploi-sante.gouv.fr/actualite-presse,42/dossiers-de-presse,46/plan-sante-au-travail-2010-2014,11031.htm>; viewed 25 February 2012
8. Tiano V. Le débat au sein de l'inspection du travail. Aix-en-Provence. Document SEMINAIRE/thèse LEST, 2001.
9. Loi N° 2010-1594 du 20 décembre 2010 portant sur le financement de la sécurité sociale
10. <http://www.anact.fr/>; viewed 10 March 2012
11. <http://www.inrs.fr/accueil.html>; viewed 10 March 2012
12. <http://www.oppbtp.fr/>; viewed 10 March 2012
13. Buzzi S, Devinck J.C and Rosenthal P.A. *La santé et la sécurité au travail en France 1880-2006*. Paris : La découverte, collection repères, 2006
14. <http://www.esds.ac.uk/findingData/snDescription.asp?sn=6446&key=esener> viewed 17 March 2012
15. Loi N° 2002-73 du 17 janvier 2002 de modernisation sociale.

16. Mercieca P and Pinatel C. santé au travail pour une approche pluridisciplinaire. *Travail et changement septembre n°321*, octobre 2008. 2-7
17. Jacod O. Les institutions représentatives du personnel : davantage présentes, toujours actives mais peu sollicitées par les salariés. *Premières synthèses n°05.1*, DARES, Février 2007
18. Loi n° 2004-391 du 4 mai 2004 relative à la formation professionnelle tout au long de la vie et au dialogue social
19. Jacod O. Le paradoxe du syndicalisme : un faible nombre d'adhérents, mais des syndicats bien implantés. *Premières synthèses n°16.1* DARES, Avril 2008.
20. Amossé T. Mythes et réalités de la syndicalisation en France. *Premières synthèses n° 44.2*. DARES, octobre 2004.
21. Pignoni MT : Présence syndicales : des implantations en croissance, une confiance des salariés qui ne débouche pas sur des adhésions. *Premières synthèses n°14.2* DARES, avril 2007.
22. Courtois T. Plus de trois établissements sur quatre déclarent évaluer les risques professionnels. *Premières synthèses n° 09.3*, DARES, Mars 2007
23. http://www.legifrance.gouv.fr/affichCode.do;jsessionid=69C8D2A6E9C9E712FF048B2BF84F98E3.tpdjo06v_2?idSectionTA=LEGISCTA000006156122&cidTexte=LEGI-TEXT000006073189&dateTexte=20100403. Code de la sécurité sociale; art 411.1, viewed 2 April 2012
24. Euzenat D. L'exposition des salariés aux accidents du travail en 2007 ; *Premières synthèses n°50.2*, DARES, décembre 2009
25. Euzenat D. L'exposition des salariés aux maladies professionnelles en 2007; *DARES Analyses n°056*, septembre 2010
26. <http://www.risquesprofessionnels.ameli.fr/chiffres-cles-et-statistiques/nos-statistiques/> viewed 15 April 2012-04-18
27. Waltispeger D. Pénibilité au travail et sortie précoce de l'emploi ; *Premières synthèses n°03.1*, DARES, janvier 2008.
28. Douillet P and Mary-Cheray I. agir sur le stress et les risques, travail et changement n°318. Mars-avril 2008. 1-14
29. INSEE conjoncture, *Informations rapides*, 1 March 2012. <http://www.insee.fr/fr/themes/info-rapide.asp?id=14> ; viewed 10 April 2012
30. Rouxel C. Conditions de travail et précarité de l'emploi. *Premières synthèses N° 28.2*. juillet 2009.
31. Lerouge L. Les effets de la précarité du travail sur la santé : le droit du travail peut-il s'en saisir ? *Pistes Vol 11 n°1*, Mai 2009
<http://www.pistes.uqam.ca/v11n1/articles/v11n1a8.htm>

GERMANY

Ralf Pieper

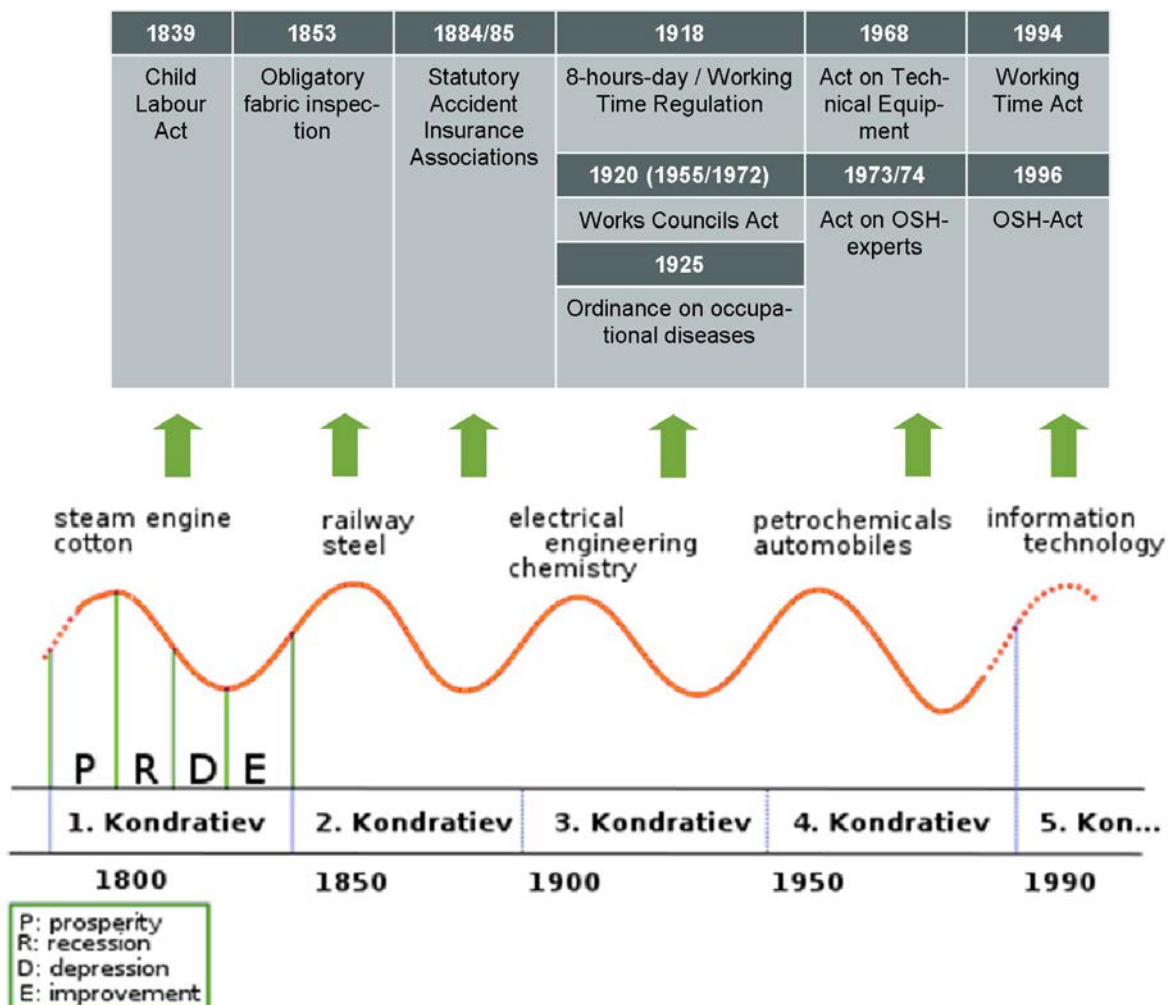


“How do characteristics of the regulatory framework and employment relations tradition affect establishments’ management of health and safety at work in Germany?”

To answer this complex question, the following paper tries to describe and analyse the determinants of workplace occupational safety and health (OSH) practice in Germany. The approach used is a historical one in order to give a holistic overall view of the development of OSH. The paper, therefore, attempts to describe the economic, organisational, technological, political and legal context of OSH. At the end, the state of the art and essentials of OSH in Germany are summarized.

1. OSH in the context of the industrial, economic and political history of Germany

First: what are the general tendencies of the framework for the development of OSH in Germany? Though the theory of long waves in business cycles (Kondratiev waves) lacks validity and does not explain the dynamics of capitalism, one can use it as a model for a rough visualisation of basic technological innovations which are essential not only for progress in labour productivity but also in the development of risks concerning safety and health at work, and political and legal reactions to this development.



http://en.wikipedia.org/wiki/File:Kondratieff_Wave.svg (13.4.2012)

The restrictions of this representation are obvious since:

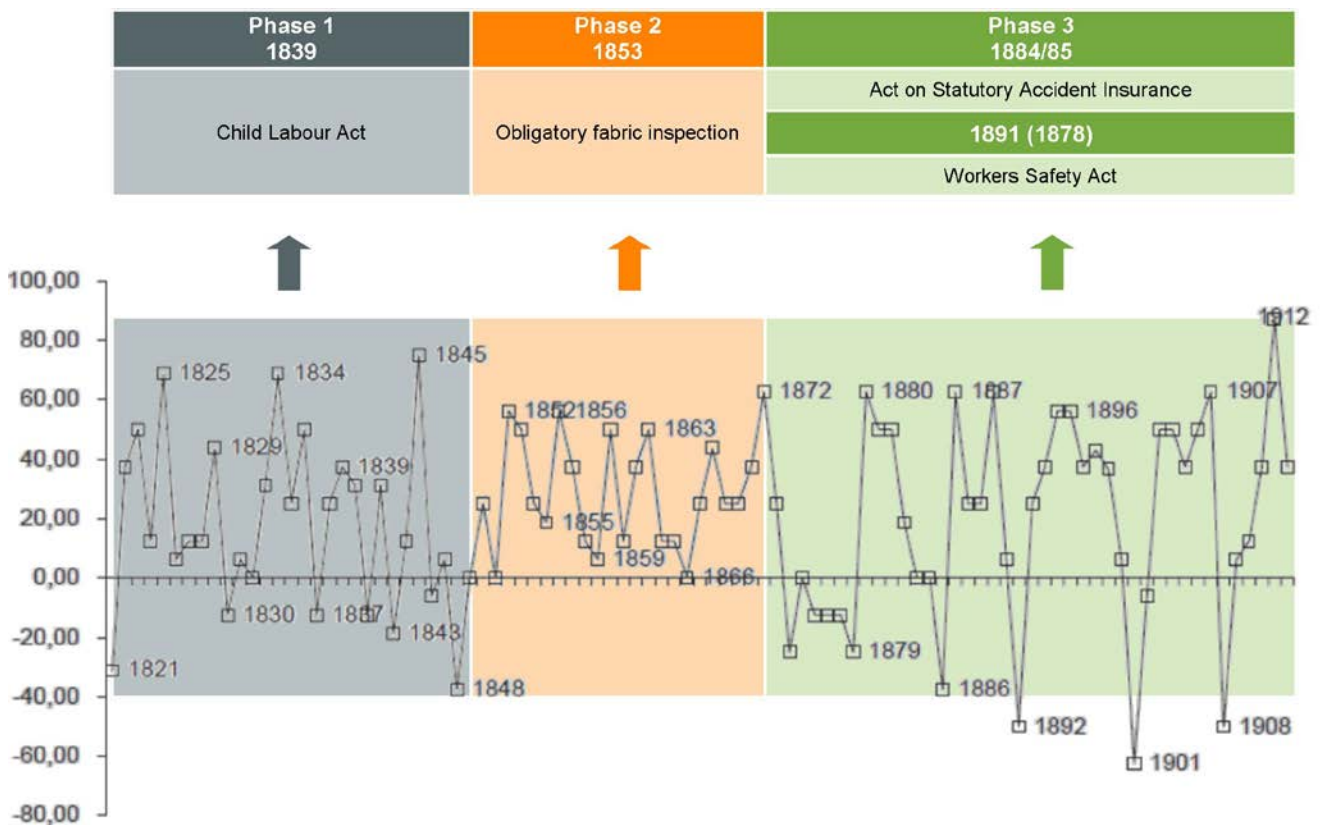
- some technologies are not referred to, e.g. general communication-, nuclear-, bio- and gene- or nano-technology
- the role of the services sector is not considered
- the different technologies are linked together and modified in the historical process
- the curve suggests a continuous development or improvement and – not least –

- there is no corresponding context of the socio-political process.

To get a more realistic and detailed view it is necessary to look at the business cycle.

2. OSH development 1820-1914

Below is a chart for the first and second Kondratiev which covers the beginning, the permeation and the full blossoming of industrialization in Germany:



Business cycle in Germany 1821-1913

Spree, Reinhard: *Business Cycles in History*, Munich, 2002 http://epub.ub.uni-muenchen.de/6/1/0201_spree.pdf

Viewing this picture one can say that the business cycle in Germany from the early 19th to the early 20th century can be divided into three phases.

Within the **first phase**, the frame of German economic and political development was strongly affected by its special position among the other emerging capitalist nations. The starting point of industrialization was a fragmented political landscape at the beginning of the 19th century, still then caused by the results of the 30–years-war, and affected by the Napoleonic era, which caused a first, external, but unsuccessful, attempt at political and legal unification. The civil revolution of 1848, therefore, failed.

However, from then on, opening the **second phase**, the hegemonic claims and supremacy of Prussia began to develop a constant pressure on the unification process (“German Unification Wars”). This was an essential precondition to create a national single market to fulfil the needs of the prevailing political-economic interests.

This supremacy, culminating in the war between France and Germany of 1870/71, opens the **third phase**, leading to the more or less authoritarian society of the German Empire (“German Reich”), affected only by the emerging labour movement. However, this movement was also partly entrapped in this society, as one can see at the beginning of the 1st World War.

Overall, the workforce was ideologically integrated in the ruling nationalistic value system, culminating in the

horrific manslaughter of the war.

Some data on population and economic growth which illustrates the dynamic development in Germany at the end of the 19th and the beginning of the 20th century:

In 1871 the population was 41,058,792; in 1910 it was 64,925,993, an increase of 24 million in 39 years.

Town population increased from 14,790,798 in 1871 to 38,971,406 in 1910, showing that capitalism had absorbed the energy of the rapidly-growing population.

In 1871 numbers in rural communes (with less than 2,000 inhabitants) were 26,219,352; in 1910, they were 25,954,587: agriculture had remained stationary; but productivity had risen.

The Censuses of Occupation bear this out with no uncertainty. In 1882 agriculture and forestry accounted for 19,225,455 of the people, whereas in 1907 the number fell to 17,681,176. On the other hand, numbers in industry rose from 16 to 26 million, and in trade and transport from 4.5 to 8 million.

The use of coal and iron is a means of measuring a country's industrial advance. Let us quote a fact or two. Between 1900 and 1911 Germany's coal output rose from 109 to 161 million metric tons.

Over half was used directly in industry, 16 per cent in transport, 13 per cent in houses, 5 per cent in making gas, and 10 per cent in making coke, briquettes, etc. This clearly shows the predominance of industrial undertakings.

John Maclean, in: Vanguard, November 1915, p.4 & 7 using Dawson's "Industrial Germany"

Within the process of the emerging national inner market two different concepts of public OSH law were competing.

The erstwhile concept – dating back to the first OSH act in Prussia of 1839 – was based on legislation by the Prussian state (state public law). This legislation was accompanied by the legal foundation of the first OSH authorities. This concept was applied in the above mentioned first phase and was further developed in the second and especially in the third phase.

The second concept – initiated by the Statutory Accident Insurance Act of 1884 which was part of the foundation of the social insurance system in Germany – was based on self-administration by entrepreneurs within a social insurance institution (but with a strong influence of the state (i.e. the German Empire)). This special type of legislation (so called "Accident Prevention Rules") can be described as autonomous legislation (autonomous public law). "Autonomous" is something of an exaggeration because this legislation was, and still is, controlled by the state (since the implementation of the EU-OSH regulation in the 1990s there has been strong pressure to minimize this legislation because of the increasing and dominating influence of federal state legislation).

However, both sorts of legislation were of public law in nature; i.e. the Empire or the statutory accident insurance associations determined obligations for the employer.

On the other hand, private law was rather a patchwork in Germany up until the enforcement of the "Bürgerliches Gesetzbuch – BGB" in 1900. Private law was, and still is today, of basic importance for labour law including OSH legislation. This is because it enables the individual employee to make legal demands that the employer fulfils his duties according to the labour contract. The precedent condition for this is that this duty is fixed in public OSH law and is suitable for application in the labour contract. Later on, not only individual private law but also collective private law became more and more important (e.g. works councils (1920) and works constitution (1973) on the one hand, and collective bargaining agreements on the other hand (see 1.4 below)).

With the dismissal, forced by the new emperor Wilhelm II., of Bismarck in 1890, who was strictly against direct influence of the state on employers and preferred the social insurance concept, the erstwhile concept was renewed in 1891. The result of the clash of the two concepts of OSH legislation and institutions was a complex (dual) system, which persisted – both in terms of its benefits and drawbacks – over the following decades up to the beginning of the 21st century. On the one hand a comprehensive system of surveillance and advice for companies was set up; on the other hand, within this system it was not possible to pass a basic act containing general obligations for the employer and general obligations and rights for employees until 1996. This gave the state of the art of German OHS regulation and institutions, up to the

1980s, the character of a patchwork consisting of disconnected standards.

3. OSH development 1914-1945

Returning to the historical process, though the end of the 1st World War was accompanied by fundamental changes, e.g. a more or less democratic constitution, the core of the German authoritarian society still remained and this culminated in the self-abandonment of the weak democratic forces of the so called “Weimar republic” in 1933. But within this short decade there were some steps in the development of OSH which are worth mentioning and which are shown in the following figure of the business cycle in Germany from 1914 to 1938.

- **Phase 1** can be characterized as the post war period with profound political and economic problems and conflicts.
- **Phase 2** covers the “Golden Years” of the 1920s.
- **Phase 3** was characterised by the “Great Depression”. As a result of the deepest economic crisis of the 20th century, in combination with the weak democracy in Germany, the National Socialist Party came to power in 1933.

This marks the beginning of **phase 4** which includes the 2nd World War, together with the racist and anti-Semitic inhuman Nazi terror, culminating in the assassination of 6 million people in the concentration camps and approximately 60 million people due to the war worldwide.

In **phase 1** the fixing of the 8-hour day in 1918 in German OSH legislation marks an important step in the improvement of working conditions. On the other hand, this more or less formal right of workers was diluted from the beginning, mainly due to the economic and political crisis of 1923. Since then, legislation on working time has been designed in a very flexible way and even today allows for a lot of deviation. In other words, and relating to the situation today, the atypical employment relationship has now become the typical employment relationship (see 2 below).

Another important event was the enactment of the Works Councils Act in 1920. Initially only a poor concession for the representation of workers against the employer, i.e. a sort of a desolate shadow of the former concept for a republic of councils which failed in 1919, it was developed more than 50 years later into the Works Constitution Act of 1972 in Western Germany (see 1.3 below). This legislation was also a

political decision for the implementation of a dual system for industrial relations in Germany: Trade Unions and Employers’ Unions at the sectoral level (collective bargaining agreements); and works councils and employers at the company level.

Within **phase 2**, an amendment of the Act on Statutory Accident Insurance in 1925 extended the task of insurance not only to accidents when travelling to and from work but also to occupational diseases. Eleven were included in the Occupational diseases ordinance (by 2012 this had increased to more than 70).

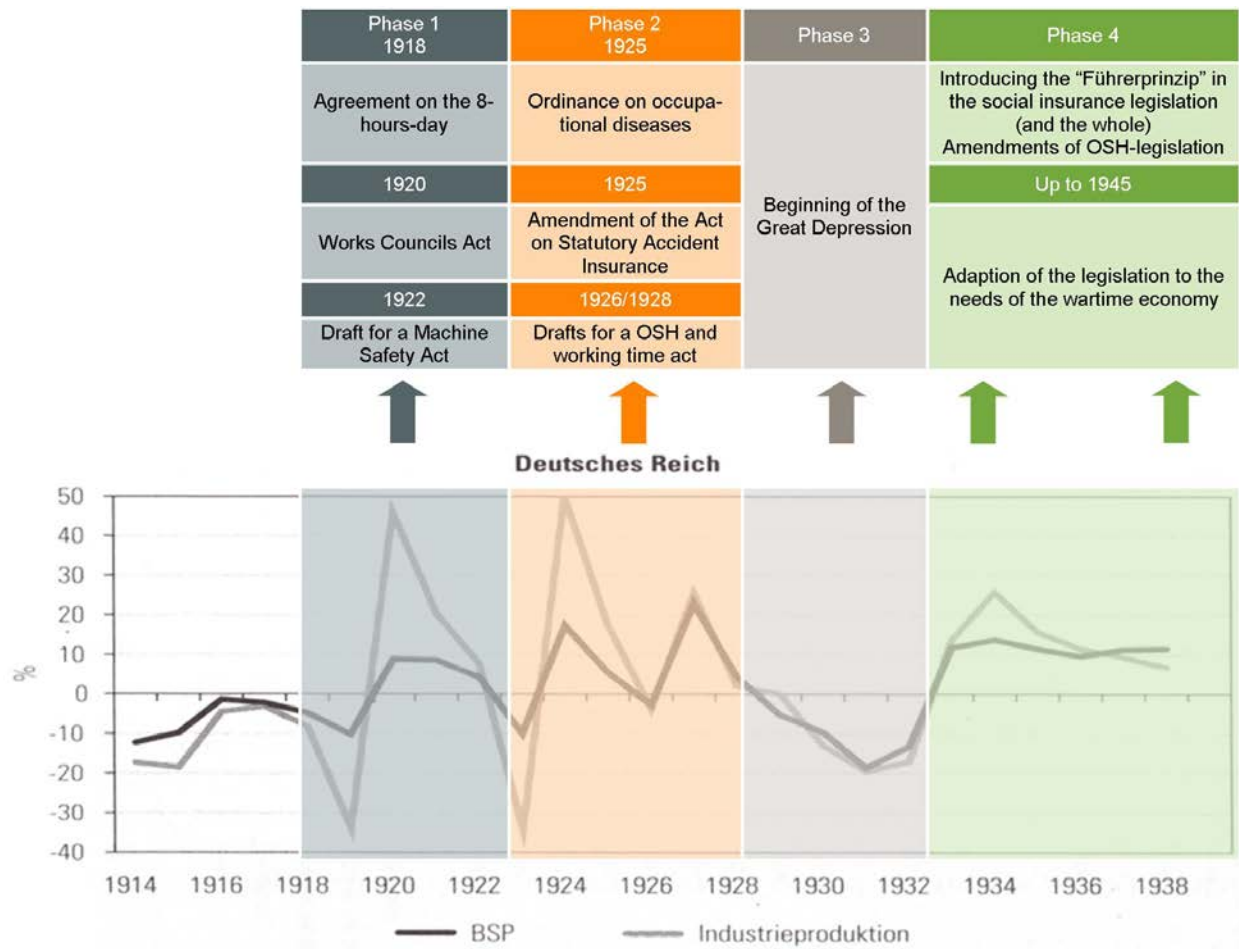
In 1926 and again 1928/29 efforts were made to pass a general OSH act, but these were not successful at all. The reason for this is found not only in the overall political situation but also in the dual system of OSH in Germany. The stumbling blocks at issue were the question of the removal or retention of inspection by the Statutory Accident Insurance Associations, the idea of a concentration of inspections by the state authorities at the level of the Reich and the projected reorganization of these authorities in a form of self-administration.

The development within **phase 3** can be characterized as the years of the “Great Depression”. With the collapse of the government under Chancellor Müller (SPD) in 1930 the German parliament increasingly lost its power to the Reich President Hindenburg and his presidential cabinets. Progressive activities on social policy, including OSH, were reduced to a minimum and important standards were diluted or removed. Industrial work relations were strongly affected by the enormous unemployment rate. Unemployment rose to 6 million people (short time work not included!) at the beginning of 1932, i.e. one in three of the workforce in Germany.

In **phase 4** the National Socialist Party came to power and axed the rest of the democratic structure of the republic of Weimar with the implicit acceptance of the conservative parties. It was not a “Machtergreifung” (takeover) but a tolerated (except by the Social Democratic and Communist Parties) coming into power. The basic economic structures, though, remained. However, the political structure and the basic principles of legislation were fundamentally changed (“Führer-Gefolgsman“-principle). Political parties and organisations were forbidden or “gleichgeschaltet”. Collective bargaining and the works councils (trade unions included) were removed by the Act for the Arrangement of National Labour of 20.01.1934. Under these circumstances, it seems curious that OSH legislation was strengthened in some cases within the following years. However, this is only a contradiction at first sight. Safe and healthy work

conditions are a precondition for productivity. The switch to the war economy and the militarization of German society required an enforced modernization of industrial structures. And this again required an adequate development of OSH, in particular to create optimum conditions under which the workforce could be regenerated. Therefore a focal point on OSH legislation in this period can be found in social aspects of OHS, all over-accentuated by the principals of the

national socialist ideology. To name only the most important: the Act on Homework of 1934, the Ordinance on the Arrangement of Working Time of 1938, the Youth Employment Protection Act of 1938 and the Maternity Protection Act of 1942. During World War II the above mentioned social OSH legislation had been reduced to a minimum due to the war - not forgetting the forced laborers who were completely without rights.



Quellen: Mitchell 1978, United States Department of Commerce, Wagenführ 1933

Krüger, *Allgemeine Theorie der Kapitalakkumulation: Konjunkturzyklus und langfristige Entwicklungstendenzen* (2010)

An amendment of technical OSH legislation was made by the Act on Hazardous Substances of 25.03.1939 which remained in force until the Act on Chemicals of 1980. The former autonomous OSH law lost its relatively autonomous character when the Act on the Constitution of Social Insurance of 1934 came into force. That legislation implemented the "Führer" principle and eliminated all forms of self-government. It was the ideological principle for all industrial relations. Within this new order there was a reworking of the accident prevention regulation in 1934. In 1936 the Ordinance on Occupational Diseases was

redesigned: occupational medicine examinations then had to be carried out by state controlled health professionals. This was done despite concerns of the Accidental Insurance Associations. And these concerns were not baseless at all because these health professionals had been tied to a general aim of the NS health policy: to preserve the job performance of the workers in the war industry. The number of those professionals rose from 467 in 1939 to approximately 8,000 in 1944.

4. OSH development 1945-1990

The end of the 2nd World War opened an era with fundamental changes in the framework for the development of OSH in Germany (within this rough description of the history of the development of OSH in Germany from 1945 up to 1990 the focus is based on the Federal Republic of Germany; cf. WIENHOLD, 2012, for a comprehensive view on the very specific development in the German Democratic Republic 1949-1990).

In **phase 1**, beginning in the early 1950s, there seemed to be a golden and never-ending period of economic growth and welfare. Western Germany became an integral part of the Western hemisphere and therefore an integral player in the Cold War Era. In 1951 Germany became a member of the European Community for Coal and Steel, and in 1956 a member of the European Economic Community. The business cycle continued, though, and in the midst of the 1960s society had to take note of the fact that economic crises were still part of economic growth.

The first noticeable crisis after the war **opened phase 2** in which fundamental changes to the structure of industry and services appeared. In part, the existing political system was not compatible with this. With the change of the German government in 1969 to a social-liberal one, some major reforms to economic, social and labour policy were carried out. These activities had been shut down since the middle of the 1970s, when the economic situation became critical again.

Phase 3 can be described as an era of another paradigmatically political change: from Keynesianism to Austerity on one hand and – on the other – to a much stronger influence of the European integration process initiated by the concept of the single European market. At the end of this phase the collapse of state capitalism in Eastern Europe opens **phases 4** and **5** which will be covered in section 1.4.

Since 1949, the beginning of **phase 1**, the process by which OSH legislation was formulated, approved and promulgated was more than ever determined by the distribution of power between the federation (Bund) and the federal states (Länder). The Federal Constitution - the "*Basic Law*" (Grundgesetz, -"GG"-) – following on from the Weimar constitution – provided that the Bund should have concurrent legislative powers and thus be entitled to preempt state legislation in the area of work-related law (which also included OSH law) in Art. 74 No. 12 GG. The main 'basic right' for all people concerning the environment and OSH was the right to live and to be bodily intact (Art.

2.2 GG). The structuring policy principle was the welfare state principle (Art. 20 GG).

However, within this phase the development of OSH was quite static, with the exception of the amendment of the statutory accident insurance legislation in 1963. Even the Works Constitution Act of 1952 was only a slightly improved revision of the Workers Councils Act of 1920 and reflected the restrictive political climate within the cold war era.

According to **phase 2** some very important events in the development of OSH in Germany are to be mentioned: the Technical Equipment Act of 1968, the Works Constitution Act of 1972 (which has its precursors in the Workers Council Act of 1920 and the Works Constitution Act of 1952) and the Act on OSH Experts of 1973/74.

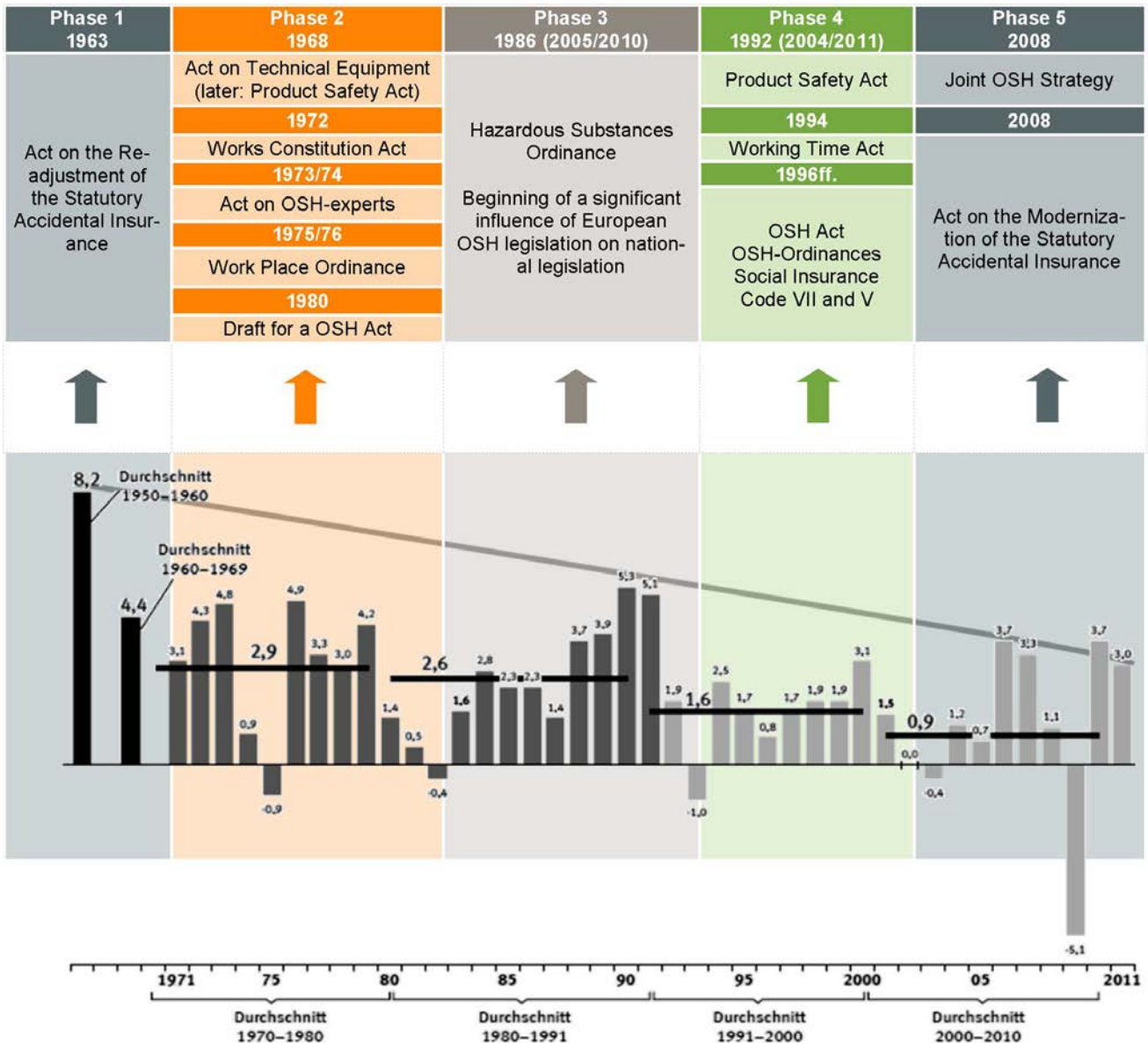
The Technical Equipment Act (later developed into the Product Safety Act of 1977/1992/1997/2004/2011) obliged the manufacturer to observe the measurements for technical equipment included in Accident Prevention Rules by the Statutory Accident Insurance Associations.

This national concept was amended in 1992 due to the concept of the Single European Market ("New Approach"). Since then it is no longer possible to make use of national accident prevention rules or other national regulation. The obligations for manufacturers are now fixed in EU-directives.

The Works Constitution Act of 1972 was, and still is, based on the general dual system of work relations in Germany, but it has improved the chances for an intensive engagement of the works councils to be involved in the design of OSH at the workplace.

According to OSH legislation, this act contains not only the basic rights for the works councils to be informed about the implementation of this legislation in their company, to get the necessary resources for that, to be involved in the actions of the OSH authorities, and also for a concrete achievement relating to risk assessment and the co-design of the concrete measurements of OSH.

This core of rights of the works councils on OSH gives them the right of co-determination on all regulation on OSH, which can be described as flexible. This means that the employer can choose between different solutions. The main problem up to 1996 was that OSH legislation did not cover any of these regulations. Only since 1996, with the enforcement of the OSH Act and afterwards the OSH ordinances, has this situation changed.



Business cycle in Germany 1950-2011 - Statistisches Bundesamt (2012)

The Act on OSH experts (“ASiG”) of 1973, which was enforced in 1974, was focused on the organisation of OSH in the company. It did not contain general obligations of the employer nor did it contain individual rights or obligations of employees. This act placed employers under a duty to appoint appropriately qualified officers to support them in occupational health and safety matters, including ergonomic workplace design. The ASiG only had jurisdiction over private companies. In the public sector an equivalent standard had to be granted. The ASiG only set a framework of obligations. It was the task of the holders of the statutory accident insurance (SGB VII) to create Accident Prevention Rules (Unfallverhütungsvorschriften – UVV) which were issued by the various “Berufsgenossenschaften” (industry and agriculture) and “Unfallkassen” (public sector). In 2011 the accident prevention rule “UVV

DGUV Vorschrift 2” came into force and replaced the older versions in order to harmonize them and to set out new concepts. It contains specific requirements regarding the appointment of safety officers and company doctors for each individual industry sector, including the public sector and agriculture. In order to adapt the tasks of the ASiG to various types and sizes of companies, it is possible for an employer to appoint officers in different ways: in bigger companies the employer may appoint employees as officers; and in medium and small companies the employer may appoint freelancers or external services as officers. Employers are required to make sure that the officers in their companies comply with their tasks. Employers have to support employees in that respect and provide them with resources (assisting personnel, rooms, equipment, etc.) as necessary. Last but not least, employers also have to make sure that employees are

able to participate in activities to further their qualifications. The duties of occupational health and safety officers include advising employers on the entire range of health and safety factors in the working environment. This starts with the planning of operating facilities and the purchasing of equipment, and extends to advising employers in the assessment of working conditions. Among other things, company doctors perform medical examinations and advise employees on work-related health matters. To ensure the standard of quality of the work of company doctors as well as of safety engineers, the employer is obliged to appoint only officers who are equipped with the necessary knowledge. The officers must be free to apply their knowledge. They have to work together with the works councils and with other experts on technical safety, health and environmental health. The employer is required to establish an OSH Committee at the company level ("Arbeitsschutzausschuss"). The establishment of such Committees is mandatory for establishments with more than 20 employees. The ASiG also enables the works council to participate in decision-making regarding the following issues:

- Company doctors and safety engineers have to work together with the works council;
- Company doctors and safety engineers are obliged to inform the works council about important OSH issues;
- The works council has the right to participate in decision-making regarding the appointment and tasks of company doctors and safety engineers;
- The works council is also represented on the Safety and Health Committee ("Arbeitsschutzausschuss").

5. OSH development 1990-2012 and the results of the development since 1839

The answer to the question about the development of OSH in the past two decades in Germany also includes the answer to the question about the results of the development from 1839 until the beginning of the 21st century. This is because some fundamentals of the development of OSH within the past 170 years in Germany are still valid but they have been modified and structured in a new way by European OSH policy and legislation. Since the end of the 1980s the implementation of European OSH regulation has been embedded in this system which strengthened the provisions but also encountered its limits. In particular, the "Dual System" was often criticized during the past decade. One of the most important influencing factors

for the further development of the "Dual System" has been the SLIC (Senior Labour Inspection Committee) evaluation report of February 2006. Additionally, from about 2003 a politically driven debate began in Germany concerning the future of the "Dual System". The idea of disintegrating one of its two pillars provoked two contrary positions, depending on the interested party (the Republic, and the Federal States).

All of these debates and conflicts ended in a typical Solomonian compromise: a "Joint German OSH-strategy" which was integrated into the German OSH Act at the end of 2008. The key component of this strategy and its regulation is an intensified cooperation between the two pillars of the "Dual System" based on binding targets and joint institutions. This solution was not only forced by the national debate in Germany but also by the Community strategy for 2007-2012 on health and safety at work: "Improving quality and productivity at work". According to the Commission the key objective of the Community strategy for this period was the continuous and sustainable reduction of accidents at work and occupational illnesses. From the Commission's point of view, the overall objective during this period was to reduce the incidence rate of work accidents per 100,000 workers by 25% in the EU 27.

In Germany the programmatic result of the European regulation was propositions on the reorganization of OSH law in 1999. Against the background of the European OSH framework, the stakeholders (the state, statutory accident insurance associations and social partners) agreed on these propositions which were amended in 2003 and 2011. Key aspects are:

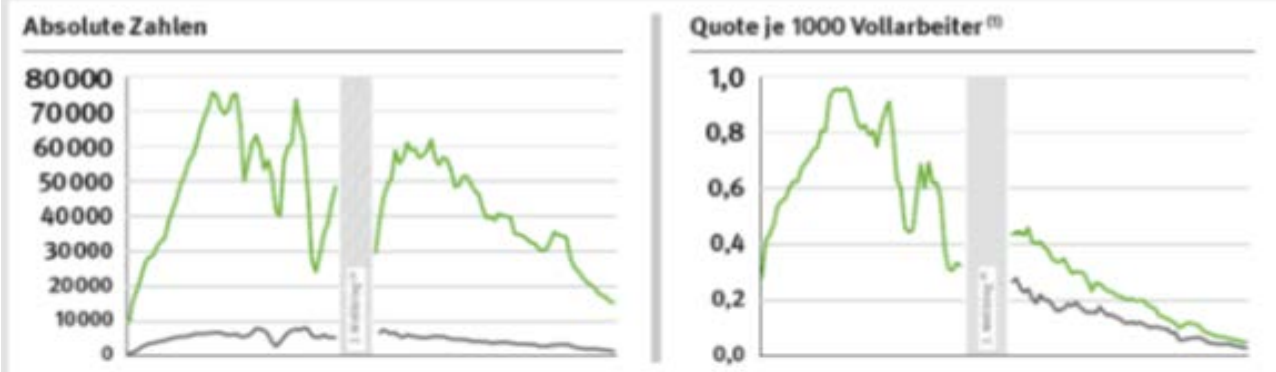
- Preference of the federal law in implementing European legislation
- Avoiding double regulation within the „Dual System“ between state legislation and autonomous legislation
- Clarity in the development of technical rules for the concretisation of the OSH legislation
- Flexibility in implementation for companies

The consequences, which were not predictable in 1999, can be characterized as follows: the re-adjustment of regulations and technical rules up to the protection targets (where possible) and the cutback of regulations by the statutory accident prevention and insurance associations. This new orientation left its mark on the still on-going OSH regulation in Germany. The European directives were transposed into the Official Journal of German Law in a word for word implementation containing only a few additions. The European framework directive, for example, was finally transposed in August 1996 via a new Health and Safety

at Work Act (ArbSchG) and amendments on the preventive health and safety measures in Social Code

VII (the legal basis of the statutory accident insurance associations).

Neue Arbeitsunfallrenten



Tödliche Arbeitsunfälle (2)



New occupational accident annuities and fatal occupational accidents from 1884 to 2010 (absolute and per 1000 fulltime employees) (DGUV 2011)

The main provisions of the ArbSchG are:

- The ArbSchG poses a uniform legal basis applicable to all work areas and all groups of workers, including the public sector.
- All employers have the same level of obligation: § 3 of the ArbSchG requires all employers “to adopt the necessary occupational safety and health measures taking account of any circumstances affecting the safety and health of employees in the workplace. The employer must assess the effectiveness of such measures and, if need be, adjust to changing circumstances. In so doing, his goal must be to improve employees’ safety and health protection”.
- A modern view on occupational health and safety, namely concerning measures to prevent accidents at work and occupational health risks, including measures to design a human work environment, which is not only aiming for the “traditional” hazards like noise but also psycho-social strains.
- Occupational safety and health must be integrated into the company’s decision-making process, which has to be done systematically, on the basis of risk assessment and on the planning, implementation and evaluation of measures. Risk assessment must take into account the nature of work activities, and any plan must consider and create appropriate linkages between all relevant company-related factors, especially technology, work organisation, other work conditions, social relations and influences of the environment on the workplace.
- The general duty of all employers to consult OHS professionals (this duty is further

specified in the German Act on OSH experts (“Arbeitssicherheitsgesetz – ASiG”).

- In specific cases of complaint, employees have the right of appealing to the relevant authority. They are also explicitly asked to make proposals on OSH subjects in the company.

To transpose the other European directives on OSH, based on the framework directive of 1989, several ordinances, based on the ArbSchG, were issued by the German government in the months and years after August 1996. To name only a few:

- Ordinance on health and safety protection for using personal protective equipment at work (1996)
- Ordinance on health and safety protection for working with display screen units (1996)
- Ordinance on health and safety protection for manual handling (1996)
- Ordinance on health and safety protection for the use of work equipment (1997; amended by the ordinance on industrial health and safety in 2002)
- Ordinance on workplaces (1976/1996/2004)
- Ordinance on construction sites (1998)
- Ordinance on hazardous substances at work (1986/2005/2010)
- Ordinance on biological agents at work (1999)
- Ordinance on noise and vibration at work (2007)
- Ordinance on provision of occupational medicine (2008)
- Ordinance on artificial optical rays (2010)

Nevertheless we would be seriously mistaken to believe that new legal provisions lead automatically to effective OSH in companies. On the one hand the resources of authorities in Germany have become more and more limited. On the other hand it is not desirable to enforce OSH only through police forces, since this would not lead to sustainable improvement. Moreover, very detailed and rigorous legal provisions are rarely compatible with the technical state of the art.

Still there is another process within the “Dual System” of OSH in Germany that must be taken into account. The on-going deregulation - in the sense described above - has been accompanied by the reorganisation of authorities. Based on concepts like “Lean State” or “Activating State”, the resources of the affected authorities have decreased over the years. For example: over 15 years the total number of staff declined from 7,507 (1996) to 6,499 (2006) to 6,000 (2010). Many state authorities have been reorganized

in the federal states and the number of accident insurance associations (“Berufsgenossenschaften” and “Unfallkassen”) has reduced to 9 (from 35; www.dguv.de/content/addresses/bgs/index.jsp - 15.04.2012). However, from the constitutional point of view the German state is committed to taking care of the health of its citizens (the right to live, physical integrity and personal rights in the German Basic Law). Facing the above outlined changes it is important to accomplish an effective separation of tasks within the “Dual System” of OSH in Germany.

A major chance in renewing the “Dual System” is the “Joint German OHS strategy” supported by the Community strategy 2007-2012 on health and safety at work: “Improving quality and productivity at work”. This German strategy had its kick-off in 2005 and was launched by the German government, the federal states and the statutory accident insurance associations (www.gda-portal.de/en/Homepage.html). The key elements are:

- developing joint objectives in the field of occupational health and safety
- designing joint fields of action and work programmes and including their implementation according to uniform principles
- evaluating the success of joint objectives, fields of action and work programmes
- determining aligned action of public occupational safety and health authorities and accident insurance funds based on the separation of tasks
- establishing a transparent, reasonable set of provisions avoiding double regulation

There is also a consensus to amplify the concept of OSH. The keywords in this context are “New Quality of Work” or “Decent work”. In 2001, the German Government launched INQA (“New Quality of Work Initiative”; www.inqa.de): trade unions and employers’ associations, accident insurance associations, the Federal States (“Länder”), the Federal Government, foundations and businesses agreed to co-operate on spreading knowledge for a new quality of work in companies, as well as on engendering processes of change. The main goal of this change process is to contribute to the commercial success of companies providing healthy, safe and decent working conditions. For Germany, the innovation of this Initiative is change from rewarding individual players or isolated aspects of safety and health to the joint effort of all stakeholders to contribute to a long-term improvement of work and production processes in companies. The measures of the initiative can be divided into sector-specific and cross-industry activities.

6. Summary

The key elements and processes of the OSH system in Germany are:

- Preparation of legislation by the responsible ministry for labour
- Agreement of legislation (Acts) by the parliament (Bundestag with a co-determination by the Bundesrat - the parliament of the federal states)
- Secondary legislation (regulations and ordinances) by the government based on specified warrants in the acts of parliament
- Specification of the provisions by common technical rules to facilitate compliance with the protection targets of OSH regulations
- Further specification of employer duties regarding the state of the art in occupational health and hygiene as well as of other acknowledged ergonomic approaches to improve OSH level
- Implementation in the enterprise with internal OSH experts (the form of the assignment depends on the number of employees and the work hazards)
- Employee participation in all companies and workers councils in larger companies
- External surveillance and advice by the state authorities and by the organization of the statutory accident insurance associations ("Dual System")

General Conclusions on OSH development:

- OSH regulation is closely linked to social, economic, technological and political processes. In Germany this matter of fact formed the "Dual System" with its benefits and drawbacks.
- The European harmonization process has had - and still it has - a deep influence on national policy and regulation on OSH, especially in Germany.
- The set of European regulations may currently cover all risks at work, accompanied by strategic and networking activities on the supranational and national levels.
- The contents of the European and German regulation are mainly focussed on protection targets of employees rather than on detailed provisions. The employer is responsible for applying these targets to the specific hazards in his/her company. These protection targets are endorsed by intensified co-determination through works councils and strengthened individual rights of employees.
- As an answer to the growing limits of the "Dual System" of OSH in Germany (especially the lack of appropriate resources and the mandatory cooperation) the Joint German OSH Strategy was founded in 2005 in order to develop the capabilities of the German OSH system and to reach an agreement on common aims.
- There is a general opening of OSH from pure safety purposes towards the sense of a new quality of work or decent work.

The consequences of the still deep and structural economic crisis of capitalism for OSH policy and law are not yet predictable. Depending on one's taste and moral constitution, scenarios can be created that predict economic regeneration or the end of modern times as we know them. Disregarding the worst case scenarios, OSH stays a necessity for all environments

and conditions of human productivity since work hazards are not limited to a specific form of production. In any case the on-going developments on OSH philosophy and regulation at the national, European and international levels (International Labour Organization – ILO; Codes of Conduct) contribute to better working and living environments.

References

WIENHOLD, LUTZ: Zwischen Anspruch und Wirklichkeit: Historischer Abriss zum Arbeitsschutz in der SBZ/DDR (2012)

PIEPER, RALF: Arbeitsschutzrecht, 5th edition (2012)

PIEPER, RALF / LANG, KARL-HEINZ: Sicherheitswissenschaftliches Kolloquium, Vol. 1-7 (2006-2012)

PIEPER, RALF / GÄRTNER; MIRIAM: The European Regulation on Occupational Health and Safety, VGB Powertech, 11/2009

PIEPER, RALF: Das Arbeitsschutzrecht in der Deutschen und Europäischen Arbeit- und Sozialordnung (1998)

LATVIA

Charles Woolfson, Ivars Vanadzins and Kaj Frick



1. Abstract

This report examines the determinants of workplace health and safety in the new EU member state of Latvia. Latvia is one of three Baltic states which suffered a particularly sharp downturn in the global economic and financial crisis. The political and economic background of Latvia as a former Soviet republic and thereafter a very open market economy sets a problematic context for the adoption of European Union-derived regulation of occupational safety and health. It is suggested that the limited advances that have been made in the workplace management of OHS since European Union accession in 2004, may now be undermined as both domestic and international actors seek to promote rapid economic recovery as the overall policy priority at the expense of social protection.

Keywords: *Latvia, economic crisis, workplace health and safety, newer EU member states*

2. Introduction

Latvia is one of the smallest post-communist countries, with some 2 million inhabitants situated on the northern shores of the Baltic Sea. Since its independence from the Soviet Union, along with its Baltic neighbours of Estonia and Lithuania, its governments have applied neoliberal policies of economic and social reconstruction with particular enthusiasm, even 'religiously' (Pabriks and Purs in Smith *et al* 2002), and at least until the global financial and economic crisis from 2008, with apparent success. In terms of its internal domestic social development, the path of radical free market economics since independence from the USSR has meant only limited provisions of a welfare state system and social protection have emerged in the post-Soviet era (Aidukaite 2011). Today Latvia is also among the least advantaged of the newer EU nations, with among the highest rates of income inequality in the EU as measured by the Gini co-efficient, a declining birth rate and high rates of emigration, with approximately 200,000 persons or one tenth of the population currently living abroad (Dennis and Guio 2004; EurLIF 2005; Lulle 2009; EuroStat 2012).

To understand fully the specific problems regarding the determinants of workplace occupational health and safety which are now emerging in the newer EU member states, particularly those such as Latvia which were fully-incorporated Soviet republics, some reference to workplace safety and health in the previous Soviet era is necessary. This legacy of fifty years which continued until the early 1990s has influenced the shape of health and safety law, the character and activities of national labour inspectorates and workplace OHS practices in the contemporary context.

The Soviet occupational health and safety system was characterized by what many would regard today as a fragmented inspection and control system. Key elements of this system were the separation of occupational health functions (mainly industrial hygiene seen as part of public health, and therefore within the sphere of Ministries of Health), from those of industrial safety (safety of equipment and machinery, under the sphere of Ministries of Labour). In the Soviet system, this division of functions was grounded in the broadly progressive notion of the need to deal with the population's health "holistically", and therefore taking account of the interaction between occupational health and community dimensions. Substantial medical and scientific resources were devoted to periodic medical examinations, to the measurement of contaminants in the workplace, to the classification of workplaces into hazard groups, and to the assessment of the progressive health impairment of individuals, as well as their subsequent treatment and possible transfer to other work. However, in the view of ILO concerning this mixed achievements of this period, "little or nothing was done to modify the processes themselves, to improve environmental control or to reduce exposure, let alone to stop unhealthy or dangerous processes" (ILO 1998).

So far as the formal regulation of the work environment was concerned, there were a myriad of health and safety acts approved by State Committees and Ministries. Individual Ministries usually developed and approved rules by "mutual agreement" with the corresponding trade union body. The Ministries, for their part, had a direct influence over dependent enterprises and organizations within their sector. Each Ministry set up a labour protection department, with a

directorates/branches, often with accompanying institutes, laboratories and centres engaged in research in the field of labour protection. Realizing some of the problems this fragmented approach was producing, a number of East European countries conducted reviews of safety and health standards in the 1970s. By contrast to comparable reviews in the West, these did not lead to the development of more coherent 'goal-setting' regulatory frameworks as in the United Kingdom. Key areas of occupational health and safety management, including those related to new industrial processes were either ignored, or subject to overlapping, even contradictory sets of regulation.

At the same time, specific levels of hazard control and related exposure specifications were often arbitrarily set and differed between industry groupings and republics, while enforcement was variable. Nevertheless, there were also positive features in the Soviet system, and many of the above criticisms also applied equally, if not more so, to Western occupational safety and health regimes of this time. It has been argued for example that Russia was a world leader for many years in setting standards preventing exposure of women to reproductive hazards. Other CEE countries had tighter controls and bans on hazardous chemicals than many Western European countries. In many instances, inherited Soviet-era standards in the new member states, for example, on machinery safety, exceed European Union specifications. In practice, however, in the Soviet era the operation and application of such standards was deficient, as both party and trade unions subordinated safety to production requirements.

Administrative and regulatory fragmentation was matched by a fragmentation of inspection and control functions between the various inspectorates, and between these and workforce representatives in the enterprises. In the Soviet period, trade unions held a privileged position in the "labour protection" of the workforce. In theory at least, trade unions served as a vehicle for the articulation of workforce views on such questions. Trade unions were also given relatively wide powers in inspection and control; they had the right at least in theory to legislative initiative, including drawing up labour protection laws, input on questions related to training, even the right to interrupt the operation of industrial processes, machines or equipment if they were deemed hazardous and, in case of imminent risks to employees' safety or health, prohibition of the activity.

With the collapse of communism in the early 1990s, the trade unions quickly lost whatever protective and surveillance role they might have held in matters of health and safety, especially at enterprise level. This

created a rupture in enforcement and control functions. New enterprise managements were often hostile to what they regarded as any form of worker oversight that echoed the previous regime. At the same time, regulatory controls of all kinds were being widely disregarded by employers while workplace accident rates spiralled. At a political and societal level, the general social protection function of national governments was also undergoing radical reappraisal as a new set of market-driven priorities was initiated. This left unresolved the problem of securing an effective system of OHS management at the workplace in which both employers and employees could participate, capable of functioning in the context of a market economy.

With the prospect of EU accession imminent, the Latvian parliament (*Saeima*) enacted a new law "On Labour Protection" in the early 2000s requiring significant changes in the organization of labour protection at enterprise level. This strengthened the legal responsibility of company managers with respect to the observation of health and safety legislation, and provided for the establishment of a labour protection function within company organizations, including the appointment of "labour protection specialists." In addition, new procedures for the investigation and registration of accidents at work were also introduced (Eurofound 2003). The response by employers to new health and safety law was, in the words of one observer, "non-controversial." An informed commentary on the new legislation unravelled this paradox:

Employers appear to understand the importance of labour protection and make efforts to ensure the health and safety of their employees. However, an "ideal" health and safety system which complies fully with all the relevant legislation is expensive, and therefore regarded as impossible to provide by almost all companies in Latvia. Many employers thus implement the law only incompletely, in order not to damage the operation of the company. Their employees, in whose interests the health and safety system operates, agree to their rights being violated in order to maintain their jobs.

More recent survey evidence suggests that the degree of employers' understanding of "the importance of labour protection" may have been overstated. In response to a question concerning employers' estimates of the proportion of their employees exposed to risk factors, in 2006, 43 per cent of employers believed that none were exposed, and in

2010, still nearly one quarter maintained this view (24 per cent) (see Vandzins et al 2010: 92).

It is against this rather unpromising background that the few proponents of improved safety culture have struggled against the tide to encourage a 'culture of prevention' in the workplaces of post-communist Latvia, often with the assistance of programmes of support funded by the EU such as PHARE.

3. The "Bubble" economy

Latvia succeeded in attracting FDI in the years following independence from the USSR and especially in the run-up to EU accession, as anticipated by its low corporate taxes, but much of this finance has gone into unproductive speculative sectors, such as real estate, along with some rather primitive production connected to the timber sector. The result saw Latvia with a current account deficit of 21 per cent GDP in 2006 and 26 per cent in 2007. The deficit on tradeables in Latvia in 2006 was an astounding 42 per cent of GDP. Moreover, Latvia's economic "success" has also been driven by banks, many Swedish, pumping huge sums of money into Latvia's real estate market, along with Russian money seeking property to store oil and mineral wealth, and the impact of EU structural funds all working to inflate the economy. Property prices in 2006 were up 87 per cent over 2005, which saw similar increases over the past few years.

The Baltic economies, but especially Latvia, were nothing more than asset bubbles inflated by foreign funds looking to capture speculative rents. The 'hard landing' when it finally arrived in the autumn of 2008 was unprecedented.

The scale of the economic downturn should be acknowledged. At a European level GDP fell by 4 per cent in 2009, industrial production dropped back to the levels of the 1990s and 23 million European citizens - or 10 per cent of the labour force - became unemployed. As the European Commission put it: "The crisis has been a huge shock for millions of citizens and it has exposed some fundamental weaknesses of our economy." However, the shock of the global crisis has been most intense in Eastern Europe. Here fundamental weaknesses of the neo-liberal economic development adopted for the last two decades have been exposed. In relative if not absolute terms, Latvia and Lithuania have experienced the impact of the crisis in probably the most drastic form in the entire globe. The so-called Baltic Tiger Economies during 2000-2007 produced average yearly growth of GDP exceeding 8 per cent in Estonia and Latvia, and in Lithuania around

7.5 per cent, at a time when EU27 average growth was less than 2.5 per cent.

From their previous elevated title of "Baltic tigers", almost within a matter of months, the economies of Latvia, Lithuania and Estonia experienced the shock of near catastrophic economic downturn made all the more severe by the global economic and financial crisis. Previously inflated property prices plunged up to 60 per cent, as Swedish banks imposed their own specific credit crunch on the domestic economy and private mortgage holders, the majority of whose loans were held in foreign currencies mainly euros. A bankrupt government was duly forced to turn to the IMF (supported by the World Bank and the EU) for a \$7.3 billion bail-out, one of the first and largest in Eastern Europe granted in the crisis. In response to the crisis and under the diktat of international lenders, a new right-wing government imposed a particularly harsh austerity programme, a so-called 'internal devaluation, which saw massive cuts in wages and public spending and reductions in social provisions.

By the spring of 2009 the European Commission economic forecast for the Baltic States was gloomy, with the economic crisis predicted to be "deeper and more protracted than previously assumed" (CEC 2009a: 80). By the 4th quarter of 2009 compared to the previous year, GDP had decreased 17.9 per cent in Latvia, 13.2 per cent in Lithuania and 9.4 per cent in Estonia (the three most significant declines in the EU, with the only other countries in Eastern Europe, Bulgaria at 6.2 per cent and Romania at 6.9 per cent, approaching these figures. The EU27 average GDP decline for this same period was 2.7 per cent. In Latvia between 2009 and 2010, there was a fall in the median income of 17 per cent.

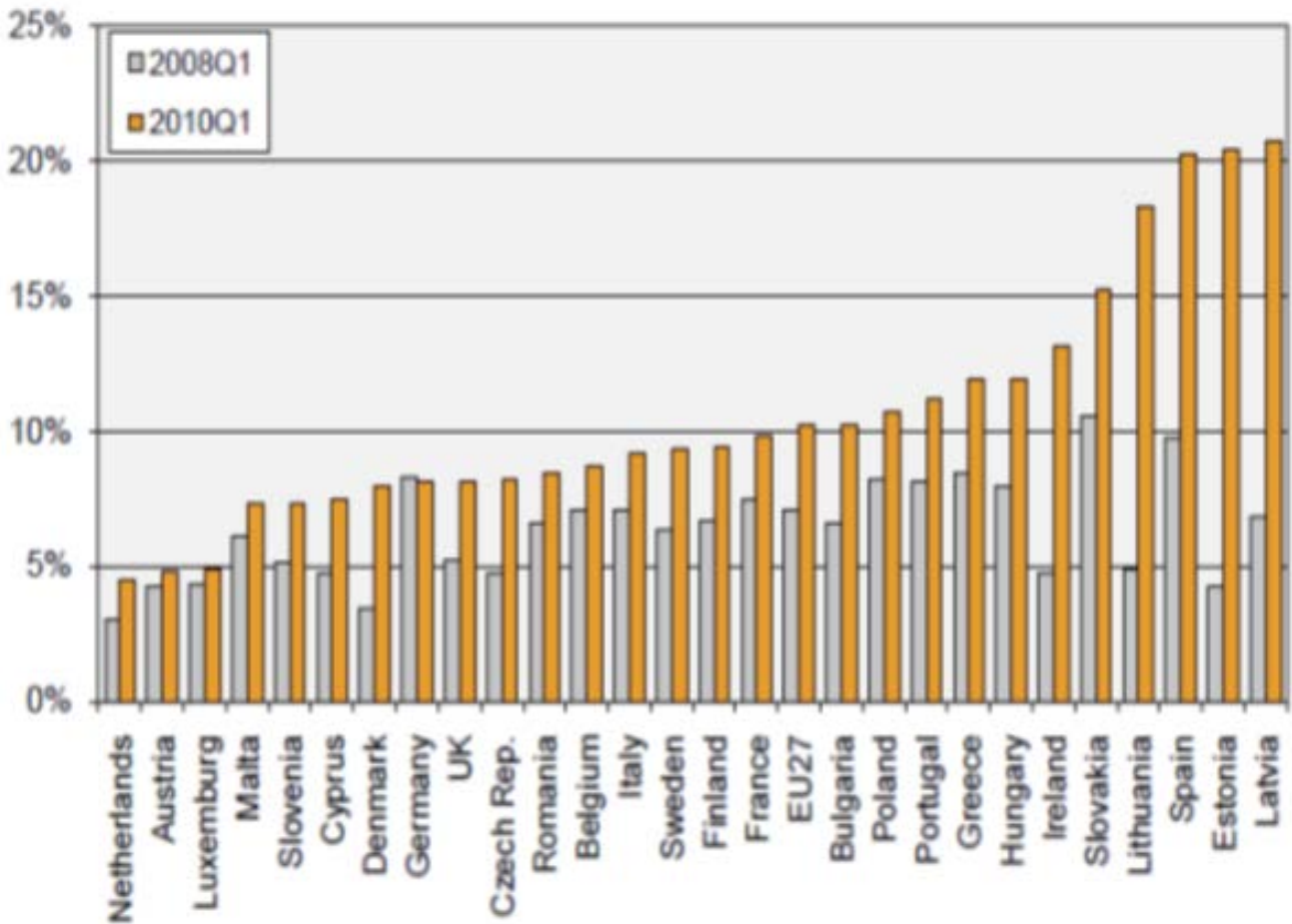
While the economy has shown some signs of recovery in the most recent period it is "still a deeply depressed economy" with continuing high unemployment (Krugman 2012). An economic shock on the scale of this scale has had immediate and massive impacts on labour market. In 2009, official unemployment rates in Baltic countries equalled the highest in the EU after Spain, reaching 17.6 per cent in Latvia, and 14 per cent in Lithuania and Estonia (Eurostat 2009a). Youth unemployment reached over 30 per cent in Latvia and Lithuania, and 28.5 per cent in Estonia (Eurostat 2009b). In 2010 Latvia had the highest percentage unemployed in the EU (Figure 1).

Youth unemployment in Latvia had reached nearly 40 per cent by 2010, surpassed by only Estonia and Spain. By 2010,, unemployment had increased more than two times since the onset of the crisis in all three Baltic States. But the impacts of the crisis go well beyond the

appearance of perhaps the highest mass unemployment since political independence from the

USSR, with the possible exception of the chaotic years immediately following the collapse of communism.

Figure 1. Unemployment rates: impacts of the crisis



Source: European Labour Force Survey, online database (See Leschke and Watt 2010:12).

4. Undeclared work and shifting priorities

Social surveys and case studies of Latvia even before the onset of crisis attested to excessively long working hours, low basic salaries, high levels of conflict in the workplace, gendered wage discrimination, poor working conditions and employees whose employment was “informalised” (Eurofound 2004; Hazans 2005; CEC 2007a). Among significant changes in the labour market since the crisis has been acceleration in the use of part-time and temporary contracts and informal payments systems. Between 2009 and 2010 there was the most significant growth in temporary employment in the EU (+2.5 percentage points: from 4.3 per cent to 6.8 per cent) as employers sought to respond to the recession by the introduction of more flexible forms of employment (Eurofound 2011a: 14). According to the Eurobarometer survey on undeclared work of 2007 (that is, well before the arrival of the crisis), Latvia at 15 per cent of the labour force ranked the highest

among the Central and East European new EU member states for so-called “undeclared work”, perhaps the most telling proxy for informal or precarious employment (CEC 2007a; Hazans 2009). Some estimates suggest as much as 25 to 40 per cent of GDP is generated in the “shadow economy” (Schneider 2002).

So-called “undeclared work” has been prevalent in many sectors of the economy including public sector healthcare institutions, construction, agriculture and forestry, hotels and restaurants, commercial services and retail. Other estimates of the size of the workforce receiving under-the-table wages payments range between 15 per cent and 45 per cent of total employment for Latvia with approximately four-fifths in the private sector and one-fifth in the state and local government sector (Eurofound 2004). The extent of concealment is also indicated by the relatively low level of declared pay in the private sector compared with the public sector, while in sectors where undeclared work is traditionally found such as the construction

industry, the disparity is even greater (32.5 per cent) (Eurofound 2004). In construction, the figure for the proportion of employees receiving envelope wages reportedly reached 40 per cent.

By 2009, a survey of Latvian employees suggested that more than half of the workforce would now accept “envelope wages” in the form of unofficial payments comprising a greater or lesser proportion of their income (*The Baltic Course* 2009). For many envelope wages were not an unwelcome imposition but in fact enabled personal income to be hidden from the banks and other creditors. This kind of informal payment system also has important negative effects on employee rights to social security, sickness benefits and pension entitlements. Paradoxically, during recent years in the Baltic States, the prevalence and social acceptability of envelope wages was beginning to be challenged by workers who recognised the negative impacts on their rights and labour standards. The Latvian labour inspectorate had a policy of “naming and shaming” errant employers. Anecdotal evidence suggests however that, with the advent of crisis, there has been a resurgence of forms of unofficial wage payment, as workers fear for their employment and employers seek to intensify utilisation of labour resources at the lowest cost and avoid social insurance obligations. Indeed, a current demand of the trade unions in their campaign against government austerity measures has been – “Prevent illegal working and the informal economy”.

The “fight against undeclared work” or, as it is termed in the Baltic States, “illegal work”, is now also a policy priority at both ILO and EU levels (CEC 2007b; European Parliament Committee on Employment and Social Affairs 2008; ILO 2009, 2010a; Williams and Renooy 2009). At the level of individual member states, especially in conditions of constrained fiscal revenues, the issue of the balance between traditional occupational health and safety enforcement and the search for illegal forms of work and illegal workers has become a central one. The Latvian Labour Inspectorate, in collaboration with the Ministry of Welfare, was developing a plan for 2010-2013 to improve the inspectorate’s capacity to reduce the incidence of illegal employment (Vega 2009:10). Thus, perhaps the most concerning aspect has been a tendency towards diversion in the objectives of labour inspection towards combating undeclared work, even though the overall numbers of inspections in OHS have remained fairly constant and the targeting of high risk industries in inspection campaigns has also continued. Nevertheless, the shift in emphasis towards identifying undeclared work also needs to be seen against the

background of a significant weakening in the resources and capabilities of the inspectorate during the economic crisis.

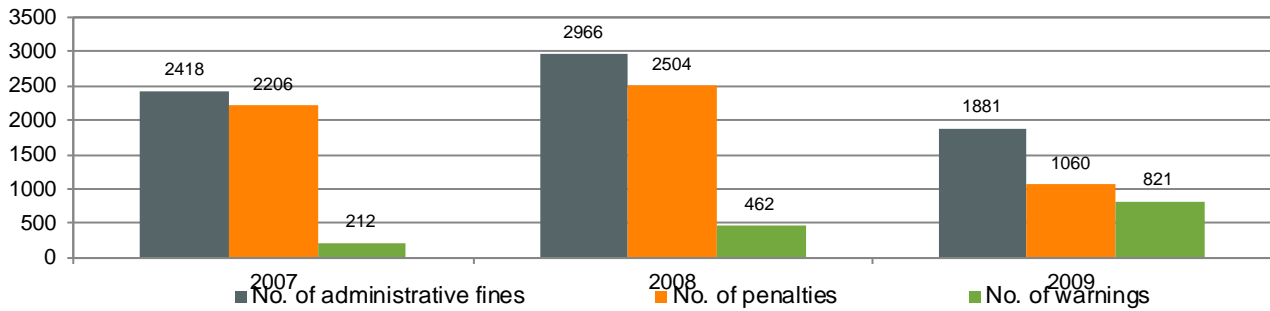
5. Impact of the crisis on labour inspection

The impact of the crisis on the operational capacities of the labour inspectorates in the Baltic states has been wide-ranging. As part of the huge cuts in public spending, the budget of the State Labour Inspectorate (SLI) has been reduced in Latvia by over 50 per cent (see Latvian State Labour Inspectorate Annual Report 2009). Of 211 official work places in December 2009 this has been reduced by 42 official work places (approximately 20 per cent overall but 25 per cent of headquarters staff) leaving 169 official work places in the Labour Inspection of which there are 117 inspectors. They were charged with supervision of over 93,000 mainly micro-enterprises employing some 873,000 persons. Even so, the Labour Inspectorate managed to inspect over 8,000 enterprises in 2009. The Inspectorate reports:

Just like in 2008, most of the violations (37.5 per cent) concern the order of the internal supervision of the working environment. Some employers do not accept the evaluation of the working environment risks at an enterprise as a basis for the creation of a really functioning labour protection system and a safe working environment. Often, after the evaluation of risks, the employees are not even familiarized with the risks they are subject to during the work (Latvian State Labour Inspectorate Annual Report 2009: 9).

While the workplace *for those still in employment* has not become safer or healthier compared to previous years, under the impact of the recession there has been a pronounced change in the pattern of enforcement away from administrative fines and towards more warnings. As the Annual Report puts it: “The growth in the number of warnings can be explained with the fact, that during the times of economic recession, inspectors apply such measures, as administrative fines, only when a direct threat to the life and health of employees can be established” (Latvian State Labour Inspectorate Annual Report 2009: 10). This can be clearly seen in a reduction in the number of fines and penalties from 5740 to 2942, and an almost doubling in the number of warnings from 462 to 821.

Figure 2. Fines and penalties for OHS violations 2007-2009



Source: Latvian State Labour Inspectorate

In Latvia a new labour inspection regime (Law of 19 June 2008 on State Labour Inspection) had been adopted in response to a critical audit of the national inspectorate by the International Labour Organisation (Albracht and Campbell 2006). The new legislation, *inter alia*, provided for more rights for the State Labour Inspectorate to act and suspend the operation of an enterprise that is in breach of occupational safety and health rules and standards and general labour legislation. It also provided for more rights for the inspectorate to supervise labour law compliance on private construction sites (Vega 2009). At the same time, new guidelines have been issued with the aim of promoting greater safety awareness (Eurofound 2009). While formal response to external criticism had been initiated, in the heat of crisis, the governing party has now admonished state regulators to “suspend” occupational health and safety regulation.

6. Indicators of working environment performance

The combination of cuts to the SLI and further restructuring of the labour market in the crisis have resulted in deteriorated outcomes in terms of occupational safety and health. Take recent survey evidence concerning working environment from the three Baltic states. The latest data from the European Foundation’s Fifth Working Conditions Survey reveal the *highest* percentages of respondents in the Union reporting “work negatively affects your health” (q67) with the partial exception of Greece at 40.8 per cent (Estonia 42.5 per cent, Latvia 52.5 per cent and Lithuania 38.6 per cent, as against an EU27 average of 25 per cent) (Eurofound 2010). When asked to indicate if “very satisfied” with working conditions in their main job (q76), the *lowest* percentages of respondents are to be found here (Estonia 16.2 per cent, Latvia 11.2 per cent and Lithuania 11.9 per cent, as against an EU27 average of 25 per cent).

Quantitative evidence, albeit statistically highly imperfect, is also useful in suggesting a deteriorating

work environment. Under Latvian legislation, the laws regulating industrial relations relate specifically to employees with employment contracts. Thus, if an employee is injured in an accident at work, social guarantees may only be received if the employee has a contract. Construction is one of the industries in which employment contracts are most often not concluded and in which working hour limits are not observed. The result is fatigue and accidents in the construction sector are disproportionately represented in terms of workplace fatalities (Eurofound 2006). An upsurge in speculative building activity following EU accession, particularly in the capital city Riga led to a sharp increase in industrial fatalities. Official statistics do not record those incidents among the “self-employed”, despite the fact that many workers in this category are in real terms employees, and engaged in sometimes highly hazardous occupations such as forestry work and construction. Somewhat predictably, given the scale of economic downturn in Latvia, reported fatal and non-fatal accidents decreased by 25.7 per cent and 26.7 per cent respectively in 2010 (Eurofound 2011b: 16). In the woodworking section compared to 2008, the total number of reported accidents decreased by 42.3 per cent and in construction which suffered almost complete economic collapse, reported accidents decreased by 48 per cent (Latvian State Labour Inspectorate Annual Report 2009: 4-5). Compared with the boom years in Latvia between 2005 and 2007, fatal incident rates therefore dropped sharply from among the worst levels in the EU although serious injuries appeared to be more persistent.

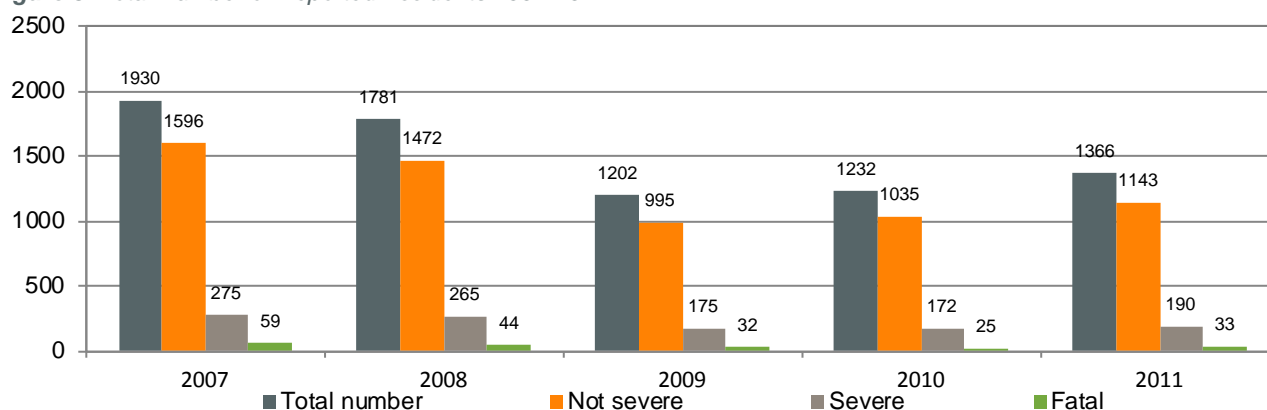
A NACE sectoral breakdown reveals the continuing importance of construction, wood processing and transport as the key areas where employee accidents were most frequent (Latvian State Labour Inspectorate Annual Report 2009:12). The occupations with most injuries are the “operators of equipment and machines, as well as the product assemblers (the drivers of self-propelled vehicles and equipment, the operators of elevating machines and equipment etc.); qualified workers and craftsmen (workers of

metalworking production, machinery manufacturing, allied industries, etc.); ordinary workers in mines, construction and transport” (Latvian State Labour Inspectorate Annual Report 2009:12).

Remarkably, given the depth of the crisis, the most recent period has seen a sharp upturn in economic activity and a rapid recovery to pre-crisis levels with a

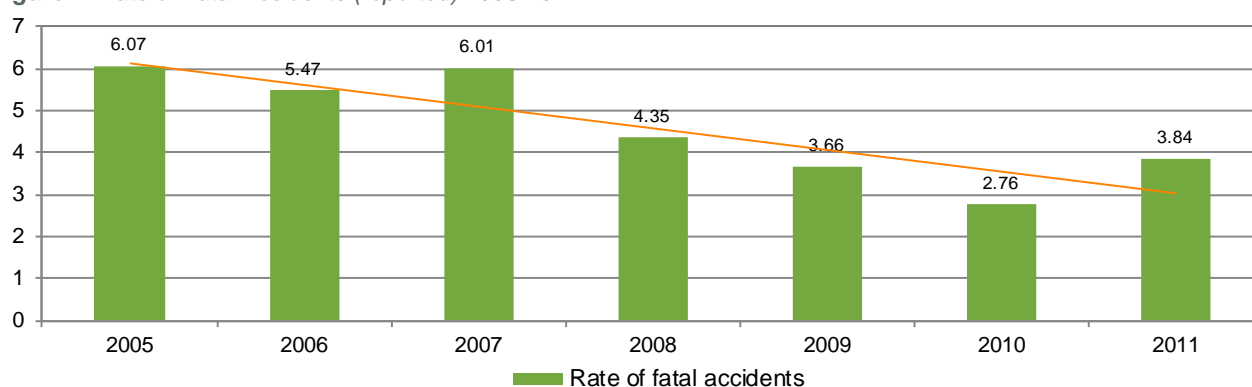
recent prognosis of GDP growth of 3-3.5 per cent for 2012. As fewer employees remain in the workplace and those who do would seem to be under greater work intensity than in the pre-crisis period, there has been an accompanying upturn in the number of severe and fatal injuries for 2011, and in the gross fatality rates (see Figures 3 and 4).

Figure 3. Total Number of Reported Accidents 2007-2011



Source: Latvian State Labour Inspectorate

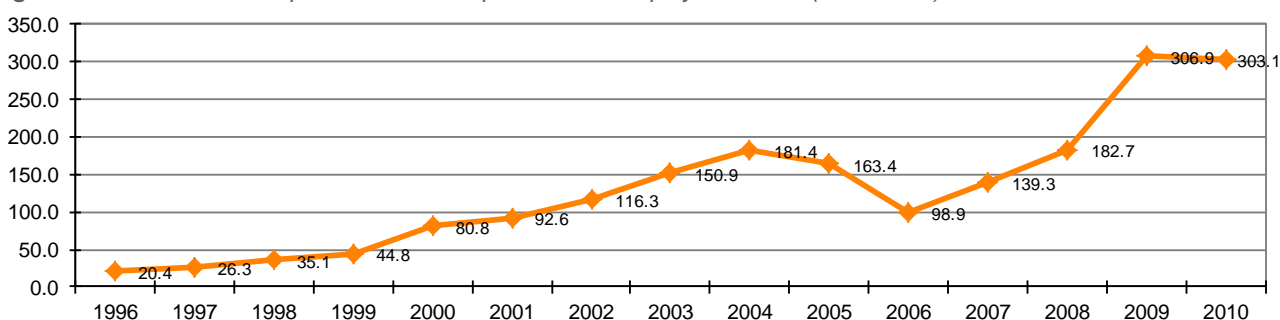
Figure 4. Rate of Fatal Accidents (reported) 2005-2011



With respect to work-related diseases, the first years of economic boom from following EU accession were accompanied by a significant fall in the number of first time reported occupational diseases per 100,000 and number of occupational patients per 100,000. However

from 2007 the numbers of occupational diseases per 1000,000 increased by a factor of three, accelerating especially during the first two years of crisis in 2008 and 2009 and only levelling out in the most recent year.

Figure 5. Incidence of Occupational diseases per 100 000 employees Latvia (1996-2010)



Source: Latvian State Labour Inspectorate

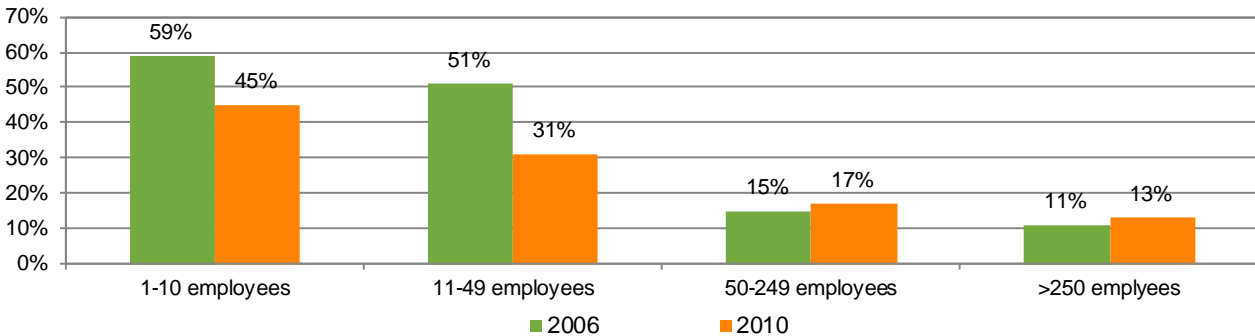
Reported occupational diseases have been growing since the mid-2000s in Latvia, but a sharp upturn in rates can be seen from 2008 onwards. The most recent figures suggest a slight downturn in recorded rates but overall since the previous peak in the mid-2000s, rates have increased by approximately two-thirds. However caution is necessary due to a very poor reporting regime, limitations created by the shortage of occupational medicine specialists and the rather restrictive classification systems and procedures for registering occupational diseases, more than any objective improvement.

In 2010 extended survey research on working conditions and risks in Latvia was published (in Latvian) by Inspecta Prevention, Ltd. and TNS Latvia (2010). This was based on a survey of 1044 employers, 2455 employees and 210 specialists in work protection. Small and micro enterprises comprised 85.3 per cent of employers surveyed and 79.3 per cent of employees. The results published in January 2011 show an increase in the number of micro-enterprises. The number of accidents not reported (Figure 6) appears to remain high in Latvia although data show some improvement in 2010 as compared to 2006. Vanadzins and Matisane (2011:7) state that only a fraction of accidents are being reported and registered and that underreporting is much more prevalent in the SMEs. Again, based on

employees' views, there appear to be significant differences in underreporting between micro (45 per cent) and small enterprises (31 per cent) as compared to medium sized (17 per cent) and larger enterprises (13 per cent). The aggregate number of registered occupational accidents in Latvia compared with other countries in European Union is on average 20 times less than the European average (121 accidents per 100,000 employees in Latvia in 2007 versus 2860 in EU15). This is explained by survey data showing large underreporting by employees and employers.

It has been suggested that the total number of registered occupational accidents has historically been rather low and has remained generally stable during the last 15 years. The previous system of registering occupational accidents provided active disincentives to report by the establishment of a "system trying to punish the person responsible for accident and to collect massive paperwork even for simple accidents combined with little or no information on accident causes and importance of their registration." Changes introduced in registration system of occupational accidents aimed at reducing the required paperwork and improving reporting may actually have served to increase levels of underreporting rather than the reverse.

Figure 6. Percentage of accidents not reported by the number of employees in 2006 and 2010 (data: Employees survey)

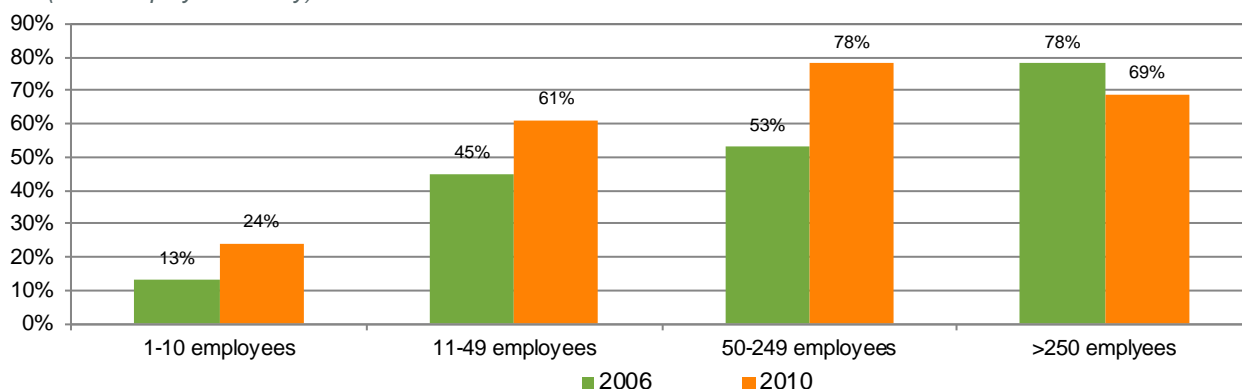


Source: Vanadzins and Matisane (2011)

Working conditions are worse in micro-enterprises, risk assessments are rarely carried out, and "these issues are not high on agenda" (Eurofound 2011). The survey indicated that a full risk assessment was made in 27 per cent of enterprises with 1-10 employees (micro enterprises), 54.8 per cent with 11-49 employees (small enterprises), 65.2 per cent with 50-249 employees (medium sized enterprises) and 55.2 per

cent with 250 and more employees (large enterprises) (See Figure7). However, these figures are derived from employers' self-reported data which is liable to be an overestimate. The survey also showed that almost half of the employers that had some serious problems with complying with OSH regulations stated that 'My business has nothing to do with health and safety – it is absolutely safe!'"

Figure 7. Percentage of companies performing workplace risk assessment and had drawn up an action plan in 2006 and 2010 (data: Employers survey)

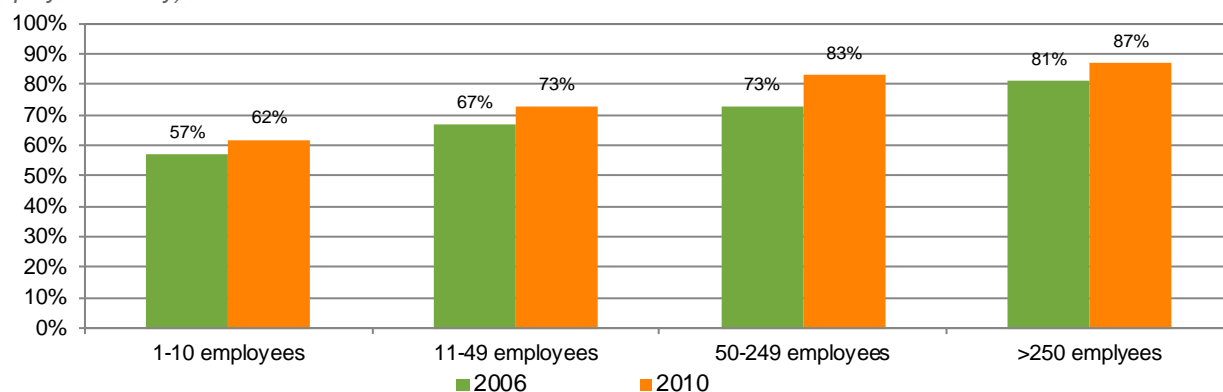


Source: Vanadzins and Matisane (2011)

Larger enterprises more often use the services of specialist organisations in assessment of workplace risks and this is an increasing trend financed by the European Social Fund. Entrepreneurs can apply for a free of charge assessment of working environment risks and the program also assists in elaboration of labour protection plans including informing employees about labour protection issues (Eurofound 2011b). Vanadzins and Matisane (2011:7) conclude with regard

to risk assessment that “the employers of SMEs are not really interested in health and safety of their workers and are not willing to take help even when it is free of charge.” As can be seen in Figure 8, employees in SMEs have less access to health examinations despite the current legal requirements that up to 90 per cent of all workers are supposed to undergo a health examination once in every 1 to 3 years (Vanadzins and Matisane 2011:7).

Figure 8. Access to health examinations during the last 3 years by the number of employees in 2006 and 2010 (data: Employees survey)

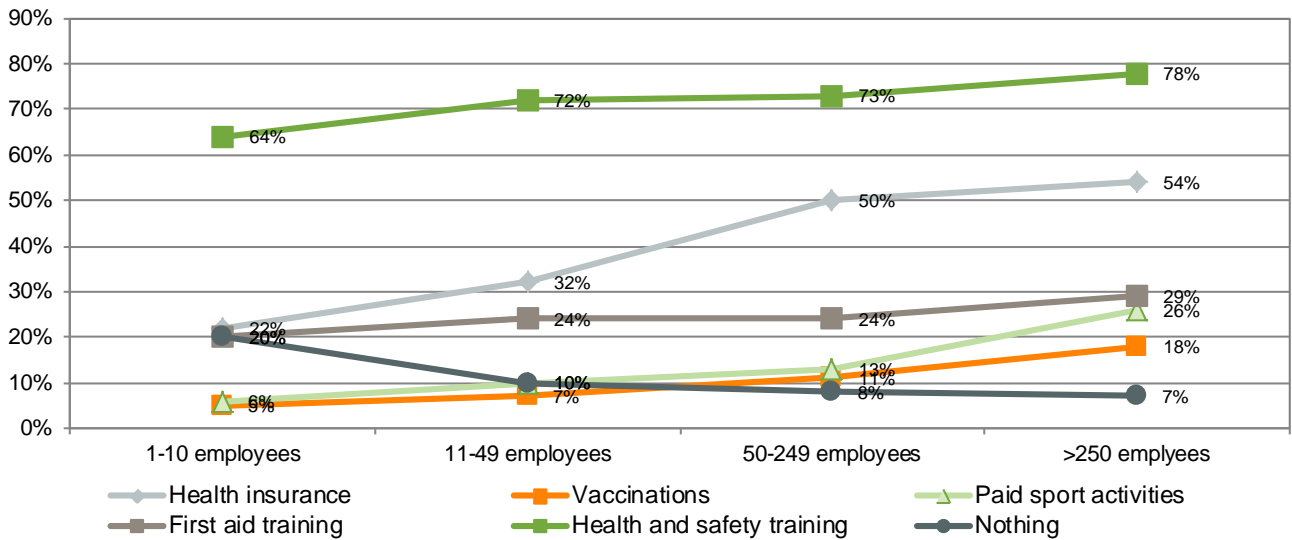


Source: Vanadzins and Matisane (2011)

Figure 9 based on employee responses shows that more than 20 per cent of workers of SMEs are not provided with any OHS measures as opposed to around 7 per cent in large companies. Workers in SMEs general receive less OHS-related benefits (like health insurance etc). The same is true for most of the measures or benefits especially for additional health insurance (often treated as additional benefit to employees in Latvia as it often covers services, such as dentist etc.) and paid sport activities (another of the common

additional benefits to make employers more attractive that includes free of charge access to swimming pool or gym). Even such basic OHS-related activities as workplace health and safety training (an obligatory requirement for employers) have been provided for fewer workers in SMEs than in larger companies (Vanadzins and Matisane 2011: 7). Again, the precise nature of such ‘training’ which is a key preventive measure is somewhat uncertain.

Figure 9. Percentage of employees personally receiving some OSH-related benefits by the number of employees in 2010 (data: Employees survey)

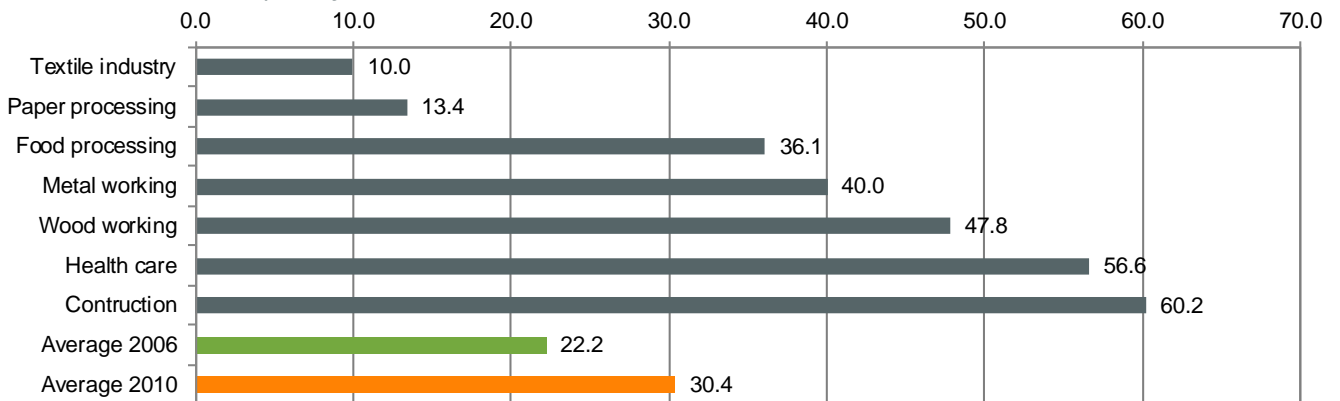


Source: Vanadzins and Matisane (2011)

The scope of coverage of OHS services would appear to have improved overall between 2006 and 2010 but significant unevenness remains as between various sectors of the economy with textiles performing particularly poorly while previous high risk sectors such as woodworking, health care and construction which

have been the target of specific OSH campaigns appear to be performing relatively better. Nevertheless the percentage of companies carrying out risk assessment and actions plans for risk reduction remains unevenly distributed between different industries.

Figure 10. Coverage of OHS services in selected industries in terms of percentage of companies carrying out risk assessment and action plans for risk reduction



Source: Inspecta Prevention Ltd and TNS Latvia 2010.

The Inspecta Prevention/TNS survey reaches the following conclusions: 1. Small and medium-sized companies are showing poorer performance in most of the occupational health and safety indicators, such as risk assessment and reporting of accidents: 2. Despite the increase in workplace risk assessment coverage in SMEs there are serious doubts on the quality of risk assessment, as it is more often done by the employer himself and workers are seldom involved in the process; 3. Employees working for SME are less covered with some of the basic OHS services, such as

health and safety training, health examinations, vaccinations, additional health insurance and first aid training (Vanadzins and Matisane 2011: 8).

The major employers' organisation in Latvia has attempted to promote working environment issues. The Latvian Employers' Confederation (Latvijas Darba Deveju konfederacija, LDDK) has produced an electronic system for assessing environment risks at work and issued a *Handbook on labour protection in enterprises*. This *Manual for young entrepreneurs* is

described as an initiative designed “to improve labour protection in enterprises and to help small and medium-sized enterprises (SMEs) in implementing an effective labour protection system” (Eurofound 2011b: 18). One paradoxical effect of the crisis has been that some employers, faced with the impacts of a negative demographic situation and massive outward migration have become more sensitive to the need for measures to improve overall employee well-being at the workplace.

To the above we would add one further observation. The regulation of the working environment cannot rely upon the active participation of labour market actors such as trade unions. In Latvia, as in all the post-communist Baltic states, trade unions are perilously weak, with an overall density of less than 15 per cent of the workforce, and generally found only in the larger enterprises (Visser 2011). Moreover, current legislation does not require joint management-worker safety committees to be present in enterprises, although in enterprises of above 50 employees a “trusted representative” can be elected by the workforce. In embedding a ‘preventative culture’ in contemporary Latvian enterprises, particularly the overwhelming majority of smaller enterprises, the crucial ingredient of employee involvement is therefore lacking.

Previous survey evidence has pointed to a widespread lack of employee “voice” in the processes of monitoring the working environment (Woolfson et al. 2008). These data identified an overall weakness of social dialogue between employers and employees in the Baltic states in general which compromised the effectiveness of health and safety participation at workplace level. With a disempowered workforce scrambling to retain whatever temporary employment foothold is available, the prospects for employee voice and enhanced representation of their interests, even in a supposedly consensual area such as working environment, seem increasingly remote.

State-initiated policy initiatives in working environment for Latvia include a “Strategy for development of occupational health and safety for 2007–2013” and a “Development programme for occupational health and safety for 2011–2013.” These aim to improve the efficiency of work environment monitoring, to improve working conditions and dissemination of information to the wider society, and the introduction of a “prevention culture” in the workplace. Such goals as reducing fatal accidents by 30 per cent have also been set and key challenges identified, including facilitating the return to work of occupational patients, introducing differentiated insurance rates based on work environment performance and improved accident registration. The programme thus includes a

range of proposed activities including legal changes, training and so forth, but at the same time envisages a decrease in the “administrative burdens” on business for OHS compliance. A new “Strategy on Public Health 2011-2017 adopted in September 2011 also contains some important initiatives which address the ongoing negative indicators for public health in Latvia in terms of preventable diseases and among the lowest levels of expenditure on public health in general in the European Union) (National Institute for Health Development of Estonia et al., 2011: 36).

A new parliament and government in 2011, and a new Minister of Welfare appointed, suggest that the outlook is not entirely bleak even though the level of political awareness among MPs of OHS issues is rather low and in some cases actively hostile to OHS legislation and enforcement. Nevertheless, preliminary consideration of the reform of the insurance system for OHS has begun and new codes of practice are being envisaged albeit of a ‘soft law’ variety. In addition, a new director of the State Labour Inspectorate has been appointed, but while staffing numbers are increasing there is still a very high staff turnover (around 20 per cent annually). Overall, enforcement emphasis has been on stopping dangerous workplaces, scaffolding etc., rather than on administrative or financial penalties. Thus, the authors of the *Inspecta Prevention/TNS* survey remain somewhat guarded in their conclusions regarding ongoing policy initiatives, noting “current political approach and measures are not working as situation is improving very slowly or not at all” (Vanadzins and Matisane 2011: 8).

7. The European dimension and the newer EU member states

The mixed legacy of both Soviet times, and nearly two decades of free market economic policies in which any form of worker participation was anathema, have already placed countries such as Latvia at a disadvantage when it comes to the adoption of modern safety management philosophies. The very limited progress made, especially with the adoption of European directives in the years leading up to and immediately after EU accession in 2004, stands to be quickly reversed in new member states such as Latvia under current conditions of recession.

In neoliberal post-communist economies such as Latvia, there has been the rapid erosion of stable employment relations within newly intensified work regimes, in which the discipline of mass unemployment has hitherto been an important factor in undermining the organisational capacities and confidence of labour.

The result has been to create labour “flexibility” and workforce compliance, with a consequential downgrading of employment standards in the context of ‘business-friendly’ government policies. Deteriorated labour standards are also manifest in dangerous and unhealthy working conditions to which employees are exposed and which they are unable to refuse without fear of job termination. The consequences for safety and health at work are particularly significant and the need for greater employee protection has never been greater.

Paradoxically, the impact of the global economic and financial “downturn” has encouraged wider pressures at European level towards what in the new regulatory discourse is termed a “lighter” regulatory touch. The European Commission, for example, has argued: “The importance of reducing unnecessary administrative burdens increased with the economic crisis”, since small and medium sized enterprises in particular “need quick relief” (CEC 2009b: 4). The crisis of 2008 onwards therefore has provided the perfect pretext to intensify an assault on regulated labour standards within the European Union, both by national governments and by the Commission itself. Under the banner of reviving European economies and stimulating further flexibility in labour markets, the Commission has proposed a “strategy for smart, sustainable and inclusive growth” which involves extensive regulatory review.

Thus, the Commission has pursued its wider ongoing agenda of lifting the “burden” of regulation from business. In a Communication from the Commission in October 2009, working environment is identified as one of thirteen “priority areas” for action. The Commission has proposed to exempt small firms from risk assessment requirements (the most difficult sector in which to ensure effective occupational health and safety). This proposed exemption is complemented by a further proposal to “facilitate lighter transpositions by Member States of the Health and Safety of Workers Framework Directive” (CEC 2009b: 102). The compliance thrust of the Commission’s proposals is revealed in the following suggestion to modify the enforcement practices of national labour inspection authorities: “While inspections are essential to achieve safety and health at work, they should be made less time-consuming for businesses and compliant employers (e.g. in low risks enterprises) [and] should be rewarded by fewer inspection visits” (CEC 2009b: 103). The full implications for labour inspection and

enforcement have still to be assessed, but the commentary above does not augur well for more effective labour protection and the preservation of decent standards in the European workplace, especially in the more problematic workplace environments of the newer EU member states such as Latvia.

A recent ILO review of labour inspection activities again suggests that specific pressures on national governments during the crisis may have created a further “imbalance” in the priorities of labour inspection:

...the urgency of the crisis has in many respects limited the labour inspectorates’ scope of action. Inspectors have understandably focused their efforts on certain aspects related to the crisis (e.g. mass redundancies) with the result that inspection visits have not been conducted in the normally comprehensive or balanced way. The impact of this imbalance should be evaluated carefully because it could have a negative effect on other elements of working conditions ...which may be neglected at the expense of crisis-specific issues (Vega 2009: 16).

ILO expressed concerns would seem to be well-founded, or at least worthy of further research. Yet, the basic issue of the need for to interrogate effective forms of labour protection remains, precisely because the crisis has undermined many previously introduced labour standards and enforcement procedures. In terms of precariousness in the working environment, the effects of the crisis in Latvia have been to accelerate the number of part-time jobs and to increase the numbers of long-term unemployed. The prospects for Latvia are of further deteriorated OHS performance with weak employee participation in OHS management, and an inspection and enforcement regime already impaired both by domestic budgetary constraints and a disempowered workforce unable to assert demands for decent working environment. Added to this, is a broader agenda emanating from the European Union of reduced administrative burdens on business signalling a shift of emphasis away from safety and health in the workplace in order to stimulate a still-elusive economic recovery.

References

- Aidukaite, Jolanta (2011) 'Welfare Reforms and Socio-economic Trends in the Ten New EU Member States of Central and Eastern Europe', *Journal of Communist and Post-Communist Studies* 44 (3): 211-219.
- Albracht, Gerard and Campbell, Stewart (eds) (2006) *Labour Inspection Audit: Tripartite Audit of the Labour Inspection System of Latvia, 3-14 October 2005*. Geneva: International Labour Office.
- Baltic Course, The* (2009) "52% of Latvian residents would not mind working under the table", 1 June edition. <http://www.baltic-course.com/eng/analytics/?doc=14390>
- CEC (Commission of European Commission) (2007a) *Undeclared Work in the European Union*. Report: Special Eurobarometer 284, by Arnold Riedmann and Gabriele Fischer. Brussels: European Commission.
- CEC (Commission of the European Communities) (2007b) *Stepping up the fight against undeclared work*. Brussels : European Commission.
- CEC (Commission of the European Communities) (2009a) Economic Forecast Spring 2009. Brussels: Directorate-General for Economic and Financial Affairs, May 4, http://ec.europa.eu/economy_finance/publications/publication15048_en.pdf
- CEC (Commission of the European Communities) (2009b) Communication from the Commission to the Council and the European Parliament. Action Programme for Reducing Administrative Burdens in the EU Sectoral Reduction Plans and 2009 Actions. Brussels, 22 October, COM(2009) 544 final. http://hesa.etui-rehs.org/uk/newsevents/files/com_2009_544_main_en.pdf
- Dennis, Ian and Anne-Catherine Guio, A (2004) *Monetary Poverty in the New Member States and Candidate Countries*. Statistics in Focus, Population and Social Conditions, 12/2004. Luxembourg: Eurostat. http://www.eds-destatis.de/en/downloads/sif/nk_03_21.pdf
- EurLIFE database (2005) Life expectancy at birth. Dublin: European Foundation for the Improvement of Living and Working Conditions. <http://www.eurofound.europa.eu/areas/qualityoflife/eurlife/index.php?template=3&radioindic=1&idDomain=1>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2003) 'Latvia – Legislation strengthens institutional basis for health and safety. <http://www.eurofound.europa.eu/eiro/2003/08/inbri/ef/lv0308101n.htm>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2004) 'Latvia— Thematic Feature—Industrial Relations and Undeclared Work.' 10 Sept. <http://www.eurofound.europa.eu/eiro/2004/06/tfeature/lv0406103t.htm>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2006) "Latvia— Accidents at Work Linked to Minimal Industrial Relations in the Construction Industry," 14 March. <http://www.eurofound.europa.eu/eiro/2006/01/feature/lv0601102f.htm>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2009) "Government launches programme for health and safety at work", European Working Conditions Observatory, January 5. <http://www.eurofound.europa.eu/ewco/2008/11/LV0811019I.htm>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2010) *European Working Conditions Survey – mapping the results*, <http://www.eurofound.europa.eu/ewco/surveys/ewcs2010/results.htm>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2011a) *Industrial relations and working conditions developments in Europe 2010*. <http://www.eurofound.europa.eu/docs/comparative/tn1105040s/tn1105040s.pdf>
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2011b) Latvia country report, Health and well-being of workers. <http://www.eurofound.europa.eu/comparative/tn1105040s/lv1105049q.htm>
- European Parliament Committee on Employment and Social Affairs (2008) *Draft Report on Stepping up the Fight Against Undeclared Work*, 2008/2035(INI). Brussels: European Parliament Committee on Employment and Social Affairs.
- Eurostat (2009a) Newsrelease, euroindicators, 121/2009, 24 August. http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/4-24082009-AP/EN/4-24082009-AP-EN.PDF

- Eurostat (2009b) Newsrelease, euroindicators, 112/2009, 31 July.
http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-31072009-BP/EN/3-31072009-BP-EN.PDF
- Eurostat (2012) 23% of EU citizens were at risk of poverty or social exclusion in 2010 Statistics in Focus 9/2012, 8 February.
http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-12-009/EN/KS-SF-12-009-EN.PDF
- Hazans, Mihails (2005) "Latvia: Working Too Hard?" In Daniel Vaughan-Whitehead (ed) *Working and Employment Conditions in New EU member States—Convergence or Diversity?* Geneva: ILO-EC. pp.161–212.
- ILO (International Labour Organisation) (2009) *Labour inspection and labour administration in the face of undeclared work and related issues of migration and trafficking in persons: Practices, challenges and improvement in Europe towards a labour inspection policy*, National Workshop on Labour Inspection and Undeclared Work, Budapest October: International Labour Office.
- Inspecta Prevention Ltd and TNS Latvia (2010) *Darba apstākļi un riski Latvijā*, 2009.–2010. Riga. Latvian State Labour Inspectorate Annual Report 2009. Riga.
http://www.vdi.gov.lv/files/sdo_2009_en.pdf
- Krugman, Paul (2012) 'Success Stories', *New York Times*, March 26.
<http://krugman.blogs.nytimes.com/2012/03/26/success-stories/>
- Leschke, Janine and Andrew Watt (2010) *Labour Market Impacts of the Global Economic Crisis and Policy Responses in Europe*. Social Watch. Brussels: European Trade Union Institute.
http://www.socialwatch.eu/wcm/labour_market_impacts_and_policy_responses.html
- Lulle, Aija (2009) 'Labour Emigration: Government and Social Partner Policies in Latvia' in Béla Galgóczi, Janine Leschke and Andrew Watt (eds) *EU Labour Migration since Enlargement: Trends, impacts and policies*, Ashgate. pp.291-309.
- National Institute for Health Development of Estonia, Department of Health Statistics, The National Health Service of Latvia, Health Information Centre, Institute of Hygiene, Lithuania (2011) *Health in the Baltic Countries 2010*, 19th edition,
<http://sic.hi.lt/data/baltic10.pdf>
- Pabriks, Artis and Purs, Aldis (2002) *Latvia: The Challenge of Change*. In David J Smith Artis Pabriks, Aldis Purs and Thomas Lane (eds) *The Baltic states: Estonia, Latvia and Lithuania*. (pp 1-169). London: Routledge.
- Schneider, Freidrich (2002) *Size and Measurement of the Informal Economy in 110 Countries around the World*, Washington: World Bank.
- Vanadzins, Ivars, Baķe, Marite Ārija, Sprudza, Dagmara, Martinsone, Žanna, Mārtiņšone, Inese, Reste, Jeļena, Eglite, Maija, Zvagule, Tija, Kurjane, Natalija, Cirule, Jolanta and Matisane, Linda (2010) *Darba apstākļi un riski Latvijā*, SIA. Riga: Inspecta Prevention un SIA, TNS Latvia.
- Vanadzins, Ivars and Matisane, Linda (2011) 'Small and medium-sized enterprises in Latvia – main challenge for the occupational health and safety system', *Barents Newsletter on Occupational Health and Safety*, 14 (1): 6-8.
- Vega, Maria Luz (2009) *The global economic and social crisis and its impact on labour inspection systems*. Negotiating out of the crisis. International Training Centre of the ILO, Turin.
http://www.ilo.org/labadmin/what/pubs/lang--en/docName--WCMS_123770/index.htm
- Visser, Jelle (2011) ICTWSS database, version 3 – May 2011, Amsterdam Institute of Advanced Labour Studies, University of Amsterdam. <http://www.uva-aias.net/208>.
- Vogel, Laurent (2010) *Better Regulation: a critical assessment*. Brussels: European Trade Union Institute.
- Williams, C. Colin and Renooy, Piet (2009) *Measures for combating undeclared work in 27 European Union member states and Norway*, Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Woolfson, Charles, Calite, Dace and Kallaste, Epp (2008) 'Employee "voice" and working environment in post-communist New Member States: An empirical analysis of Estonia, Latvia and Lithuania', *Industrial Relations Journal* 39 (4): 314-34.

SPAIN

Ana M Garcia and Fernando G Benavides



1. A view on history: the institutionalization of occupational health in Spain

By the end of the 19th century and the early years of the 20th century, some developments in Spain suggested the will to institutionalize the protection of health and safety in the workplace (Bernabeu et al, 2000). During this period social protection institutions appeared (such as the Institute of Social Reforms and its precedents) and began to consolidate behind some of the major initiatives on occupational health and safety (OSH) put in place at the time, such as the Act of Occupational Injuries or the Regulation on Occupational Safety and Health, including the creation of a technical corps of labour inspectors with functions, among others, in the field of OHS. Contemporarily, occupational medicine became a regulated profession, warmly welcomed within the young National School of Health (1925), and this process influenced the development of Industrial Hygiene from the hand of the health administration. All these developments were relevant too for the development of the first Spanish Law on Occupational Diseases (1936), which recognised a list of 22 diseases or groups of diseases, but which was never applied.

This incipient process of institutionalization was abruptly stopped by the Spanish Civil War (1936-39) and its consequences. The structure of labour inspection and some initiatives of social protection, such as the compulsory insurance of disease (1942) or the establishment of industrial mutualism, remained, but many of the initial developments slowed down. New legislation on occupational diseases was not approved until several decades later (1978). The assurance of professional contingencies through the mutual companies, the so called *Mutuas de Accidentes de Trabajo y Enfermedades Profesionales* (MATEPs), was established with a clear bias toward business interests. The possibilities for worker participation in the management of OHS issues in companies and institutions were non-existent during the forty years of dictatorship in Spain (1939-1977).

During this time, occupational medicine was primarily restricted to caring and rehabilitation issues, a far cry from workplace surveillance and prevention activities.

Within this approach, institutions such as the National School of Occupational Medicine or the Occupational Medicine Department in the new Institute of Medicine, Hygiene and Safety at Work (1944), forerunner of the current Spanish Institute of Occupational Hygiene and Safety (www.insht.es), were also developed. The closer antecedent of the current Spanish Occupational Health and Safety Services (under the *Reglamento 39/1997*, see below) were what were then called Industrial Medical Services (1959). "Training, direction and tutelage" of physicians in these services was managed by the labour administration; with training mostly carried out by the Legal and Forensic Medicine departments of university Medical Schools.

Following the introduction of industrial medical services, the most important innovation in the field of occupational health in Spain took place in 1971 with the adoption of the National Plan of Occupational Hygiene and Safety, the General Ordinance of Occupational Safety and Hygiene and the current Institute of Occupational Safety and Health (1978, www.insht.es). While this last body, controlled by the Ministry of Labour and Social Security, assumed the functions of occupational safety and hygiene, those of occupational medicine, with its agencies, were under the health administration. This last measure, as indicated by Bernabeu et al. (2000), "...recovered the dichotomy that had been chairing occupational health in Spain: environmental and occupational conditions, traditional hygiene and safety at work, were under Ministry of Labour management, linking with the veteran labour inspectorate and with a predominance of professionals from the world of engineering and jurisprudence, while occupational health was assigned, when not diluted, to the medical and health field".

2. Training in occupational health: occupational medicine and nursing

The development of Occupational Medicine in Spain (García Gómez, 1998; Díaz de Franco, 2002) is also relevant to illustrate the current situation of the discipline and its limited role in relation to the structures and strategies for the protection of the OHS of Spanish workers. After the aforementioned

regulation of industrial medical services, developing workers' health surveillance and control functions in large workplaces (100 or more workers), the specialty of Occupational medicine was defined for the first time in Spain under the regulation governing training for different medical specialties (1984). The Spanish specialty of Occupational Medicine, however, started in a 'discriminated against' situation with respect to other medical specialties, together with other particular specialties such as Space, Physical Education and Sport and Legal and Forensic medicine. Under this regulation, the specialty of occupational medicine was studied at university occupational medical schools, following a registration payment, over three academic courses. Unlike other medical specialties, the training program did not include clinical rotations and did not have any kind of economic compensation.

Subsequent regulation (2003) modified the training program for medical specialties in Spain. Training in occupational medicine was relocated to a more convenient paragraph for the training of medical specialists, together with Community Health and Preventive Medicine and Public Health. Following this reform, which came into force in 2005, the training of future occupational doctors was carried out via a residence system in accredited training units lasting four years, including the remuneration of medical residents and following a new official program which included an upper grade in Occupational Medicine and rotations in prevention services, governmental occupational health institutions, MATEPs and national health services.

Despite the positive expectations that arose with the new management of occupational medicine specialists' training, nowadays this specialty is having hard times. The number of places offered is declining year on year. According to the experts, current occupational medicine training units face significant financial problems. Unlike other medical specialties' training, which are provided by the national health service, occupational medicine training is voluntarily provided by MATEPs, with these organizations deciding how and where training vacancies are offered each year. But the training vacancies are not sufficient to meet the demand for professionals, and occupational medicine posts are, in practice, covered by doctors from other specialties.

The history of occupational nurses in Spain is much shorter and even more disappointing (Corbelle Álvarez, 2009; Cabanillas, 2011). Despite the qualities of this profession for the field of occupational health, and the leading role that occupational nurses assume in the field of OHS in other countries (Delclòs et al., 2005), the specialty of occupational nursing, preceded by the

Diploma in Industrial Nursing, was only defined as a nursing specialty for the first time in Spain in 2005; the training program did not begin until 2009, and in 2010 the first places for the training of these specialists were offered, comprising just 13 vacancies across the whole of Spain. In 2011, 15 vacancies were offered, a number that remains entirely symbolic and contrasts sharply with that of other nursing specialties (e.g., 458 vacancies for Obstetrics and Gynecology, 219 for Community Nursing, 198 for Mental Health Nursing and 98 for Pediatric Nursing; only the specialty of Geriatric Nursing, with 14 vacancies, is below that for Occupational Nursing).

3. Training in occupational health: safety and health technicians

According to Spanish regulations, Spanish services for the prevention of occupational hazards in companies must be accredited by the competent Labour authority as being able to offer services in the disciplines of Occupational Medicine, Occupational Safety, Industrial Hygiene and Occupational Ergonomics and Applied Psychosociology. Experts in these disciplines must act in a coordinated manner, in particular in relation to the functions relating to safe job design, risk assessment and evaluation, preventive plans and workers' training. In the previous section of this paper, some decisive characteristics of the trajectory and current status of occupational health training (occupational doctors and nurses) have already been presented. Training of the so-called "technicians in occupational risk prevention", central figures for OHS activity in companies, also has some relevant peculiarities. Training of these technicians was stipulated by Spanish Regulation 39/1997. At that time, an accreditation procedure was established for active technicians. And from the very start of the process under Regulation 39/1997, concerns were raised about the need to manage the training of future OHS technicians through universities; but this was not attained until much later (Casamitjana, 1998; Guàrdia and Peró, 2011). In 2002 training of OHS technicians was offered on courses accredited by labour administrations. At that time, there were a total of 290 accredited courses, mostly without any relationship with Spanish universities (Durán and Benavides, 2004). As noted in a recent report (Guàrdia and Peró, 2011), for many years the quality of OHS technicians' training was largely of dubious quality, and mostly completely detached from higher education. Hundreds of Spanish OHS technicians attained their degree during this period. It was not until 2010 that University level training of these technicians was made compulsory. However, limitations have also been pointed out for this

approach: most higher degree programs are open to graduates in any discipline, and it is not uncommon, for example, to find OHS technicians with the specialties of Occupational Safety or Industrial Hygiene and higher degree curricula in the humanities or social sciences areas.

In addition, the comparison of the training programs of Spanish OHS technicians with those from other European universities (Guàrdia and Peró, 2011) highlights relevant differences: for example, in Spanish programs content relating to the legal field generally has a much greater presence, while training content on research methodologies is scarce or non-existent. The aforementioned report (Guàrdia and Peró, 2011) highlights the involvement of the University as a strength in the current training program, but the quality of the existing program is considered to be in need of improvement, mostly with regard to the lack of requirement in terms of the background of trainees, the shortage of applied or practical content, weakness in specialization training, little training in research methodologies, insufficient length of the training program and the need to strengthen training in skills such as management, negotiation and communication.

4. Occupational health and safety regulatory framework

Spain's entry into the European Economic Community in 1986 was decisive for the country's legislative development in the field of OHS. Within a very short space of time, and starting from structures and regulations that were, in the main, limited and inadequate, such as the Industrial Medical Services (1959) or the General Ordinance for Safety and Health at Work (1971), Spain approved a Law for the Prevention of Occupational Risks (Law 31/1995) and a Regulation for OHS Services (Regulation 39/1997), both essential to set the current practices and structures in the field of OHS in Spain. Thereafter, a substantial number of legal provisions governing OHS were developed in relation to different occupational risks, mostly derived from European directives.

Law 31/1995 is basically the transposition into Spanish law of European Directive 89/391/EEC, but also of other directives, such as 92/85/EEC, 94/33/EEC and 91/383/EEC, relating to the protection of motherhood and young workers and temporary employment. With Law 31/1995, substantial changes in OHS structure and practices in Spain were introduced. Since the introduction of this Law, all companies have been required to plan and organize OHS activities systematically. Another very important change has

been the creation of structures for workers' participation and consensus tools in the OHS field. For the first time in Spain workers can designate safety representatives (safety reps) with specific functions in the field of OHS in companies, and safety and health committees have been established in companies with 50 or more workers as structures for participation and consensus. Since then, the emphasis on workers' rights for participation in all aspects related to the protection of OHS has been a consistent and normative part in all of Spanish OHS.

OHS regulations in Spain make it compulsory for all employers in all companies and in all sectors to plan prevention, including occupational risk assessment and control or elimination of exposures and conditions deleterious to workers' health. All companies, even the smaller ones, are obliged to devote internal or external resources to the prevention of work-related diseases and injuries and the protection of workers' health; most of them meet this requirement by hiring external Occupational Health Services - mostly those affiliated to their own occupational health insurance systems (MATEPs, see the following sections). There are also subsidiary regulations and responsibilities for manufacturers (e.g., regarding working equipment) and contractors (e.g., in building activities). The self-employed can subscribe to a voluntary system for the coverage of occupational disease and occupational injuries. Participation provisions (mostly covered through the election of safety representatives) are compulsory for all companies with 6 or more workers (see the following sections). Although sectoral or regional safety representatives have frequently been claimed as necessary to cover the gaps in participation schedules, in particular in small business and in sectors with high rates of precarious work (Dossier, 2004), and some local schemes have been launched in the past (González Lada, 2006), regional reps are far from being a real resource for workers' participation in OHS in Spain.

Although Law 31/1995 and related regulations have undoubtedly brought improvements and very important advances for workers' OHS protection in Spain, the Spanish OHS protection system also has flaws and limitations (Boix, 2003). The emphasis among companies and OHS services on merely formal compliance with the obligations set out leads to excessive bureaucratization in the implementation of standards, and so-called "defensive prevention", the real benefits of which, in terms of OHS, are dubious. Defensive prevention can be defined as legally biased OHS: companies and OHS services target all of their actions at avoiding inspection and punishment by a system (the Labour Inspectorate) that is basically perceived as arbitrary and unpredictable. OHS

legislation is not applied in the light of technical knowledge, experience or common sense, and becomes an end when it should be a means, as if OHS was a legal issue rather than a technical discipline. This is perhaps due to the fact that "the Spanish legal framework, i.e. Law 31/1995 and derived regulations, is in essence more the forced result of membership of the European Union than an internal process of maturation of the social, political, scientific and professional basis for OHS" (Uberti and Rodrigo, 2006).

5. Inspection systems

Preventive practices in companies are also influenced by the shortcomings of the Labour Inspectorate (Crespán, 2007). In 2006, the Labour Inspectorate in Spain celebrated 100 years. Currently the Labour Inspectorate (Dirección General de la Inspección de Trabajo y Seguridad Social, 2011) employs 934 inspectors; a rate of one inspector per 10,000 workers. Spanish labour inspectors cover, among many other functions, compliance with OHS rules in companies. To strengthen this activity, since 2006 nearly 300 technicians have been employed in the autonomous communities (Spanish regions with certain economic and management independence from central Government) to carry out inspection duties in the field of OHS. More than 20 per cent of the inspection activities described in the 2010 Labour Inspectorate report are classified as OHS activities. The planned activity of the Labour Inspectorate in this regard is described in that report in the following terms:

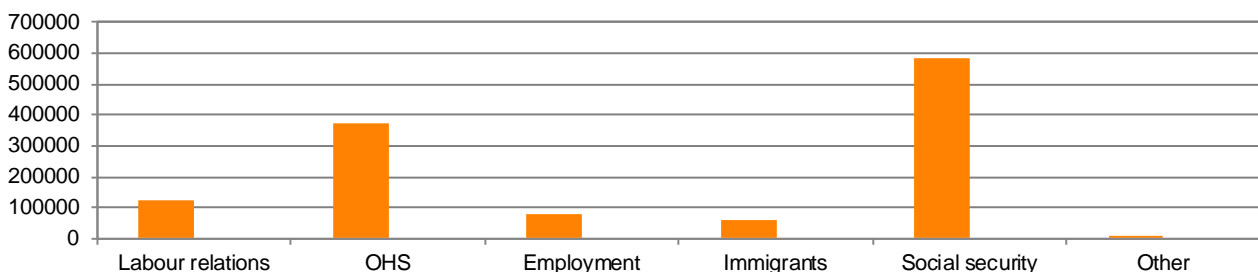
- Working conditions: monitoring of compliance with OHS legislation in the workplace, focusing mainly on the construction sector,

without prejudice to the development of actions in other economic sectors.

- Controls in proceedings in the fishing sector
- Controls on OHS services in the companies and firms auditing OHS activities and certifying OHS training
- Compliance of coordination obligations when different companies concur in a work setting
- Investigation of occupational accidents

Reactive (unplanned) activity includes reports made at the request of the courts, tribunals, administrations, workers and citizens, mainly in connection with the investigation of occupational accidents and diseases. As pointed out by the experts (López Parada, 2005), judicial claims due to lack of preventive measures are virtually non-existent, either from workers, unions or the administration. The OHS activities of the Spanish Labour Inspectorate have in the past been described as inadequate, biased and even arbitrary (Uberti and Rodrigo, 2006). Even so, some recent efforts may improve the effectiveness of this body in the field of health and safety at work, such as improving forecasts referred to in the Spanish 2007-2012 Strategy for Safety and Health at Work or the indications to strengthen control over the integration of prevention in the general system of management of enterprises arising from the 2003 reform of Law 31/1995. In general, OHS professionals claim the need for increased resources for inspection and for intensifying the training and specialization of inspectors to improve efficiency and to better target their performance (Moreno, 2005). In spite of gaps and the need for improvements in the Spanish inspectorate system regarding occupational health and safety coverage, this area, which ranks second in order after activities related to Social Security issues as shown in the figure below, involves a large number of activities.

Number of activities of the Spanish Labour Inspectorate by subject



Source: 2011 Report (Inspección de Trabajo y Seguridad Social – Estadísticas, 2011)

Available at: http://www.empleo.gob.es/its/web/Que_hacemos/Estadisticas/index.html

In fact, according to the last report (2011) from the Spanish Labour Inspectorate (Dirección General de la Inspección de Trabajo y Seguridad Social, 2012),

occupational health and safety related activities involve a substantial part of all inspection outputs, as shown in the table below.

Number and proportion (%) of outputs from the Spanish Labour Inspectorate involving occupational health and safety (OHS) issues. Spain, 2011

	All subjects	OHS subjects	
		N	%
Visits	356.535	79.276	22,2
Actions	1.184.626	374.727	31,6
Offences	90.096	19.900	22,1
Fine (euros)	256.478.396	60.384.768	23,5
Workers affected by offences	451.861	123.598	27,4
Required actions	137.228	102.391	74,6

Although OHS inspection activities are usually focused on more traditional OHS risks and exposures (e.g., 43% of the activities were related to safety and hygiene conditions, working equipment and personal protection devices), there are signs pointing towards an enlargement of the scope of inspection functions in the area of occupational health and safety, such as the publication of guides to regulate the activities of Labour Inspection with regard to economic and psychosocial risks at work, to integration of prevention activities into the management of the companies or to road safety (Inspección de Trabajo y Seguridad Social, 2012) and some initiatives promoting the control and promotion of safety culture in the companies (Instituto Nacional de Seguridad e Higiene en el Trabajo, 2008; Velázquez, 2009).

6. Occupational risk insurance system

The General Social Security Act of 1994 (Act 1/94) sets the current legal framework of assurance in the field of health and safety at work in Spain. Occupational accidents and diseases are insured contingencies, covering all employees and also some self-employed workers. In the case of occupational accident or disease, this insurance system covers medical costs (medical and pharmaceutical treatments) and economic losses (costs derived from sickness absence and compensation claims). In the majority of cases, companies insure these contingencies through firms called *Mutuas de Accidentes de Trabajo y Enfermedades Profesionales* (MATEPs). These firms act as partners of the Spanish Social Security system (Castello and Castejón, 2007).

MATEPs are employers' associations (with joint liability) collaborating with the Spanish Social Security system in the management of the contingencies of occupational accidents and diseases (currently in Spain they are also authorized, under certain conditions, to cover non-work-related accidents and illness). They are defined as private non-profit entities. Under Law 31/1995 and Regulation 39/1997, MATEPs gained

enormous prominence as the main entities supplying OHS services to companies.

However, later MATEPs were forced to separate their activities as accident and occupational disease insurers in collaboration with the Social Security system from their activities as OHS services for companies. A note from the Ministry of Labour and Social Affairs in this regard warned of "the privileged position of MATEPs as compared to other entities providing external OHS services to companies" and "covert funding of MATEPs' activities as OHS services for companies with funds coming from the Social Security system" (Castejón and Crespán, 2005). For this reason, the administration forced MATEPs to organize their OHS services through societies of prevention with economic independence from the rest of the activities of these entities, although these societies continue to maintain close proximity with their main firms. Simultaneously, an in depth restructuring of MATEPs led to the grouping into large corporations of a substantial number of small entities (in the early 1980s there were more than 150 MATEPs acting independently, which were grouped in 2007 into just 22 large firms). According to recent data, Spanish MATEPs are involved in the management of 90% of occupational contingencies (accidents and diseases) and MATEPs' societies of prevention act as OHS services for more than 50% of all Spanish companies (Rodrigo, 2007).

The basis for this occupational risk insurance system in Spain was established in the time of Franco's dictatorship in Spain, and the model has been a continuous source of misgiving and dispute in Spain between the MATEPs and the unions, including the MATEPs' involvement in OHS activities. While recognizing that the resources and wide distribution of MATEPs in Spain and their good relationship and knowledge of companies are suitable conditions for ensuring appropriate OHS coverage, especially for the tens of thousands of micro-enterprises with limited capacity for prevention with their own means, MATEPs tendency to favor the interests of the employer (the contractor of their various services) has led to

conflicting relations with workers and trade unions. Therefore, MATEPs democratization, with greater and more effective involvement of trade unions in their management, has been demanded, as has the disappearance MATEPs through their inclusion within the national health service (Rodrigo, 2007).

7. Occupational health and safety services

Spanish Law 31/1995 proposes different modalities for the organization of OHS in companies. However, Regulation 39/1997 puts the emphasis on external OHS services, against the principles established by the framework directive (Luque, 2004). As already mentioned in the previous section, MATEPs have been the main beneficiaries of this emphasis (currently, the beneficiaries are the so-called societies of prevention in the MATEPs). According to data from the latest Spanish Working Conditions Survey (Almodovar and Pinilla, 2009), 73% of companies have opted for hiring external OHS services, this option being progressively predominant over time since Regulation 39/1997. As a result, OHS planning and management with the company's own resources (perhaps relying on a minimum of external advice) are virtually non-existent, except in larger companies. According to 2011 data (see table), the majority of Spanish companies are small; however, it is also true that a substantial proportion of workers in Spain are employed by larger enterprises.

Distribution of Spanish companies according to size (2011)

	Companies n (%)
1-5 workers	1,161,360 (79.8)
6-49 workers	269,034 (18.5)
50-99 workers	13,279 (0.9)
100-499 workers	9,873 (0.7)
500 and more workers	1,709 (0.1)

Source: Spanish National Institute of Statistics

Derivation of OHS duties through the hiring of external OHS services has been repeatedly referred to as a cause of the lack of integration of occupational risk prevention in companies, a phenomenon that experts identify as one of the main obstacles to progress in the field of health and safety at work in Spain (Velázquez, 2009). Indeed, while the obligation of the employer "to integrate" occupational risk prevention in its day-to-day management of the company is clearly established in Law 31/1995, as well as in Directive 89/391/EEC, and consequently production management and OHS management should go hand in hand, OHS

responsibility should be assumed by the employer only, without the possibility to delegate to others, whether they are workers, OHS services or subcontractors. In practice, however, companies' practices in the field of OHS are far from such integration, as are OHS services' practices and the Administration's own practices too. The activity of Spanish OHS services has undergone frequent scrutiny and criticism (Bajo, 2002; Boix, 2003; Boix et al, 2008). Some recent initiatives of professionals, researchers and institutions (Boix and Prada Rodríguez, 2011) are intended to develop recommendations to improve OHS services' quality and to promote good practices among their professionals.

8. Occupational health and safety participation

Law 31/1995 requires Spanish employers, for the first time, to manage health and safety with a systematic, informed, and participative approach. Workplaces with six or more workers should have safety reps elected by the workforce or appointed by trade unions. In the majority of cases, prevention delegates are linked to trade unions, and mostly rely on the support structures and resources of the two major unions in Spain (CC.OO. and UGT). A recent CC.OO. report (Narocki et al, 2011) assessing the activities and achievements of an extensive network of occupational health advisors developed by CC.OO. with the main goal of supporting the activity of safety reps in companies, concluded by stating that such advice fulfilled a vital role in improving the bases on which the authority and influence of these representatives sits. The duties and rights of safety representatives in Spanish workplaces under Law 31/1995 are described below.

Duties
<ul style="list-style-type: none"> • Control of occupational health and safety legislation accomplishment • Promotion of workers' cooperation • Collaboration with employers on decision making about <ul style="list-style-type: none"> - Working equipment, environment and conditions - Organization of preventive activities - Preventive actions - Procedures for workers' information and training - Procedures of documentation regarding: <ul style="list-style-type: none"> Preventive plans Occupational risk evaluation Planning of preventive activities Health surveillance Occupational injuries and diseases • Elaboration of reports answering employers consultations

- Respect of confidentiality
- Participation in and implementation of Health and Safety Committee activities

Rights

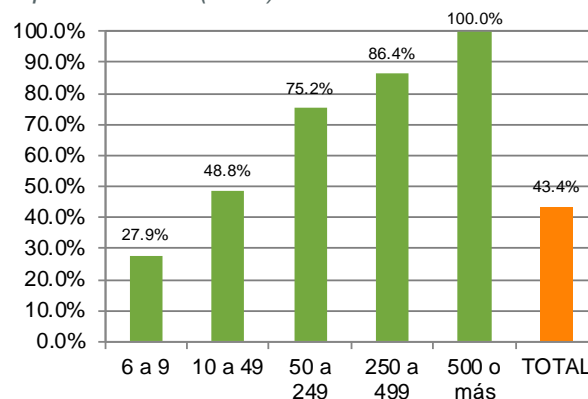
- To be consulted by employers regarding health and safety decision making
- To accompany health and safety technicians during risks evaluations
- To accompany Labour Inspectors visiting the workplace
- To be informed by Labour Inspectors about the results of their visits
- To ask for inspections from the Labour authorities
- To have free access to occupational health and safety documents and reports affecting the enterprise
- To be informed by employers about occupational injuries and diseases
- To be informed by employers about any other health and safety related information
- To visit work places and to control working conditions in the enterprise
- To make preventive recommendations to the employer and Health and Safety Committee
- To receive justification from the employer regarding recommendations not implemented
- To ask for unsafe work activities to be stopped
- To receive training and resources from the employer for the implementation of their duties
- To have special consideration of working time for the implementation of their duties
- To have employment and professional promotion guaranteed

A study of safety representatives in Spanish workplaces (García et al, 2007a; García et al, 2009) concluded that Spanish safety representatives were quite active, although their participation in activities related to occupational health management was in general low. Besides workplace size, industrial sector, safety representatives' training, and perceived support from the Labour Inspectorate were the most consistent and strongest factors associated with safety representatives' activities. For activities related to participation in occupational health management, perceived support from employers and from occupational health services also showed significant associations.

According to the latest national survey of OSH management in enterprises (Almodovar and Pinilla, 2009), providing weighted data on safety reps coverage at the national level, this coverage is not

complete, but is present in a significant proportion of Spanish companies. The coverage varies according to the size of the company (see figure).

Spanish companies (%) with safety representatives (2009)



Source: Spanish National Working Conditions Survey, 2009

Act 31/1995 establishes the constitution of the Committee on Safety and Health in all companies with 50 employees or more. This Committee is a joint body with workers' and company managers' representatives developing OHS information and consultation functions in workplaces. The coverage of this structure of participation is very high in Spain: according to the 2007 Spanish Working Conditions Survey (Almodóvar and Pinilla, 2007), carried out on a representative sample of employees from all occupational sectors in Spain, 84% of workplaces with 50 or more employees have their Committees on Safety and Health constituted, and this proportion increases to 92% in workplaces with 500 or more employees. In very few areas of public health action are healthy citizens' participation structures so widespread, operative and close to the target population. Some recent initiatives have shown the relevance of these structures to carrying out prevention programs in the OHS field based on the company's own resources, as is the case for participatory ergonomics programs (Garcia et al, 2012).

Differences in the coverage of bodies and figures of representation on OHS in enterprises can be seen not only relating to the size of workplaces, but also in the function of the sector of activity of enterprises (Almodóvar and Pinilla, 2007; Almodóvar and Pinilla, 2009); these resources are more frequently found in the industry sector, followed by services and construction.

9. Occupational health and Spanish trade unions

There are two main trade unions in Spain: *Comisiones Obreras* (CC.OO.), which originated in the 60's from a series of mining strikes in the north of Spain and suffered severe reprisals during Franco's dictatorship in the country, and the *Unión General de Trabajadores* (UGT), with a much longer history, arising from the Spanish socialist movement at the end of the XIX century. Originally, CC.OO. was closely related to the clandestine Spanish Communist Party (*PCE*), but this connection was later loosened. With the arrival of democracy in Spain, both trade unions developed greatly, receiving economic support from the State and growing in resources, capacities and participation in policies through meetings with governmental and employers' representatives in social dialogue committees, with more or less activity and influence through various governments. The rate of trade union membership in Spain is among the lowest in Europe, remaining steady over recent decades at between 15-20% of the working population. However, trade union coverage of the working population through wage bargaining and workers' representation is much higher (Beneyto, 2010).

Both main Spanish trade unions (CC.OO., UGT) have been active in relation to occupational health and safety issues, but perhaps the involvement of CC.OO. in this area is particularly remarkable through the creation and maintenance of ISTAS (Trade Union Institute of Work, Environment and Health, www.istas.net), which is an independent trade union's technical foundation supported by CC.OO. with the aim of promoting the improvement of working conditions, occupational health and safety and environmental protection in Spain. With both a technical and a scientific basis, ISTAS has been very influential in social dissemination and mobilization around key aspects in occupational safety and health, such as the importance of occupational exposure to psychosocial risks and the opportunities for their management (Moncada et al, 2010), strategies to control chemical exposure at work (Romano et al, 2011), the impact of occupational diseases in the population (García et al, 2007b; García and Gadea, 2008), the development of participatory ergonomics programs (García et al, 2012) and the role and activities of safety representatives in Spanish companies (García et al, 2009), to mention just a few examples.

10. The Labour market in Spain

Some major descriptors of the labour market in Spain, collected in a recent report of the Spanish Society of Public Health and Health Administration (SESPAS), especially in relation to those aspects that can directly

influence health and well-being in the population (García, 2010), are presented in this section. The rapid development of the current situation of economic crisis in Spain and in all its neighbouring countries has led to constant variations in these indicators, very likely towards still more unfavourable situations for the coming years. However, the scene described is informative enough for the purposes of this paper.

Data for 2009 (*Instituto Nacional de Estadística*) already reflected a bleak situation. In 2009 there were 18.5 million workers employed in Spain (the average for 2011 is 18.1 million); and this number has been going down again when compared to the previous period. In 2009, more than 1.2 million people lost their jobs. At the end of the same year more than 4.3 million unemployed workers, defined as persons aged over 16 who are without work, available for work and actively seeking employment (5.0 according to data for 2011), were registered in Spain. The unemployment rate in 2009 was 19% (in 2011 it reached 22%).

Also according to 2009 data, the decline of employees in that year (815,500 persons) occurred mainly among workers with temporary contracts (668,000). In comparison with the previous year, occupation fell in all sectors (services: -3%; construction: -17%, industry: - 2%, agriculture: - 3%). The rate of activity (the ratio between the active population and the population in the active age range) increased among women (up 52%) and decreased among males (standing at 68%) as compared to the previous period. By age, decreases have affected mostly young workers (in 2009 more than 180,000 workers lost their jobs in the group aged between 16 and 29 years). The activity rate among foreign workers (76%) was still higher than the activity rate for Spanish workers (57%), but showed a much more rapid decline (-0.47 compared to the previous period for foreign workers, -0.01 for Spanish workers). The unemployment rate in 2009 for foreign workers was much higher than for Spanish workers (30%). It should be noted that the arrival of massive numbers of foreign workers in Spain has been a relatively recent phenomenon, possibly unique among the experiences of other European countries. In 1999, only 2.3% of Spanish workers paying into the Social Security system were foreigners, while in 2008 this proportion reached its highest level, with 10.8% of foreign workers contributing to the system (*Instituto Nacional de Estadística*). Most foreign workers in Spain come from central Europe (Romania), Northern Africa (Morocco) and Latin America (mainly Ecuador and Colombia).

In comparison with those of its neighbouring countries, Spanish indicators are equally worrying (see table below). According to European statistics (Eurostat,), Spain is placed in the lowest positions in the context of

a crisis which is undoubtedly affecting all countries, but for which it seems that not all were equally prepared and not all show a similar ability to overcome the situation. While still in the process of decline, in 2009 the unemployment rate in Spain doubled from the rate for five years earlier (from 9% in 2005 to 18% in 2009). In the same period, the average for the European Union of 27 (EU-27) countries did not change from 8.9%, while in the EU-15 it increased only one point (from 8% to 9%). In general, in the majority of countries female rates of unemployment are lower than those for males, and in some cases the fall in employment seems to have affected men more deeply

than women (though in Spain data from 1977 onwards from the active population survey show that unemployment rates have been higher for women than for men). On the other hand, in all countries younger workers (under 25 years old) have much higher unemployment rates, and once more Spain stands out above the rest with the worst indicators for this group with nearly 40% unemployment (double that for the whole of the EU-27 of 20%). The proportion of temporary contracts in the country is also the highest in the table, almost 24 per cent (slightly above the next country, Poland, with 21% and again double that for EU-27 of 11%).

Unemployment (2005, 2009) and temporary contracts (2008) in Spain and in other European and non-European countries (from García, 2010)

	Unemployment rates (2005)	Unemployment rates (2009)			% temporary contracts (2008)
	Total	Total	Mujeres	< 25 años	
EU-27	8,9	8,9	8,9	19,8	11,3
EU-15	8,1	9,1	9	19,5	11,7
Germany	10,7	7,5	6,9	10,3	12,6
Austria	5,2	5	4,7	10,6	7,5
Belgium	8,5	7,9	8,2	21,6	6,7
Bulgary	10,1	6,7	6,6	16	3,6
Croatia	12,7	9,6	10,6	25,5	9,4
Denmark	4,8	6	5,3	11	ND
Spain	9,2	18,1	18,4	39	23,7
Finland	8,4	8,2	7,6	21,5	11,6
France	9,3	9,4	9,8	23,8	13
Greece	9,9	9,7 ^a	13,5	22,1 ^b	7,3
Netherlands	4,7	3,5	3,5	6,7	12,1
Hungry	7,2	10	9,7	26,5	6,9
Ireland	4,4	11,8	8	24,6	5,8
Italy	7,7	8,5	10	21,2 ^b	9,8
Luxemburg	4,6	5,7	6,2	17,8	5,8
Poland	17,8	8,2	8,7	21,1	20,6
Portugal	7,7	9,6	10,3	19,3	17,3
United Kingdom	4,8	7,8 ^c	6,6	15 ^b	3,8
Czech Rep.	7,9	6,8	7,8	16,7	6,6
Sweden	7,7	8,3	8	25,2	ND
USA	5,1	9,3	8,1	ND	ND
Japon	4,4	5,1	4,8	ND	ND

NDA: No data availability. ^a Data for September 2009. ^b Data for 2008 (2009 no available). ^c Data for September 2009.

In a context in which, on the one hand, employers require greater flexibility and adaptability to fluctuations in the market and, on the other hand, workers claim increased security in employment and social benefits (together with the necessity of special protection measures for the most vulnerable groups), the so called *flexicurity* approach seems to satisfy all, if this is possible. Although the concept is interpreted in different ways in different contexts, the Danish Government's proposal, coining the term for the first time, understood that *flexicurity* entails strategies for the flexibility of the labour market, caring for social security systems and guaranteeing the rights and duties of the unemployed. The European Union actively encouraged this proposal, being followed by more or less developed countries through diverse approaches. Apart from other multiple considerations that could be made in this respect, the evidence shows that without a strong social protection system (alongside security), the evolution of the labour market towards flexibility will very negatively affect the health and well-being of the working population and their families (García, 2010).

11. Working conditions and OHS outcomes

A more recent general assessment of OHS in Spain was provided by a 2006 report delivered by the Spanish Observatory of Occupational Health (Benavides, 2007), a centre which would later be integrated into the current Centre of Research in Occupational Health (www.upf.edu/cisal, CiSAL) of the University Pompeu Fabra in Barcelona. The 2006 Spanish Report of Occupational Health was preceded by a 2004 report (Durán and Benavides, 2004) and its continuity is scheduled in a subsequent report due this year (2012). Data collected and analyzed in the 2006 report led to the following recommendations intended to improve OHS protection in Spain:

1. It is necessary to evaluate employment policies in terms of their impact on the health of workers
2. It is necessary to extend the quantity and quality of OHS resources, especially in smaller companies
3. High risk groups should be identified and given urgent attention, especially young workers, women and immigrants, and manual and unqualified workers

4. The most prevalent occupational risks, also requiring urgent attention, are falls, the manipulation and inhalation of chemicals, repetitive movements, monotony and lack of control over work
5. Commuting occupational injuries must be considered as a priority for OHS policy
6. Workers aged over 55 years should be considered as a target population in future preventive interventions against fatal occupational injuries
7. OHS policies intended to control non-fatal occupational injuries causing sickness absence should concentrate on the construction and services sectors
8. Spanish autonomous communities show different patterns in the incidence of occupational injuries and the causes for these differences should be investigated
9. The identification and registration of occupational diseases should be urgently improved
10. Work-related conditions (such as mental illness) should also be under surveillance and preventive actions in this regard should be developed

Available data on some of the main indicators of workers' health in Spain add additional information on the situation of OHS which is also of interest.

Thus, the frequency and characteristics of occupational injuries is an important indicator because of its direct relationship with working conditions and the acceptable quality of registration (Benavides and Serra, 2003). A recent analysis (Benavides et al, 2011) of the trend of non-fatal injuries in Spain between 2000 and 2009 showed a clearly positive trend. As shown by the data in the table, the number of these occupational injuries has declined consistently during this period: while slightly more than one million non-fatal occupational injuries were recorded in 2000, in 2009 this number was around 700,000. In this same period the incidence (the ratio of the number of occupational injuries and the number of employees) reduced by 46%, from 84.3 to 45.7 per 1,000 workers. Although in most of the first part of this period the number of workers in Spain increased, by the end of the period the effects of the economic crisis began to be manifest. More recent data on the number of occupational injuries show a continuous decrease.

Incidence of non-fatal occupational injuries in Spain, 2000-2009 (from Benavides et al, 2011)

Year	n	Working population	Incidence per 1000 workers
2000	1.037.689	12.304.946	84,33
2001	1.058.031	12.828.575	82,47
2002	1.049.450	13.376.632	78,45
2003	979.510	14.037.339	69,78
2004	976.381	14.560.220	67,06
2005	1.010.178	15.390.727	65,64
2006	1.034.733	16.057.867	64,44
2007	1.051.786	16.724.243	62,89
2008	921.495	16.791.949	54,90
2009	715.535	15.670.813	45,66

Benavides et al (2011) argued that there were two main reasons which explained these trends. Firstly, the change in the productive structure in Spain, which has been moving towards the services sector, which already employs three out of every four Spanish workers (see table). In a study examining the impact of

changes in the productive structure in terms of the decrease of the risk of fatal occupational injuries, it was observed that the contribution of such changes explained a third of the decline in these injuries (Santamaria et al, 2006).

Distribution of Spanish workers according to economical activity of companies

	2001		2008		2011	
	Workers (x1000)	%	Workers (x1000)	%	Workers (x1000)	%
Agricultura	1045,2	6,5	818,9	4,0	760,2	4,2
Industria	3176,7	19,7	3198,9	15,8	2555,3	14,1
Construcción	1876,2	11,6	2453,4	12,1	1393	7,7
Servicios	10048,1	62,2	13786,4	68,1	13396,2	74,0

Source: Spanish National Institute of Statistics

The second explanation relates to the effort made by authorities, workers and businesses to prevent occupational accidents, particularly through the so-called *Planes de Acción Preferente* (PAPs) program. Through this program, driven by local administrations, inspection and advice are concentrated on those companies exhibiting a high number of occupational injuries, based on the observation that approximately 40% of occupational injuries occurred in 2% of companies. PAPs work primarily by visiting those companies with a high number of occupational injuries; finding out if those companies fulfil legal requirements concerning preventive measures, mainly related to safety (e.g., machinery, equipment, tools, devices, and clean spaces); offering solutions; and establishing deadlines to solve detected faults. Between 1999 and 2004, most of the Spanish autonomous regions (14 out of 17) developed PAPs in their own territories, mostly focusing on non-fatal traumatic occupational injuries

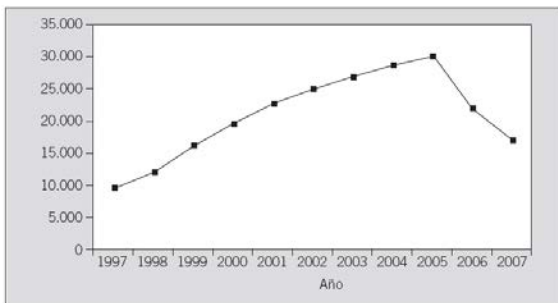
(Benavides et al, 2009). Recent studies have shown the effectiveness of these programs, with the annual incidence of non-fatal occupational injuries in the participating companies reduced by 12% (Gil et al, 2010).

Information on occupational diseases in Spain is rather less reliable and more difficult to interpret than the information on occupational injuries. Although there is recent regulation in this respect (the new system for the notification and registration of occupational diseases in Spain approved in 2006), the available data continue to show serious problems in notification and acknowledgement. In fact, after a relatively constant increase in the number of registered occupational diseases over recent years (very likely related to improvements in the system of notification and registration), recently a reversal in this trend was observed (see figure), which again has been linked to

problems in the notification system and to a drift of the cases which should be dealt with by the Social Security system and their partners (MATEPs) towards the national health service (Benavides and García, 2008).

According to available estimates for the year 2006 (García and Gadea, 2008), underreporting of the incidence of occupational diseases in Spanish official registries is around 75%. For some conditions (such as respiratory diseases or occupational cancer), underreporting increases to 95% of existing cases. In addition, the annual number of work-related deaths in Spain was estimated to be around 16,000 (Garcia et al, 2007b); in the same year, only two cases of fatal occupational diseases were registered in Spain.

Number of occupational diseases registered in Spain, 1997-2007



Source: Statistics from the Spanish Ministry of Labour

It is well known that in Spain a large number of work-related health problems are treated as common diseases by the national health service, but costs related to this should be borne by the account of MATEPs, managing the money that companies pay to the Social Security for the insurance of occupational risks. It has been estimated that nearly 16% of primary care consultations in Spain are caused by work-related exposures (Benavides et al., 2005). Most of these work-related health problems (71%) are musculoskeletal disorders; indeed, in Spain almost two out of every three registered occupational diseases and more than one third of reported occupational injuries (according to data from the occupational injuries and diseases registry, Ministry of Employment and Social Security, www.meys.es/estadisticas/EAT/Welcome.htm) are related to occupational exposures to physical strain, mainly posture, repeated movements and sedentarism.

12. Summary and conclusions

In this report we have presented some major determinants of the health and safety at work situation in Spain, describing key elements in its historical development, current conditions, the context of the labour market, the main legal requirements, the main

features of OHS structures and professionals and some outcome indicators in terms of workers' health. From all this information, we summarize below what might be the major influences and determinants for the protection of the health and safety of workers in Spain:

- In Spain, by the early 20th century the main initiatives on social protection and most particularly in relation to the health and safety of workers were developed; however, civil war and the period of dictatorship (1939-1977) abruptly interrupted this initial development. Although some developments were also observed, those years were mostly a lost period for the necessary social and professional maturation in this field, and some elements were introduced that quite possibly continue to weigh heavily on the current situation (pitfalls for the development of occupational medicine, the control of OHS mostly by the labour administration in detriment of health administration, the biased occupational contingencies assurance system).
- The entry of Spain into the European Economic Community (1986) represented a decisive boost in all policy development in the field of safety and health at work, in terms of the legal standards of Law 31/1995, derived from European Directive 89/391/EEC, and Regulation 39/1997, organizing OHS services in Spain.
- This policy development has determined the appearance of structures for the representation and participation of workers in the management of safety and health in companies (mostly workers' safety reps and health and safety committees), with what is a currently not a full but significant coverage. Available empirical information shows important levels of activity of these representatives and structures of participation of workers at the company level.
- Although there have been positive trends in Spanish indicators of workers' health in recent years (especially, a notable decrease in the incidence and severity of occupational injuries), the activities of OHS services and professionals in practice are considered overly formal and bureaucratic in what has come to be termed "defensive prevention", meaning that companies and OHS services direct most of their efforts towards their main objective of avoiding sanctions.
- In Spain there is now a variety of indicators on OHS performance, allowing a to some extent accurate diagnostic description of the

situation and evaluation of some policies, regulations and initiatives in this area. However, not all workers are equally represented by these indicators, which are more reliable for employees with regular contracts. Self-employed workers, immigrants, precarious workers and workers in the black or underground economy (a group which increases in crisis periods) are scarcely or not represented in most of available statistical data.

- The lack of integration of OHS activities in the management of companies has been identified as one of the main constraints for the quality of prevention in the workplace. The majority of companies differentiate between production management and OHS management and delegate responsibility for

prevention in other subjects mainly to external OHS services. The practices of companies, OHS services and the administration Labour Inspectorate system itself are far from favouring such integration.

- Training provisions for Spanish OHS technicians do not seem to have had sufficient guarantees of quality for a long time, and there is still significant room for improvement.
- The training of occupational health professionals (occupational doctors and nurses) has also proved to be flawed and problematic. The current supply of training posts is reduced each year and is clearly insufficient to meet the needs of the working population.

References

- Almodóvar A, Pinilla FJ, coordinadores. VI Encuesta Nacional de Condiciones de Trabajo. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo; 2007.
- Almodovar A, Pinilla FJ, coordinadores. Encuesta Nacional de Gestión de la Seguridad y Salud en las Empresas. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo; 2009.
- Bajo JC, Boix P, Castejón E, Maya I, Pou R, Rodrigo F, Velázquez M. La lógica de la prevención de riesgos laborales. Diez consideraciones y una propuesta final. Arch Prev Riesgos Labor. 2002;5(4): 179-83.
- Benavides FG, Serra C. Evaluación de la calidad del sistema de información sobre lesiones por accidentes de trabajo en España. Arch Prev Riesgos Labor. 2003; 6 (1): 26 – 30.
- Benavides FG, coordinador. Informe de Salud Laboral. España, 2006. Barcelona: Observatorio de Salud Laboral; 2007.
- Benavides FG, García AM. La sorprendente historia de las enfermedades profesionales en España. Med Clin (Barc). 2008; 131(14):559
- Benavides FG, García AM, López-Ruiz M, Gil JM, Boix P, Martínez JM, Rodrigo F. Effectiveness of occupational injury prevention policies in Spain. Public Health Reports. 2009: 124 (Suppl. 1):180-7.
- Benavides FG, Velarde JM, López-Ruiz M, Rodrigo F. Una década de éxito en la prevención de las lesiones por accidentes de trabajo en España. Seguridad y Salud en el Trabajo. 2011; 62: 22-7.
- Beneyto PJ. Afiliación y representación sindical en Europa. Últimos datos y estudios comparados. Madrid: Fundación 1º de Mayo; 2010.
- Bernabeu J, Perdiguero E, Zaragoza P. Desarrollo histórico de la salud laboral. En: Benavides FG, Ruiz-Frutos C, García AM, editores. Salud laboral: conceptos y técnicas para la prevención de riesgos laborales. 2ª edición. Barcelona: Editorial Masson; 2000. p. 71-81.
- Bofill J, Serra C, Benavides FG. La nueva lista de enfermedades profesionales: ¿Que novedades aporta respecto a la situación vigente hasta ahora? Arch Prev Riesgos Labor. 2007; 10 (2): 69-71.
- Boix P, editor. Hacer lo que hay que hacer y hacerlo bien. III Foro ISTAS de Salud Laboral. Madrid: ISTAS; 2003.
- Boix P, Rodrigo F, García AM. Informe sobre la calidad de los servicios de prevención en España. Madrid: Instituto Sindical de Trabajo, Ambiente y Salud; 2008.
- Boix P, Rodríguez de Prada A. Buena práctica profesional y calidad de la prevención: una iniciativa de transferencia impulsada por el Instituto Nacional de Seguridad e Higiene en el Trabajo. Arch Prev Riesgos Labor. 2011; 14: 177-8.
- Cabanillas Moruna JL. La formación especializada en Enfermería del Trabajo. Revista Enfermería del Trabajo. 2011;1:58-9.
- Casamitjana N. La Formación en Prevención de Riesgos Laborales: una oportunidad que no debemos dejar escapar. Arch Prev Riesgos Labor. 1998;3:95-6.

- Corbelle Álvarez JM. La Enfermería del Trabajo, una especialidad reciente, una profesión de siempre. *Med Segur Trab.* 2009; 55:10-1.
- Castejón E, Crespán J. La separación de los servicios de prevención ajenos de las mutuas: otro mundo es posible. *Arch Prev Riesgos Labor.* 2005; 8 (2): 56-7.
- Castellá JL, Castejón E. Aseguramiento y prevención de los riesgos laborales. En: Ruiz-Frutos C, García AM, Delclòs J, Benavides FG, editores. *Salud laboral: conceptos y técnicas para la prevención de riesgos laborales.* 2ª edición. Barcelona: Editorial Masson; 2007. p. 111-21.
- Crespán X. Inspección de trabajo y seguridad social y la prevención de riesgos laborales. En: Ruiz-Frutos C, García AM, Delclòs J, Benavides FG, editores. *Salud laboral: conceptos y técnicas para la prevención de riesgos laborales.* 2ª edición. Barcelona: Editorial Masson; 2007. p. 149-54.
- Delclos GL, Bright KA, Carson AI, Felknor SA, Mackey TA, Morandi MT, Schulze LJ, Whitehead LW. A global survey of occupational health competencies and curriculum. *Int J Occup Environ Health.* 2005;11(2):185-98.
- Díaz-Franco JJ. Medicina de empresa-medicina del trabajo: un proceso de legitimación. *Arch Prev Riesgos Labor.* 2002;5(1):1-3
- Dirección General de la Inspección de Trabajo y Seguridad Social. Informe anual 2010 de la Inspección de Trabajo y Seguridad Social. Madrid: Ministerio de Trabajo e Inmigración; 2011.
- Dirección General de la Inspección de Trabajo y Seguridad Social. Informe anual 2011 de la Inspección de Trabajo y Seguridad Social. Madrid: Ministerio de Empleo y Seguridad Social; 2012.
- Dossier: Delegados territoriales de prevención. *PorExperiencia.* 2004;(26).
- Durán López F, Benavides FG. Informe de salud laboral. Los riesgos laborales y su prevención. España 2004. Barcelona: Atelier; 2004.
- Eurostat. Labour Force Survey. Available at: <http://epp.eurostat.ec.europa.eu>
- García AM, López-Jacob MJ, Dudzinski I, Gadea R, Rodrigo F. Factors associated with the activities of safety representatives in Spanish workplaces. *J Epidemiol Community Health.* 2007a;61:784-90.
- García AM, Gadea R, López V. Estimación de la mortalidad atribuible a enfermedades laborales en España, 2004. *Rev Esp Salud Publica.* 2007b; 81:261-270.
- García AM, Gadea R. Estimaciones de incidencia y prevalencia de enfermedades de origen laboral en España. *Aten Primaria.* 2008; 40:439-45.
- García AM, López-Jacob MJ, Dudzinski I, Gadea R, Rodrigo F. Characteristics, activities and perceptions of Spanish safety representatives. In: Walters D, Nichols T, editors. *Workplace health and safety. International perspectives on worker representation.* Hampshire: Palgrave MacMillan; 2009. p. 73-89.
- García AM. Mercado laboral y salud. Informe SESPAS 2010. *Gac Sanit.* 2010; 24(Supl.1): 62-7.
- García AM, Sevilla MJ, Gadea R, Casañ C. Intervención de ergonomía participativa en una empresa del sector químico. *Gac Sanit.* 2012; 26(4):383-6.
- García Gómez M. Una nueva concepción de la medicina del trabajo. *Arch Prev Riesgos Labor.* 1998;1:51-3.
- Gil J, Boix P, López-Ruiz M. Evaluación del impacto de las políticas intensivas de intervención frente a los accidentes de trabajo en empresas de la Comunidad Valenciana. *Arch Prev Riesgos Labor.* 2010;13:128-34.
- González Lada HM. Los delegados y delegadas territoriales de prevención ya una realidad en Asturias. *PorExperiencia.* 2006;(34).
- Guàrdia J, Però M, coordinadores. Estudio de las necesidades formativas en prevención de riesgos laborales, ante el nuevo marco docente y los cambios reglamentarios derivados del denominado Proceso de Bolonia. Barcelona: Universidad de Barcelona; 2011.
- Inspección de Trabajo y Seguridad Social. Atención al ciudadano. Normativa y documentación. Available at: http://www.empleo.gob.es/ITSS/web/Atencion_al_Ciudadano/Normativa_y_Documentacion/index.html
- Instituto Nacional de Estadística. Encuesta de Población Activa. Available at: www.ine.es
- Instituto Nacional de Estadística. Directorio Central de Empresas. Available at: www.ine.es
- Instituto Nacional de Seguridad e Higiene en el Trabajo. Guía técnica para la integración de la prevención de riesgos laborales en el sistema general de gestión de la empresa. Madrid: INSHT; 2008.
- López Parada RA. Prácticas judiciales y su repercusión preventiva. En: Instituto Sindical de Trabajo, Ambiente y Salud. *Políticas públicas en salud y seguridad: una estrategia para el siglo XXI.* IV Foro ISTAS de Salud Laboral. Madrid: ISTAS; 2005. p. 109-17.

- Luque M. La reforma de la Ley de Prevención de Riesgos Laborales: una primera valoración. Arch Prev Riesgos Labor. 2004; 7 (1): 1-2
- Ministerio de Trabajo y Asuntos Sociales. Estrategia Española de Seguridad y Salud en el Trabajo 2007-2012. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo; 2007.
- Moncada S, Llorens C, Moreno N, Rodrigo F, Landsbergis P. CCOO ("Comisiones Obreras")- ISTAS (Union Institute of Work, Environment and Health) participatory action plan for a healthier work organisation: A case study. Safety Sci. 2011;49:591-8.
- Moreno N. Diez años de Ley de Prevención de Riesgos Laborales. Valoración de las políticas de salud laboral de las Administraciones y los agentes sociales. En: Instituto Sindical de Trabajo, Ambiente y Salud. Políticas públicas en salud y seguridad: una estrategia para el siglo XXI. IV Foro ISTAS de Salud Laboral. Madrid: ISTAS; 2005. p. 103-7.
- Narocki C, López-Jacob MJ, Canaleta E, Morán Barrero P, Briso-Montiano P. Impacto del asesoramiento sindical en salud laboral. ISTAS; 2009. Available at: <http://www.istas.ccoo.es/Descargas/Informe%20impcto%20asesoramiento%202011.pdf>
- Rodrigo F. Las Mutuas, esas grandes desconocidas. Arch Prev Riesgos Labor. 2007; 10 (4): 192-4.
- Romano D, Santos T, Gadea R. Trade Union Priority List for REACH authorisation. J Epidemiol Community Health. 2011;65(1):8-13.
- Santamaría N, Catot N, Benavides FG. Tendencias temporales de las lesiones por accidentes de trabajo (traumáticas) mortales de España (1992-2002). Gac Sanit. 2006; 20: 280-6.
- Uberti-Bona V, Rodrigo Cencillo F. Sobre sistemas de inspección y sistemas de prevención. Arch Prev Riesgos Labor. 2006; 9 (3): 117-20.
- Velázquez M. La integración de la prevención de riesgos laborales en la empresa. Arch Prev Riesgos Labor. 2009; 12: 165-9.

SWEDEN

Kaj Frick



1. Sweden's background and EU-membership

1.1 A review of what we know of work environment management in Sweden

This article tries to describe and partly explain how risks at work are managed in Sweden and thus how the provisions on Systematic Work Environment Management (SWEM, AFS, 2011) are implemented. SWEM transposes EU's Framework Directive (89/391/EEC). The SWEM-management is rooted in on the one hand how the broader economy affects organisations and their management and on the other how various actors promote SWEM.

The article will therefore be much devoted to the background factors. It will start by drafting Sweden's development and its EU-membership and go on with the regulatory regime, the social insurances and the labour market (in sections 2 to 4). Then it will describe the external work environment actors of OHS services and labour inspection, and continue with the internal workplace actors of workers-unions and employers-managers (and their external organisations; in sections 5 and 6). Finally it will assess how SWEM is implemented and its health and safety outcomes, before summing up promoting and obstructing factors for an effective implementation in the present economic-political setting (in sections 7 and 8).

1.2 Economic and political micro-history

Rapid growth from 1870 to 1970 transformed Sweden from a poor, agrarian country to one of the world's richest. This culminated in a nearly continuous boom between 1945 and 1975. A high proportion of labour became manufacturing workers, often employed in export oriented corporations. Large factories were relatively common, of which many were in rural company towns. After WW II the economic growth paid for the development of a welfare state, led by Social Democratic governments in power 1932-76, 1982-91 and 1994-2006. Some half of the tax level of 45.8 % of GDP in 2010 (Ekonomifakta, 2012a) is redistributed to the citizens, mainly as pensions and other social insurances, but municipalities and counties also provide broad welfare services. These have since the 1970s created many public (mainly female) jobs.

The oil-crisis and increased competition hit Sweden in the 1970s and 80s. Inflation grew and the economy slowed down, but unemployment was low until the economic crisis of the early 1990s. GDP then shrunk by 5 %, unemployment peaked at 13 % and public budget deficits soared. With recovery from 1994, GDP grew yearly at around 3.5 % to 2008. Swedish banks (just) avoided the finance crisis in 2008 but the export dependence made the economy shrink by some 5 % during 2009. After an increase of 6 % in 2010 and 4 % 2011, GDP grows slowly during 2012 and may speed up in 2013. It was some € 41 000 per capita in 2011.

The crisis accelerated change. Unemployment was rarely above 4 % from 1945 to 1991, but has since never been below 6 % (Öberg, 2011). Public budgets are now balanced and the debt is low. The public sector has fewer employees and less social transfer payments. Supply chains have grown with outsourcing and small firms (see also 6.1). The income gap has grown, especially since 2007 (SvD, 2011). The gini-coefficient grew from 0,20 in 1980 to 0.26 in 2008, mainly due to increasing and unequally spread capital gains (OECD, 2011a). Politically, the Social Democrats lost their dominance. Centre-right coalitions ruled in 1976-82, 1991-94 and now since 2006. They have increased neoliberal policies since 2006.

Sweden has an open economy. Exports and imports make up some half of the GDP. 2 % work in the primary sector, 13 % in manufacturing, 6 % in construction, 5 % in transport, 41 % in private services and 32% in public services (Ekonomifakta, 2012b; SCB, 2010: 158). This is reflected in the trade unions. Blue-collar ones in LO (Swedish Trade Union Confederation) had 63 % of all members in 1975, the white-collar ones in TCO (Swedish Confederation of Professional Employees) had 31 % and the academic unions in SACO (Swedish Confederation of Professional Associations) had 5 % (SCB, 1976). In 2010, LO had shrunk to 46 %. SACO grown to 18 %, while TCO had a slight growth to 36 % of all union members.

1.3 European Union membership and the Framework Directive

Sweden joined the EU in 1995. In 2003, the government decided not to join the Euro, after loosing a plebiscite on this. Few adaptations to EU's work

environment acquis were required. Swedish regulations were often ahead of EU's, but Sweden has since 1995 added or changed details in the regulations to implement EU-directives. However, other EU-decisions have much affected industrial relations and thereby the work environment system. The Directive on Posted Workers and some EU-court verdicts (notably the Laval-case, C-319/05) undermine the Nordic model of industrial relations of settling minimum wages and most other working conditions in collective agreements and few by law (Bruun et al., 1992). Unions may now only take limited industrial action to uphold some minimal conditions for posted workers, which may create a dual labour market with social dumping.

In 1993, the provisions on Internal Control introduced employers' mandatory self-regulation as the primary Swedish strategy to safeguard health at work. They had domestic origins but also transposed the requirements of the Framework Directive (89/391/EEC). However, workers are given a stronger right of participation than in the Directive. Unlike the Directive, the provisions also fulfil the quality control logic by stipulating a feedback and learning loop of internal audit and improvement. The provisions were updated and renamed Systematic Work Environment Management in 2001 (SWEM; AFS, 2001) and are since actively enforced and the by far most cited provisions (see further 7.1).

2. Regulatory regime

2.1 Work environment regulation

The Work Environment Act (WEA) from 1978 covers (nearly) all conditions and actors. It is a framework act with broad requirements and a general preventive duty for employers, but also for those who produce, import and market products for work, and for actors in the construction process. This zero-risk duty is slightly relativized by other sections in the Act. The general duties are, however, rarely invoked. The work environment (and its management) is instead regulated in provisions issued under WEA by the Swedish Work Environment Authority (SWEA). The Act's and provisions' material work environment requirements also apply to work by self-employed. Since SWEM in 1993 (then Internal Control), SWEA's provisions combine process and material requirements as a strategy to implement WEA. Risks assessments (and action plans) are basic requirements also in the ergonomics provisions (from 1998) and part of many other provisions, including on chemical hazards. Since the 1990s, many specified material provisions have been replaced by fewer and overarching performance

oriented ones (though this classification is not used in the Swedish discourse). The number of sections in the regulations have been cut to one third.

2.2 Formerly corporatist but still cooperative industrial relations

Employees and employers are since long highly organised. Even before the general franchise (in 1921), the social partners participated in a tripartite governance of labour and social policies, including safety at work (Rothstein and Bergström, 1998). The corporatism increased after LO (the union federation) and SAF (the private employers) reached a general agreement in 1938 at Saltsjöbaden. At the peak of their strength, LO and the Social Democrats initiated a series of work reforms during the 1970s, which still form the basis of Swedish labour law. Apart from the WEA, the most important were acts on:

- Union representation on company boards.
- Shop stewards' right to take paid time for their function.
- Lay-off rules, on first in, last out.
- Co-determination, in practice union rights of information and of consultation.

The economic basis for this corporatist and centralised model started to erode from the late 1970s but more so with the 90s' crisis. Collective agreements are now reached at sector levels (but nationally co-ordinated). Most political tri-partite corporatism has been dismantled. Yet, the Swedish Model continues. Unions and employers still control some formal organs and retain much influence through informal meetings with authorities (Rothstein and Bergström, 1998), including with SWEA on work environment regulations. They still co-operate, especially on the work environment. The industrial relations model is also largely intact.

2.3 Governance system

Ministries are small. Ministers govern by general instructions to state authorities, by the acts they are to implement, by appointing their director-generals and boards, by the size of their budgets and by giving them special tasks, usually in their annual appropriation letters. Public policies are specified and implemented by the authorities. These interact with the interest organisations that are major actors in the Swedish politics, including the social partners. The crisis of 1991-94 was a watershed in the Swedish society, politics, industrial relations and labour market. Public budgets are since tightly balanced. Governance models shifted from earlier social engineering during the reform years towards neoliberal decentralisation and market solutions. Public services are now largely managed by objectives and quantitative performances

and they are gradually privatised. One in five in publicly financed welfare services, such as schools and nursing homes, work for private employers (AF, 2011). National infrastructures are transformed into private corporations. There are fewer, simpler and more general regulations. The new government has since 2006 deregulated much of the labour market, making it easier to produce in supply chains with casual and-or imported labour. In all, Sweden is one of the least regulated countries in the EU.

2.4 Consensus and cooperation in work environment policies

Swedish work environment policies are consensus oriented and primarily advice and persuade employers-managers to make them assess and address risks. This voluntarism is to be supported by an extensive social dialogue. In 1912 labour got the right to appoint worker safety representatives and central LO representatives on the authority for occupational safety (Rothstein and Bergström, 1998). Neither this nor the labour inspection did for long amount to much. Accidents and diseases instead grew with the industrialisation. However, with growing unions and social policies from the 1930s, there were gradually more safety reps, inspectors and regulations to support a better local prevention. Employers were also worried by too many accidents. After Saltsjöbaden, they reached a general safety agreement with LO in 1942. From then on and to the crisis of the early 1990s, the social partners 'owned' Swedish work environment policies, by dominating e.g. initiatives, public inquiries and the national authority's board (from 2001: SWEA). The formal corporatism is since abolished, but the social partners still cooperate much on work environment issues between themselves (now including TCO and SACO and public employers) and with SWEA.

The work environment reforms of the 1970s strengthened both the regulations and the labour inspection, but the focus on persuasion and consensus continues. There is little formal enforcement by the inspection and sanctions are rare for violating regulations or after accidents. SWEA still uses information as a major strategy and it finds that the large majority of employers comply with the non-binding requirements of their inspection notices without the need for the cumbersome legal enforcement (Frick, 2011a and b).

3. Cutbacks in social insurances

Sweden's worker compensation is part of the public social insurance system against loss of income when

one is unable to work because of sickness, early retirement (i.e. 'permanent' sickness) or unemployment. In 2008, these insurances paid out a total sum of €12 billion (and €15 billion in 2005). To this should be added large costs for normal pensions, for personal support to disabled persons and for some other benefits. The worker compensation insurance got a wider coverage and better compensation in 1977. This is topped by extra benefits from collective agreement insurances. However, the right to sue the employer was abolished with this no-fault liability insurance (Perrin-Thorau, 1998). Workers compensation rights were restricted during the crisis of the early 1990s. From 1992 to 1997, the accepted claims dropped to one in eight while the compensated sick-days were more than halved (Lidwall and Skogman Thoursie, 2001). With further insurance restrictions since 2006, the large majority of perceived work related ill-health is not reported and even less compensated (Toren, 2010). The rules and their implementation make it much harder for women to get compensated for their stress and MSD-diseases than men for their accidents.

Unemployment shrank from the mid 90s, but sickness absence and early retirement grew. During the early 2000s some 14 % of the adult population (20-64) received either form of insurance, at a cost of €10 billion (Palmer, 2005). The government (Ds, 2001), inquiries (SOU, 2002) and research (e.g. Marklund et al., 2005) first emphasized psychosocial work risks as a major cause of the rising costs. This led to political initiatives, including more resources to SWEA, with instructions to focus more on such risks. However, the political debate shifted towards individuals' behaviour and 'overuse' of the insurances from 2002, despite evidence that most of the increased absenteeism was caused by much less rehabilitation of the long term ill (Larsson et al., 2005; Johnsson, 2009). SWEA was ordered to increase its supervision of employers' sickness absence management, in their SWEM. From the autumn of 2006, the centre-right government tries to get people back to work, much by reducing both the rights to and the benefits from the insurances at sickness absence, early retirement and unemployment. This whip is to be complemented by a carrot supporting people to rehabilitate to and to find work, though how this is working is much debated. Fees to the union-administrated unemployment insurance funds were multiplied in 2007 while benefits were reduced. This made many leave this voluntary insurance. When the social insurances have been reduced, the municipalities' social security assistance (at subsistence levels) has increased by some 25 % since 2009 (Socialstyrelsen, 2011).

4. A changing labour market

4.1 The labour market and its regulation

In October 2011, 4.2 million were employed and around 0.5 million were self-employed. The unemployment was 380 thousand, or 7.6 %, (and is roughly the same in July 2012). One third of these were unemployed at least half a year (SCB, 2011). Unemployment is slightly higher for men than for women and much higher for youth and for those born abroad. The employees were spread over 330 000 workplaces, of which 60 % had 1–4, 28 % 5–19, 10 % 20–99 and 2 % at least 100 employees (in 2008; SCB, 2010: 159). Yet 64 % worked for employers with at least 100 employees, as these usually have many workplaces. 77 % of the men and 72 % of the women were gainfully employed (including self-employed) in 2006 (Ds 2008: 7 and 9). The problem of an aging population is not acute, but in some decades there will be fewer working per non-working, which has started a debate on e.g. increased retirement age and how to support this by promoting long term work ability. In 2010 close to 60 % of the 60-64 year Swedes were gainfully employed, up from 49 % in 2000 (compared 31 % in EU).

Sweden is an ethnically mixed country with 13.8 % of the population born abroad (SCB, 2010: 105). Persons born outside the Nordic countries have increased their share of the Swedish population by 39 % from 2003 and 2007 (to 1.1 of 9.1 millions; 9.5 millions in 2012). Including posted workers and other temporary migration, EU-citizens make up some 11 % of the workforce and another 9 % are from other countries (Migrationsverket, 2010). Since 2008, Sweden has OECD's most open, demand-driven labour immigration. Employers may freely recruit workers from abroad (i.e. thus also outside the EU) if they nominally advertise the job before and claim that they will respect prevailing collective agreements conditions. However, the promises are not binding. Unions have often found actual wages and working conditions to be much lower than promised. The OECD therefore recommends Sweden to reinforce its mechanisms to ensure employer compliance with national standards (OECD, 2011b).

Globalisation also affects the labour market (Frick, 2009). With the increase of transnational corporations, the export of especially manufacturing jobs has grown since the 1990s and downsizing has become more common also in profitable firms of workplaces. The proportion of the labour force working for foreign-owned companies in Sweden has increased five-fold, from 2.5 % in 1980 to 12 % in 2004 (IVA/NUTEK, 2006). More adversarial management cultures in the

international firms may explain why the managers who believe that local co-operation is good for business fell from 70 % in 1996 to 46 % in 2003 (Levinson, 2004).

There is a segregation between 'male' and 'female' jobs, between sectors, within them and within workplaces, with women dominating in the public sector and in many private services. Payment and working conditions are generally lower in the 'female' jobs, though many foreign men also have to accept those jobs. The growing private service sector has smaller and more short-lived firms and a younger staff with higher turnover than the manufacturing and public sectors. Service employees are also less unionised, at 61 %, though even less among young blue-collar workers in cities (Kjellberg, 2011).

Fracturing corporations, focussing on their core business, have increased. This has created more firms and workplaces, with on the average fewer employees (AV, 2011a). 80 % of the 45 000 new firms per year are services producers (Ds 2008: 6). The structural change led to a tripling of new firms and those employed in new firms between 1993 and 2010 (Ekonomifakta, 2011a). Part of this growth has been caused by growing franchising firms, with some 100 000 employees in 2009 (Wikman, 2010). Self-employment likewise nearly tripled between 1981 and 2010 (Ekonomifakta, 2011b). It will probably continue to increase. In 2009, the government made this possible, even if the only customer is the former employer. There are now 15 % temporary and 11 % self-employed (SCB, 2012).

4.2 Labour force training and skills

The changed economic and job structure is accompanied with increased general education (SCB, 2010: 490-501). Among grown ups (25-65 years), close to half only had primary school in 1970, which went down to 33 % in 1990. In 2010, 15 % had primary school, 49 % secondary school, 22 % shorter academic training and 14 % at least three years academic training. The educational level varies geographically, with some wealthy suburbs and university towns having 40-50% with academic exams, but in all around 40% of the youth now continue to academic training, with a 10 %-units higher rate for women than for men. This has resulted in the mentioned decrease of blue collar and growth of professional jobs. Fewer and fewer blue-collar jobs are also unskilled, though many still remain in private services.). There is a strong relation between educational level and the further training offered by employers. SACO-members get the most and those in LO the least on-the-job training (LO, 2007). Still, many employees feel that they can not fully use their training and skills, mainly through too

much control (including from IT-systems; Gellerstedt, 2011).

5. Infrastructure to support the work environment management

5.1 Occupational health services with little prevention

According to ESENER (2010), nearly all workplaces are well advised by occupational health (OH) services. However, there is no support for this claim. The some 500 OH service units have a staff of 4 500 persons, dominated by nurses, physicians and others with individual-medical orientation. Their coverage has shrunk from 80 % of those at work in 1989 to 65 % in 2011 (Kindenberg, 2011). The private sector and especially small firms, are less covered. Employers mainly hire curative advice and help and little prevention. Health checks is a major product as are health promotion and rehabilitation. The abolition of sector-oriented OH services – such as in construction and in transport, with their movable mini-clinics – was a serious loss when the services were deregulated in 1993. However, some OH units are still active in risk assessment, improvement programs and other prevention, mainly by initiative from large private employers with a preventive focus (Schmidt et al., 2011).

Employer organisations object to union requests to again make health services mandatory, but the social partners jointly want to strengthen their preventive orientation. However, the government mainly directs the services to help reduce social insurance costs by sickness absence prevention and rehabilitation. The SWEM-provisions order employers without adequate internal work environment competence to hire such, but labour inspectors rarely enforce this as they consider most OH services to lack the necessary competence, e.g. on systematic work environment management or psychosocial problems (Frick, 2011a).

5.2 'Enlightenment' to improve the social construction of risks at work

R&D to produce and information and training to disseminate knowledge of risks and solutions is to support local understanding and improvement. This 'enlightenment' is part of the voluntaristic strategy and supported by both social partners. The unions used case studies and surveys, on e.g. stress and chemical risks, to raise awareness and public support for the work environment reforms of the 1970s (see Nelkin, 1985, on struggles over the social construction of risk). However, the conservative government much reduced

enlightenment funding in 2007 when it closed the National Institute for Working Life and abolished training and information subsidies. But there are still several producers of such information and training. There are reports and other information materials on R&D-units' web-sites, two work environment journals, with circulations of 10-15 000 each, and regular work environment news in a labour law and the many union journals, also in the white-collar ones.

Most information and training is run or influenced by the social partners. Prevent is since 1945 their joint training and information council for the private sector. It produces the main work environment basic training course (Better Work Environment). This is sold in 10-15 000 copies a year, together with 15-20 000 other training materials, which often are (re)used to train new groups of safety reps and others (Quist, 2011). Prevent also issues a journal, produces and spreads much information material, runs development projects on various problems with the social partners, and is the home of the largest work environment web-portal. The social partners joint insurance company, AFA, is a major funder of applied work environment R&D and also produces and spreads much work environment information.

The unions run national and regional further training work environment courses. When the government withdrew the subsidy, participation in LO's and TCO's courses plummeted while SACO had to stop their central training. In 2010, LO and Svenskt Näringsliv (the private employers) reached an agreement to support LO's central training with 10 M SEK per year during 2010 to 2012 (with hope of prolongation). This enabled LO to again give some 1 000 safety reps further training per year. Work environment information and development projects in the private sector are mainly run by joint industry bodies. These are less active than before the early 1990s, but still important. For example, the committee in the construction-industry has some research funding while the one in transport organises the sector's work environment (and professional) training. They often run projects, such as on MSD-prevention in the engineering industry that produced a joint risk assessment manual (Prevent, 2011).

5.3 A reduced Work Environment Authority

5.3.1 Wide brief but limited resources and training

In 2001, the National Board for Occupational Safety and Health and ten labour inspections districts merged into SWEA. The authority also supervises the Working Time Act, but the Act's general exemptions and alternative regulation through collective agreements

makes this a minor task. And SWEA controls the market of products that may affect health and safety at work, mainly by supervising compliance with EU's technical and chemical directives. Where EU-regulations are lacking, SWEA may issue national provisions on product safety.

Most of SWEA's staff regulate and supervise places of work, half as labour inspectors. The authority has been hit by repeated upheavals in its organisation and funding. In the latest one, the new government cut SWEA's budget by a third from 2006. This reduced the staff to 550 persons in 2010. The central expertise was more than halved to retain some 260 inspectors (with a fairly equal gender balance). With one inspector on 17 000 employees, SWEA is back to the level before the reforms started in the 1970s. It is much under ILO's norm of at least one inspector on 10 000 employees (AV, 2007; AV, 2011a). A staff turnover of close to 20 % led to much training in 2011 (AV, 2012c). New inspectors are trained for three months, with some individualized additional training during another three years. However, an audit of SWEA by EU's Senior Labour Inspectors Committee (SLIC, 2008) "found some indications that the recent cuts have resulted in a reduction in continuing professional development, in communication between specialists, and in training of established inspectors."

5.3.2 Information and supervision but less enforcement

SWEA largely plans and monitors its regulation, supervision and information based on its own analysis. With much fewer inspectors, the supervision has become somewhat more reactive and less proactive to implement the authority's plans. SWEA now uses its

resources more in coordinated national campaigns against selected risks or industries. SLIC (2008) questioned SWEA's monitoring system: "In common with many member states, the system is performance driven and the targets are quantitative e.g. number of notices served, number of inspections. Inspectors also record the level of compliance on priority topics, which is somewhat of a qualitative check, but an enhancement would be to develop some more qualitative measures of the outcomes achieved, as a result of the inspections and enforcement activity carried out." With inspiration from Denmark, the government has ordered SWEA to test a model to screen and publish ratings of all employers during 2010-12. However, a total screening would require a doubling of SWEA's resources.

SWEA uses information and guidance to implement the WEA. The government recently gave it some extra funding to improve its much visited web-site. The authority also has a telephone information service, is active on chat-sites and Facebook and produces printed media such as brochures and letters. Much information is now translated to English and major immigration languages on the most important regulations, duties and risks for foreign firms and workers. In SWEA's recent role as contact for foreign firms with posted workers, it also tries to provide information on the applicable labour regulations and collective agreements. The number of workplace visits have been reduced, but not as much as the budget. SWEA explains the inspectors' increased productivity as reduced office time etc., but there is also internal critique of shorter inspections with tick-the-box check-lists (Arbetarskydd, 2012).

Table 5.1 SWEA's workplace supervision (AV, 2011a and 2012c)

	2006	2007	2008	2009	2010	2011
Visited workplaces	22500	20000	19000	19000	20300	20300
Follow-up visits	8100	7400	7100	6200	8500	11000
Total workplace visits	40000	36000	33200	30000	33500	34700
Total supervision visits	-	26000	23000	21000	22400	22300
Visits per inspector	93	100	110	115	133	143

5 % of the total visits in 2011 were to self-employed – to inspect machinery etc. – and 72 % to small workplaces (1-49 employees). The latter is a larger share than in 2006, though many small workplaces are part of large employers' organisations, such as retail chains or schools. The supervision is guided by SWEA's rules, from the planning to how cases are closed (AV, 2008). These rules aim for a legal basis for the

inspection and any ensuing requirements, for predictable and equal implementation of the law and for supervisions that local social partners understand and accept. The inspection notices' requirements are not binding. The inspection districts only proceed to injunctions-prohibition if the employer does not comply in time or not enough with the requirements. Only the worst cases are referred to the judicial system

for possible prosecution. The cutbacks have reduced the number of inspection requirements on risks

reduction (though not on SWEM), but SWEA takes more legal actions to enforce these:

Table 5.2: Enforcement in SWEA's supervision (AV, 2012d)

	2007	2008	2009	2010	2011
Inspection notices	14000	14000	13000	14000	13700
Requirements in these:	54000	52000	46000	44000	42000
- <i>SWEM (risk ass. & al.)</i>	40%	40%	41%	39%	45%
- <i>Technical</i>	21%	24%	22%	19%	20%
- <i>Hygiene & chemicals</i>	21%	21%	20%	21%	18%
- <i>Psychosocial & ergonomics</i>	19%	16%	16%	21%	18%
Injunctions or prohibitions	750	900	889	944	941
References to prosecution	240	210	259	287	351

Most procedural stipulations in the regulations are directly enforceable. There are yearly around a hundred fines or sanction fees against violations of these, for example the duty to test pressurized vessels (AV, 2011b). Violations of material provisions are not legal offences until employers ignore injunctions-prohibitions to correct them. Yet, both employers and safety reps appreciate the inspection visits and find that they have resulted in important risk reductions (AV, 2010b). SWEA's limited enforcement likewise indicates that inspectors find that employers mostly comply (enough) with the non-binding requirements in the inspection notices. However, there are few convictions for penal liability after accidents.

5.3.3 More regulation of technical than of organisational risks

SWEA describes effects of its efforts. For example, supervision of home care for the elderly found that equipment to lift persons had become much more common since SWEA's homecare campaign some years ago that often required employers to install such. And the prohibition of continuous work at checkout counters had neither increased costs (predicted by the employers) nor part-time employment (predicted by the unions). The "enforced" multifunctional staff had instead increased the shops' flexibility and adaptability (AV, 2010b).

SWEA has been more successful in making employers reduce technical risks than in raising their general ability to detect and reduce risks. The authority did not start a general SWEM-supervision until after 2000 and has since focused more on SWEM's routines than on the employers' duty to conduct a SWEM that is effective to reduce risks. Labour inspectors supervise and promote (the necessary) SWEM-routines of risk assessment, task distribution etc., but rarely go to the top on e.g. the resourcing for such a management. The

employers' duty to evaluate and (if needed) improve their SWEM is especially neglected (Frick, 2011a).

The supervision of psychosocial health mainly relies on SWEM. Technical risks are reduced (though not eliminated), but organisational risks and psychosocial and musculoskeletal diseases (MSD) persist. The regulation and supervision of psychosocial risks is difficult for SWEA. SWEA only prioritised this issue after extra funding and a government order in 2001. As the risks are still not specified in any provisions, labour inspectors mainly use employers' SWEM duty to assess (and if needed act against) suspected stress risks. The Work Related Stress agreement between EU's social partners was not translated into collective agreements. The unions therefore find that the EU-agreement has not been implemented in Sweden, while the employers believe that this voluntary approach is the only one feasible (Frick, 2010). The now shortened inspection time may have reduced the focus on these complex risks.

5.3.4 Supervision of the supply chain economy

SWEA has few legal instruments to supervise health risks caused by labour market changes (NERCLIS, 2011). However, the WEA broadens the preventive duty in some respects, mainly upstream in planning of, and "sideways" in coordination in, construction workplaces. The coordinating duty recently became stricter to transpose the EU-directive. Owners of premises are responsible for the safety of the localities and its equipment. SWEA rarely goes upstream in supply chains, but the authority e.g. met industries that hire many entrepreneurs for maintenance and construction to discuss improved safety. It also run a successful campaign against petrol station robberies by going to the top in the five petrol corporations.

There are neither special regulations nor SWEA practices on the risks for temporary workers. These are to be covered by employers' duty to assure that their workers are properly informed, instructed and suitable to handle any risks. This may be inspected in relation to temporary (and to hired) workers. Self-employed are more covered by the legislation. They have to follow all the provisions on the work environment and to cooperate in prevention at joint workplaces, including construction ones. Those who hire workers from other employers have to include them in their SWEM to ensure acceptable conditions. The responsibility is shared with the hired workers' employer, who is to receive all relevant risk information. This is to be supervised by SWEA's inspectors, especially when they control the local SWEM. Safety representatives also recently got the right to represent workers hired from other employers.

There are no legal obstacles but serious practical ones to supervise temporary foreign firms and their posted workers. SWEA runs a project to develop a better strategy for this. The latest WEA-inquiry (SOU, 2007) proposed that regional safety representatives (RSR, see below) should get access also to workplaces without union members, but of the type normally under union contracts. RSRs would be able to check the work environment for posted workers (notably in construction), but this has not been enacted. Neither have the inquiry's proposals for more responsibility to principals in supply chains (as in other Nordic countries).

6. Labour relations and worker influence

6.1 Still strong trade unions and social dialogue

The strong trade unions since long influence Sweden's work environment policies. This was especially the cases when they and the employers agree but the unions also were backed by a strong labour market and had the ear of the long ruling Social Democrats. The social partners' cooperation and influence peaked 1942 to 1991. It is since reduced but there are still many joint bodies and projects at national and sectorial levels, now including TCO's and SACO's white collar unions and the public employers. The unionisation rate is down from 83 % in 1993 to 70 % (67 % for workers and 73 % for white collar unions; LO-tidningen, 2012). The slow union decline accelerated when the government much increased membership costs in 2007. Membership varies much by sector, from 80 % or more among public employees to under 50 % or less in some private services. It is extra low among young city

workers and in small firms (Kjellberg, 2011). Unions have local clubs wherever possible. These appoint safety reps and negotiate with the employers on salaries and on co-determination. Members without clubs are represented by regional union officers, who also may be RSRs (see below).

6.2 Union work environment policies

Since the 1970s, the unions work environment policies include work organisation, but there is sometimes an internal competition on this with the negotiators. They want more supervision, stricter sanctions, more prosecutions, more generous worker compensation and other social insurances and more R&D plus training and information on the work environment. They use much money to produce and spread information and to recruit, train and support their safety reps. With the economic changes, work environment policies relate more to labour market and industrial relations issues. Blue collar workers are more exposed to these changes, which increase risks at work and reduce workers-unions ability to deal with them (LO, 2010). LO's members are also more exposed to technical risks and their unions focus much on such regulations.

Fracturing into small firms and high work loads raise risks also for white collar employees. TCO's and SACO's unions have become more active on the work environment and they appoint more RSRs. Working time is important for them, as unpaid-unregulated overtime, as conflicts between time and workload and as increased shift-work also for white-collar employees. Organisational risks for stress and MSDs are now the worst health risks in all federations and they want SWEA to issue psychosocial provisions against these. However, although TCO and SACO have become more active, their work environment policies are still less explicit and vocal than those of LO's unions, with for example mainly general statements in their recent congress programs and action plans (TCO, 2011; SACO, 2010).

6.3 Organised and active employers

Svenskt Näringsliv's (SN) 49 employer organisations have 60 000 member firms with 1 646 000 employees (62 % of the privately employed). There are some smaller private employer organisations (with 10 000 firms and 150 000 employees), but 190 000 private employers (of which nearly all are micro-firms), with 8-900 000 employees are unorganised. All public employers are organized. SKL represents 20 counties and 290 municipalities with 1 042 000 employees. The Swedish Agency for Government Employers represents 250 government agencies with 243 000 employees. There are two smaller employer organisations for the

non-profit sector. Some 80 % of all employers are thus organised. As the unions have substitute agreements with many unaffiliated ones, 90 % of all employees have collective agreements, despite the absence of a state extension mechanism (Kjellberg, 2011).

SN supports cooperation on voluntary improvement and making this as easy as possible. They want clear and simple regulations, which has made them object to several of SWEA's proposed new provisions, and also against inclusion of work environment clauses in public procurement contracts. They advocate the same TLVs and other requirements across EU, not to disadvantage Swedish firms in international competition. They want to minimize documentation duties, especially for small firms, and for SWEA to be more of an advisor than a police (Svenskt Näringsliv, 2008). As part of advocating for more knowledge- and much cooperation with the unions on this – the employers promote the business case to support and motivate their member firms. Although the employers are active in voluntary work environment cooperation, they strongly oppose binding collective agreements with the unions on this, as mandating rules should be left to SWEA. However, the collective agreement on the work environment that the electricians union forced their employers to sign after an industrial conflict has been used much more constructively by the union than the employers had feared (Frick, 2010). RSRs are a contested issue. SN finds that RSRs sometimes misuse their rights to also perform union activities, but does not want to abolish the system.

The public and non-profit employers advocate similar policies, and cooperate much with, SN. SKL has several experts working to defend their member but also to voluntarily reduce risks and promote health at work through training, information, direct advice, written materials, websites etc. SKL acknowledges the serious problems of a high sickness absence, and of MSD- and psychosocial risks. It is also aware of the need to be attractive employers to replace large groups soon to retire. This motivates much activism, including the development program of Sunt Liv.

However, SKL resists "overregulation", such as the psychosocial provisions proposed by SWEA in 2003, and higher fines for hospital (and others) that don't comply with SWEA's injunctions. SKL's agreement with the unions on cooperation and work environment (FAS 05) has high aims, but its central guidance and support is more effective to promote local work-group dialogues than systematic work environment management to reduce health risks (Frick and Forsberg, 2010).

6.4 Workers' right for a representative participation

The local cooperation is supported by strong rights in the Work Environment Act (ch. 6) for safety reps (SR) and joint committee members for a competent dialogue with management on anything related to health at work. If managers don't cooperate, reps can call in the labour inspection and in acute emergency stop work. Since 2010, reps in a firm hiring labour may act also on behalf of workers hired from labour hire firms. Workers in the latter firms may also appoint SRs but rarely do so. Self-employed are only covered by safety reps on construction sites, where the reps may also monitor the coordination duty. SRs seldom use the right to call in the inspection. Their rights of information and dialogue instead provide them with some normative power, but their actual influence depends much on the labour market and labour process power of the employees and of the training and knowledge of the reps. Reps rights are to be upheld by the local unions, which can sue the employer for damages.

The consultation right is mainly protected for safety representatives, but the Act and the SWEM-provisions order employers to consult with all employees and to train and inform them on relevant risks. Information and training is also included in provisions on some risks. Through their unions, employees also have a right of codetermination. Employers' have a duty to inform the local union and to negotiate with them on important changes to the employees, but with a right for the employer to decide if they disagree. Unions may also appoint (minority) representatives on company boards.

However, the workplace dialogue through worker representation is probably less than what ESENER (2010) claims. It states that 40 % of Swedish workplaces with ten or more employees have joint work environment committees. But only some 25 % of these workplaces have 50 employees or more, which is the size when WEA requires joint committees. There are also indications that many firms above 50 employees may lack committees, due to less unionisation (Frick, 2012). There is a broad consensus for a better integration of work environment issues into other management decisions. Several central and local work environment agreements (such as FAS 05) therefore combine local dialogues according to the codetermination and the work environment acts in the same committees. However, these committees may be more effective for unions and managers to reach agreements on production decisions than to improve the work environment, with its non-negotiable requirements (Frick and Forsberg, 2010).

6.5 Safety representatives are the backbone of the work environment system

There are some 100 000 union appointed safety representatives (SRs) in 20-40 000 workplaces, or 6 to 12 % of all (Frick, 2012). If there are more local reps, one is appointed chief rep to coordinate the SRs. In large workplaces, chief reps may be influential and work on half or full-time, especially in high-risk industries. SRs are to support and speak for all employees in the area, team, department etc. for which they are appointed, not only for their union members. The LO-unions have largely upheld their number of reps, despite fewer blue collar workers, a lower unionisation rate, a fracturing of the labour market into smaller firms and more casual labour. They now have 64 500 safety reps (20 members per SR) while the TCO-unions appoint some 31 450 SRs (one per 38 members), and SACO's unions have 5-6 000 reps (one in 125 members; Du & Jobbet, 2012; Gellerstedt, 2012). The safety rep ratio within each of the federations is roughly the same as in 1980, but the labour market has grown and shifted towards more white-collar jobs, so the overall ratio is therefore down from one rep on 30 to one on 42 employees.

The SR ratio varies by industry. In 2004, there were only reps in 3 to 10 % of private service workplaces compared to in 21 % of construction sites, 35 % of factories and 59 % of workplaces with SRs in public administration (Arbetarskydd, 2004). Reps are to be appointed from 5 employees, but most firms of 5-19 employees lack SRs, To partly compensate for the lack of SRs and to support 12 000 single reps in small firms, there is since the reforms of the 1970s a system of regional safety reps (RSRs; Frick, 2009). Since then nearly 3 000 RSRs (240 as full-time equivalents) cover the quarter of the labour market made up of small firms or some 90 % of all workplaces without joint committees but where there are unions members. And the RSR-system is now growing among white collar unions. The total activity of LO's SRs (including the regional ones) amounted to the order of 10 000 full time positions in 1996 (LO, 1997: 103), and has hardly changed much since then (Gellerstedt, 2010; Johansson 2010). Safety reps in TCO and SACO should add at least a thousand full-time equivalents to a total of 10-12 000, which makes SRs the by far largest Swedish work environment actor.

Safety reps influence depend much on their bargaining strength. Up to the 1990s, SRs were voices for the scarce labour that many growing and profitable employers competed for. But since the economic crisis, unemployment is higher and casual work has grown. Labour, and their safety representatives, now have less

market power to influence managers. However, the long cooperation taught many managers that productivity can be combined with health and safety. This may be why LO's 2006 SR-survey still indicates much safety rep satisfaction with their dialogue with managers. But there is poorer cooperation in the 30 % of their workplaces without joint WE committees, i.e. in small ones that still have reps. (Gellerstedt, 2007; Frick, 2012). SRs rarely bring issues to open conflict. SWEA is yearly called in for some 3-400 such (Du & Jobbet, 2011) and 50-100 rep stops (AV, 2012d)

SRs knowledge and arguments is also important for their influence. The problems in the rep training since the 90s crisis were, as mentioned, aggravated by funding cuts in 2007. The shift towards more professional and individualised jobs changes how work is socially constructed. As stress and other risks have increased, safety reps have become important also for the white collar unions, which see work and risks much within the broader setting of their members' professional development (Lärarnas Riksförbund, 2005; Jusek, 2011). But blue-collar unions likewise promote their members' professional and individual development, to retain their jobs and get higher salaries (Gellerstedt, 2011). The motivation and loyalty of more skilled and trained employees with more personal production responsibilities is important for the employer. If work risks are part of the communities of practice (Gherardi and Nicolini, 2000), safety reps should have an internal bargaining power that is less dependent on the external labour market. On the other hand, skilled and responsible jobs may also lead to internalisation of the employers' production objectives. Work environment critique and requests, by safety reps or any employee, may then be difficult as it is a critique of one's own work.

New management methods may likewise make it harder to uphold the critical safety rep role against the employee production role. These methods can reduce collective cohesion and solidarity, when employees increase their identification with the company and its production (Johansson, 2011). The growing – but still very imperfect – implementation of the mandatory SWEM may also erode the safety reps activist role. If managers start to be more proactive against (at least some) risks at work, employees may go to them and turn less to their safety reps. In the similar Danish setting, Lund (2002) and Dyreborg (2011) found that more active managers reduce the safety rep influence. Finally, the reps prevention may be challenged by an increased management focus on individual behaviour as explanation of sickness absenteeism and of accidents. Yet in all and so far, the Swedish safety rep system has been fairly resilient despite a weaker structural position through weaker labour market,

lower unionisation, more casual labour, globalisation, more international ownership etc.

6.6 Growing direct worker participation with uncertain results

Direct work environment participation by all employees may be growing, though this is hard to separate from their production tasks. Modern work organisation focus on the responsibility of individual and groups, which enables and requires individuals to more look after their own work environment. This is expressed in more collective agreements, in which salaries are negotiated by each employee with her/his manager. Policies and agreements emphasize direct participation more, e.g. FAS 05 in the municipal and county sector. FAS has broad aims but focuses mainly on a better local dialogue between employees and supervisors in their work groups, in which work risks are also to be resolved. But there is also a growing authoritarian aspect of direct participation, with more international employers now focusing on controlling safe worker behaviour (Rasmussen, 2010).

7. Work environment management and its outcomes

7.1 Differences in SWEM by sector and enterprise size

SWEM is defined by its outcomes. It is "the work done by the employer to investigate, carry out and follow up activities *in such a way* that ill-health and accidents at work are prevented" (my italics; AFS, 2001, section 2). SWEM thus focuses on the total management of the work environment quality. Risk assessments and other procedural stipulations are important but still only means to this zero-risk end (risk-minimization in practice). Yet, even SWEM's means of procedures are hard to measure. Which risks are covered and how well in a written risk assessment or an action plan?

There are therefore few facts on the SWEM-implementation. Managers' self-reports on this in ESENER (2010) are probably too positive. They claimed that 84 % checked risks. 73% of the risks were assessed by their own staff, 61-85% of their workplaces had various policies on psychosocial risks, 75% analysed causes of sickness absences, 87% supported employees return to work, 54% monitored employee health through medical examinations, and 91% had at least one of these SWEM-policies.

However, three quarters of the Swedish workplaces in ESENER have 10-49 employees and such firms have repeatedly been shown to have a poor OHS

management (Frick, 2009). And as less than half of the Swedish managers (47 %) replied to the survey, there is probably a positive bias, which is worsened as this is self-reporting on legal compliance. Mainly internal risk assessments is supported by other studies (e.g. Frick, 2011a; Kindenberg, 2011), while ESENER's rates of risk assessment and other parts of SWEM are not supported by any other data. The widespread risks at work instead demonstrate that work environment management often exist more on paper than as the required real prevention (AV, 2010a and 2010c).

Labour inspector's some 5-8 000 assessments per year of how well SWEM is implemented (on a three point scale; Johansson, 2012) indicate a gradual improvement from 2006 to 2011. Many small employers have at least started (level 2) and more of the larger ones have made their SWEM effective (level 3). SWEM's implementation is also indicated by a few questions on this in the large work environment surveys (AV, 2010a) and in LO's safety rep surveys (Gellerstedt, 2007). All three indicators demonstrate that risk assessments and other SWEM-routines are gradually spreading, at least among larger employers, but have so far had far from a full effect on prevention and thus on risks at work. Most small firms have either not started or only begun to comply with the provisions' requirements. There are marked sector differences, with more advanced manufacturing and some parts of the public sector in the lead and private services lagging in implementing SWEM. Some hundreds large employers or worksites have certified work environment management systems, mostly OHSAS 18001, but others are certified according to the SWEM-provisions (privately certified, with no guarantee of labour inspection approval).

However, employers can be awarded such certificates despite serious deficiencies in their risk prevention (Frick, 2011c). The mentioned indicators have methodological problems and there are no attempts to improve the monitoring of the SWEM-compliance (Frick, 2011b).

Some case studies provide deeper information on SWEM. In the municipal sector (21 % of all employed), risk assessments and action plans seems to be common. A case study (supported by other studies on municipal management) indicated that these are fairly effective to find and eliminate or abate technical risks. However, organisational risks for stress and MSDs (which are widespread in the sector) may be raised but they are rarely prevented (Frick and Forsberg, 2010). An overall assessment on the risk prevention (Frick, 2004) estimated this to have gradually improved of specified technical risks, including of micro-ergonomics (with widespread use of lifting e.g. equipment) and of

chemical hazards (with no more large-scale exposure to much too high levels).

Still, many deficiencies in SWEM (especially in smaller firms) means that many other known and preventable technical risks are overlooked and may result in injuries or diseases. Organisational risks are often in larger organisations but they are rarely effectively handled, resulting in a poor prevention of stress and many forms of MSDs. A growing number of temporary foreign firms with posted workers have been found to often have serious deficiencies in their SWEM (Frick, 2009).

7.2 Outcomes in risks and (ill-)health at work

7.2.1 Fatal and serious accidents are the only reliable indicator

Reported and recognized occupational injuries provide no reliable data on how employers manage risks at work. In 2003, two thirds of work related accidents with sick-leave but only 23 % of the diseases (as answers in the work environment survey) were reported to the worker compensation insurance. As diseases dominate the work related ill-health, the total reporting rate was some 30 % (Sundström-Frisk and Weiner, 2005). And recognized and compensated injuries mostly reflect variation in the regulation and

interpretation of the insurance. The presently much reduced recognition therefore results in even less reporting (Torén, 2010), and reported accidents have dropped from 94 000 in 1990 to 26 000 in 2009. Despite the known problems, the government still uses reported accidents and diseases as a basis for its work environment policies (Proposition, 2011).

Fatal and serious accidents are more accurately reported (though not completely for posted workers). Accidents with a months absence or more have dropped from 12 800 in 1994 to some 8 000 in 2009, i.e. far less than all accidents (AFA, 2005 and 2011). Fatalities have fallen from the 425 yearly killed in the mid 1950s to presently some 60 (while employment has grown from 3.0 million to 4.2 million). Most of this is a result of economic and technical change when much fewer work in close contact with dangers. However, prevention has also improved, through safer technology and work methods (Frick, 2004). During 2007-2011, the highest fatality rates per industry was in descending order: Farm, fishing and forestry, Construction, Transport and storage, and Manufacturing (AV, 2012a). In later years, posted and other temporary foreign workers have had a much higher fatality rate than those working permanently in Sweden (AV, 2012b).

Table 7.1 Fatal accidents at work for different groups

Year	Employees	Self-employed	Others	All
1980	123	29	18	170
1990	90	23	15	154
2000	43	18	6	67
2005	53	14	2	70
2009	35	6	10	51
2010	49	5	5	59
2011	50	6	4	60

(1). Including traffic accidents while at work (but not to-from work). 'Others' include military conscripts, prisoners and students, but in later years they have mainly been posted workers, usually in construction.

(2) Source: AV, 2012b.

(3) Womens' fatalities are down from 5-15 per year during 1955-70 to 1-8 during 2000-11.

7.2.2 Work environment and health surveys are the best indicators

Besides serious accidents, the work environment and work related health surveys (AV, 2010a; and 2010c) are the only reliable indicators on risks and thus on SWEM. The large surveys can be subdivided to various industries and job-types. However, although the cover all working, results are not presented by employment type (such as self-employment). With carefully crafted questions, the answers correlate well with objective measurements (Wikman, 1991). The surveys indicate

that MSD-problems are widespread. Heavy lifting (more than 15 kg several times a day, every day) is slowly down from 16 % for women and 23 % for men in 1989 to 10 % for women and 18 % for men in 2009. But both women and men reported more MSDs. In 2009, 41 % of the women had neck or back and 36 % arm or shoulder pain, while of the men 28 % had neck or back and 25 % arm or shoulder pain. This was some 8 %-units more for all answers than in 1989. Pain is much more common among unskilled workers than among professional white-collar employees, but the latter still

report such weekly pains 15-20 per cent for men and 25-30 per for women.

Stress and other organisational risks are also common. "Have way too much to do" (agree completely or mostly) was for men 45 % in both 1989 and 2009. For women it had grown from 48 to 56% (with a peak for both sexes around 1999). "Diversified working duties" (completely agree or partly – in contrast to repetitious work) are slightly less common in 2009 (57 % for men and 52 % for women) than in 1989 (60 % for both groups). Those who can determine their own work pace at most half of the time (i.e. often work to a set pace) has grown from 36 % of the men and 51 % of the women in 1993 to 45 % of the men and 60 % of the women in 2009. "Difficulty sleeping every week due to thoughts of work" grow from 12-14 % in 1989-1991-1993 to 19 % for men and 22 % for women in 1999 and has since varied slightly around these levels. In 2009, some 65 per cent of the unskilled female 55 per cent of the unskilled male workers were physically exhausted after work every week. So where around 35 per cent and 25-30 per cent of the professional women and men respectively. 55-60 per cent of professional women and men that year kept thinking about work at home, versus 30 per cent of the women and 25 per cent of the men in unskilled work.

Those "exposed to noise (making it impossible to talk at a normal voice) at least one-fourth of the time" remain roughly the same in 2009, with 29 per cent of men and 15 per cent of women, as in 1989. The lack of progress may be due to that most technical noise reduction had been done during the 1970s and 80s, and that new groups (such as nursery school staff with more and more small children) are exposed to noise.

8. Summing up: Support for and barriers to effective prevention

8.1 Workplace factors for an effective SWEM

Fewer fatalities and other serious accidents support case-study results of an improved technical prevention (but which is not possible to discern from the crude SWEM measurements). Yet, widespread stress and MSD-risks indicate that many employers may have implemented the SWEM-routines but they have only partly integrated these into their management. The limited research (again mainly case studies) indicate that the partial implementation of SWEM as genuine prevention is promoted by some, often interacting, factors:

- The Swedish work environment system is largely intact and focus much on SWEM. Since at least 2001, SWEM is a major aspect of

SWEA's information and supervision. The authority is much reduced but its labour inspectors still visit around 6 % of all workplaces per year. And unions are weaker, but still organise 70 %. They focus possible more on health and safety, including to support their safety reps. There are still some 100 000 safety reps, equaling around 10-12 000 full time positions, to promote prevention.

- The enlightenment is likewise reduced but continues. There are is widespread ignorance, especially among managers, and many reps have not got enough or any training. Yet, there is much R&D that produces knowledge of risks and counter-measures. This is spread to the workplaces through much training and information. Adequate knowledge is nearly always available and it often reaches and is used in workplace prevention. The enlightenment also affects societal norms. For example, capital investors look at how employers manage the work environment (Almquist and Henningson, 2009).
- A still widespread acceptance by employers and their managers to engage in an organised dialogue with employees and their unions, especially on risks at work. The dialogue was created during the earlier strength of labour, but most of the managerial cooperation has survived the major changes. This is indicated by LO's safety rep survey of 2006 and by the fact that the large majority of managers and safety reps visited by SWEA still find that the inspection was positive and helped to reduce risks.

8.2 Why not more prevention?

Other factors or actors may at least partly explain that a continuous SWEM- promotions has not achieved a better prevention, i.e. why the frequent risk assessments and action plans are only partially implemented applied into managerial decisions on production:

- SWEA's active SWEM-supervision focuses on procedures and rarely requires the quality control logic (mandated in the provisions) of a regular internal audit and improvement. It rarely goes to the top with the SWEM-requirements. This may be why the social partners information and training focus on SWEM's procedures and little on the need to improve the management of risk prevention.
- Employers-managers capability for an effective SWEM is not sure. This may be promoted by the spreading of of quality

control logics (not only as ISO-certificates). On the other hand, continuous cost-cutting has reduced many managers' time to focus on how to manage risks at work (Frick et al., 2005). Top-managers do not notice the superficial SWEM. They mainly control that procedures are established but rarely evaluate their effectiveness in more than sickness absence (with poor relation to risks) or lost-time-injuries (LTI, with no relation to the dominating disease risks). However, there are exceptions of CEO support for long term risk reduction and thus a more effective SWEM.

- Employees' increased training and competence give them more power over their work in the labour process and often make traditional command-and-control inefficient. Employers therefore have an interest in a healthy and motivated workforce. Yet, more are employed in casual work with little power to influence their conditions. And new IT-taylorism is common, also in more skilled jobs (Gellerstedt, 2011). And HR-management tries to replace direct supervision with normative control over employee minds and hearts. This may result in a work environment management that reduces the role of unions and safety reps and instead communicates with individual employees (Lundh, 2002; Dyreborg, 2011).

8.3 Weakening of workplace actors may erode what's been achieved

The power balance has shifted from labour towards capital, with much higher unemployment, more precarious jobs and neoliberal labour market politics. The globalisation has increased the share of foreign employers, often with a more authoritarian management that is less willing to prioritize the work environment (not only minimizing LTIs) and to cooperate with the weaker unions and their safety reps (Wikman, 2010). This is especially the case for the growing number of small foreign firms on temporary jobs in Sweden. Together with a nearly free import of foreign labour, there is a competition, at least for less skilled work, through social dumping that often includes poor risk prevention (Frick, 2009).

These changes may further erode the work environment system and weaken both employers and as employees as actors for effective prevention. The fracturing of larger corporations and the growth of private services create more small firms reduces with less preventive capacities. These small firms are increasingly in supply chains in which larger

organisation put their suppliers economy – and thus their work environment – under pressure. The large and growing public procurers are mostly prohibited to include work environment requirements in their contracts, although private corporations may require some SWEM-capability of their entrepreneurs. Regional safety reps and increasingly SWEA's inspections focus on small firms. Yet, their rare visits can only partially compensate for the poorer SWEM in small firms, especially in the more common foreign ones.

8.4 Conclusion: Will the resilience last?

So far the Swedish work environment system has been resilient. Most (or more) of the larger workplaces and employers have at least partly implemented the mandatory SWEM, despite two decades of a weaker position of labour. These employers have found SWEM possible to implement without too much efforts and costs, at least to the level where SWEM's prevention does not much interfere with their organisation and management. They usually also see a value in promoting the health and motivation of their staff. With the norms of prevention, they find high accident rates and other visible problems embarrassing. They employ a large majority of working Swedes, which thus are given a reasonable protection against technical risks and some, though less, against organisational ones. On the other hand, unions, SWEA and others who promote SWEM have neither been strong enough in themselves nor had a position to achieve a better implementation, one that would challenge the employers' managerial prerogative (Frick, 2011a and b). This balance of a half-full SWEM-implementation seems possible to maintain as long as there are no major changes either way in the work environment system.

The growing numbers of small firms may have started more with risk assessments and other SWEM-routines but so far with only a limited improvement of their traditionally poor prevention. There are instead several tendencies of an eroding work environment management in the growing share of vulnerable work in labour hire firms, subcontractors, foreign firms and as (involuntarily) self-employment. The difference in prevention between the better and worse employers has therefore probably increased. The growing dualism in risk prevention is likely to continue and perhaps worsen unless the government stops deregulating the labour market and (like in Norway) tries to prevent unfair competition through social dumping. So far the government has not enacted the mentioned proposals with that purpose.

References

- AF (2011). Sammanfattning av arbetsmarknadsutsikterna hösten 2011. Ura 2011:8. Arbetsförmedlingen, Stockholm.
- AFA (2005). Allvarliga arbetsskador och långvarig sjukfrånvaro 2005. AFA Försäkring, Stockholm.
- AFA (2011). Allvarliga arbetsskador och långvarig sjukfrånvaro 2011. AFA Försäkring, Stockholm.
- AFS (2001)
<http://www.av.se/inenglish/lawandjustice/provisions/2012-08-15>
- Almquist, R. and J. Henningson (2009). When actors on the capital market reduce the complexity of information on people and working environment in organizations, *J. Hum Resource Costing & Accounting*. 13:1.
- Arbetarskydd (2004). *Arbetarskydd 2004*: 3, p. 4-5.
- Arbetarskydd (2012). Arbetsmiljöverket måste ransaka sig själv. 2012-03-26.
- AV (2007). Återrapportering av regleringsbrevets uppdrag om minskade anslag. Återrapportering till Arbetsmarknadsdepartementet 2007-04-26, Arbetsmiljöverket, Solna.
- AV (2008). Rules for inspection. Arbetsmiljöverket, Solna.
- AV (2010a). Arbetsmiljön 2009 - Arbetsmiljöstatistisk rapport 2010:3. Arbetsmiljöverket, Stockholm.
- AV (2010b). Årsberättelse 2009. Arbetsmiljöverket, Stockholm.
- AV (2010c). Arbetsorsakade besvär 2010 - Arbetsmiljöstatistisk rapport 2010:4. Arbetsmiljöverket, Stockholm.
- AV (2011a). Årsberättelse 2010. Arbetsmiljöverket, Stockholm.
- AV (2011b). Sammanställningar 2011-06-30: Domar och godkända strafförelägganden i arbetsmiljömål 2010. 2011-07-06: Domar 2010 i mål om viten grundade på arbetsmiljölagen. Arbetsmiljöverket, Stockholm.
- AV (2012a).
<http://www.av.se/statistik/faktarapporter/dodsolyckor.aspx>. Accessed 2012-03-05
- AV (2012b). Antal dödsolyckor bland anställda och egna företagare/entreprenörer i utländska företag som är verksamma i Sverige men registrerade i andra länder. 2012-03-09. Arbetsmiljöverket, Stockholm.
- AV (2012c). Årsberättelse 2011. Arbetsmiljöverket, Stockholm.
- AV (2012d). Tillsynsstatistik 2007-2011. 2012-08-15:
<http://www.av.se/inspektion/inspektionsstatistik.aspx>
- Bruun, N., B. Flodgren, M. Halvorsen, H. Hydén and R. Nielsen (1992). *The Nordic Labour Relations Model: Labour Law and Trade Unions in the Nordic Countries – Today and Tomorrow*. Aldershot, Dartmouth.
- Ds (2001). Långsiktig verksamhetsutveckling ur ett arbetsmiljöperspektiv: En handlingsplan för att förnya arbetsmiljöarbetet. Ds 2001: 28, Näringsdepartementet, Stockholm.
- Ds (2008). Arbetsmiljön och utanförskapet. Ds 2008: 16, Arbetsmarknadsdepartementet, Stockholm.
- Du & Jobbet (2011) Nyheter: Här står striderna hetast. *Du&Jobbet*, no. 4: 55-56.
- Du & Jobbet (2012) Nyheter: Du&jobbets studie: 96 000 skyddsombud. *Du&Jobbet*, no. 2: 45-46.
- Dyreborg, J. (2011) 'Safety Matters Have Become Too Important for Management to Leave it Up to the Workers' – The Nordic OSH Model Between Implicit and Explicit Frameworks. *Nordic Journal of Working Life Studies* 1 (1); 135-60.
- Ekonomifakta (2011a). Accessed 2011-11-17:
<http://www.ekonomifakta.se/sv/Fakta/Foretagande/Entreprenorskap/Nystartade-foretag/>
- Ekonomifakta (2011b). Accessed 2011-11-17:
<http://www.ekonomifakta.se/sv/Fakta/Foretagande/Naringslivet/Naringslivets-struktur/>
- Ekonomifakta (2012a). Accessed 2012-02-29:
<http://www.ekonomifakta.se/sv/Fakta/Skatter/Skattetryck/Skattetrycket-historiskt/>
- Ekonomifakta (2012b). Accessed 2012-08-15:
www.ekonomifakta.se/sv/Fakta/Arbetsmarknad/Sysselsattning/Strukturforandringar-i-sysselsattningen/
- EU-OSHA (European Agency for Safety and Health at Work) (2010a), *European Survey of Enterprises on New and Emerging Risks – Managing safety and health at work*, European Risk Observatory Report. Available from:

https://osha.europa.eu/en/publications/reports/ener1_osh_management

- Frick, K. (2004), Why isn't the work environment healthy? – High aims but lower practice in Swedish OHS reforms, in Joint OSH strategy for the Enlarged Europe. January 2004, ETUC-TUTB, Brussels.
- Frick, K. (2009). Health and safety representation in small firms: A Swedish success under threat, in D. Walters and T. Nichols (eds). *Workplace Health and Safety – International Perspective on Worker Representation*. Palgrave Macmillan, Basingstoke.
- Frick, K. (2010). The semi-mandatory implementation of EU's Work Related Stress Agreement (WRS) in Sweden. National report to the EU-study on the implementation of the European Social Partners' agreement on work related stress. Mälardalen University, Västerås.
- Frick, K. (2011a). Implementing Systematic Work Environment Management in Sweden – Interpretation by SWEA and supervision by its labour inspectors, in D. Walters, R. Johnstone, K. Frick, M. Quinlan, G. Baril-Gingras and A. Thebaud-Mony. *Regulating Workplace Risk – A Comparative Study of Inspection Regimes in Times of Change*. Edward Elgar, Cheltenham.
- Frick, K. (2011b). The regulation of systematic work environment management in Sweden – higher ambitions in a weaker Swedish work environment system, in D. Walters, R. Johnstone, K. Frick, M. Quinlan, G. Baril-Gingras and A. Thebaud-Mony. *Regulating Workplace Risk – A Comparative Study of Inspection Regimes in Times of Change*. Edward Elgar, Cheltenham.
- Frick, K. (2011c). Worker influence on OHS management systems – A review of its ends and means. *Safety Science* vol. 49: 974-987.
- Frick, K. (2012). Resilience within a weaker work environment system - The position and influence of Swedish safety representatives, forthcoming in D. Walters and T. Nichols (eds.). *Safety or Profit? - International Studies in Governance, Change and the Work Environment*, Baywood, Amityville, NY.
- Frick, K., O. Eriksson and P. Westerholm (2005). Work environment policy and the actors involved, in R. Gustafsson and I. Lundberg (eds), *Worklife and health in Sweden 2004*. National Institute for Working Life, Stockholm.
- Frick, K. and A. Forsberg. (2010). Hälsosam-projektet – Framgångar och svårigheter i att genomföra FAS 05 för bättre samverkan och arbetsmiljö i Leksand. Dalarnas Forskningsråd, Falun.
- Gellerstedt, S. (2007). Samverkan för bättre arbetsmiljö – skyddsombudens arbete och erfarenheter. LO, Stockholm.
- Gellerstedt, S. (2010) Telephone interview 2010-12-02 with Sten Gellerstedt, LO.
- Gellerstedt, S. (2011) Fler arbetare måste få utvecklande jobb – inte digital Taylorism. LO, Stockholm.
- Gellerstedt, S. (2012). Mail 2012-02-27 with a table of members and safety representatives per union within LO.
- Gherardi, S. and D. Nicolini (2000). The Organizational Learning of Safety in Communities of Practice. *Journal of Management Inquiry* 9(1): 7-18.
- IVA/NUTEK (2006). Internationaliseringen driver på strukturomvandlingen. Nya fakta och statistik no. 9. Ingenjörsvetenskapsakademien-NUTEK, Stockholm.
- Johansson, L-B. (2010). Telephone interview 2010-12-07 with Lill-Britt Johansson, Kommunal's officer on union organisation in privatised workplaces.
- Johansson, S. (2011) Implementering av Lean produktion – en utmaning för fackföreningsrörelsen. Working Paper. Department of Work Science, Luleå Technical University, Luleå.
- Johansson, L. (2012). Private communication 2012-02-21 from Lennart Johansson, statistician at SWEA, with statistics on the labour inspectors' SWEM assessments for 2006, 2009, 2010 and 2011.
- Johnson, B. (2009). Kampen om sjukfrånvaron. Arkiv, Lund.
- Jusek (2011) Contacts with officers at the SACO-union Jusek. Mail from Emma Olseni Ehmark (2011-09-23). Telephone with Kerstin Peanberg (2011-09-23) and telephone with Marie Thuresson (2011-10-03).
- Kindenberg, U. (2011). Företagshälsovården i går, i dag, i morgon. In SOU 2011: 63. Framgångsrik företagshälsovård - möjligheter och metoder. Fritzes, Stockholm.
- Kjellberg, A. (2011). The Decline in Swedish Union density since 2007. *Nordic Journal of Working Life Studies*, Vol. 1 (1); 67-93.
- Lärarnas Riksförbund (2005) Arbetsmiljöundersökning 2005, lärare. Lärarnas Riksförbund, Stockholm.
- Larsson, T, S. Marklund and P. Westerholm (2005). Den galloperande sjukfrånvaron – Sken, fenomen och väsen. Arbetslivsinstitutet, Stockholm.

- Levinson, K. (2004). Lokal partssamverkan – en undersökning av svenskt medbestämmande, Arbetsliv i omvandling, 2004: 5. Arbetslivsinstitutet, Stockholm.
- Lidwall, U. and P. Skogman Thoursie (2001). Sickness absence during the last decades, in S. Marklund (ed), Worklife and Health in Sweden 2000. National Institute for Working Life, Stockholm.
- LO (1997). Arbetsmiljöns utveckling – Skyddsombudens erfarenheter. LO, Stockholm.
- LO (2007). Frihet och förmåner i arbetet, Röster om facket och jobbet. Rapport 4 av 7. LO, Stockholm.
- LO (2010). LOs Arbetsmiljöstrategi 2010. LO, Stockholm.
- LO-tidningen (2012). En av tre nobbar L-facken. 10 Februari 2012, p. 6.
- Lund, H. A. (2002). Integreerede ledelsessystemer og arbejdspladسدemokrati i et bæredygtighedsperspektiv. Tidsskrift for Arbejdsliv 4 (4): 39-58.
- Marklund, S., M. Bjurvald, C. Hogstedt, E. Palmer and T. Theorell (2005). Den höga sjukfrånvaron – problem och lösningar. Arbetslivsinstitutet and Försäkringskassan, Stockholm.
- Nelkin, D. (1985). Introduction: Analyzing risk, in D. Nelkin (ed.), The Language of Risk: Conflicting Perspectives on Occupational Health. Sage, London.
- NERCLIS (2011). The NERCLIS Project: Contract to assess the potential impact of emerging trends and risks on labour inspection methodologies in the domain of occupational health and safety. Cardiff Work Environment Research Centre, Cardiff University, Cardiff. Annex I National reports: Sweden. NERCLIS Report Vol 1 <http://cf.ac.uk/cwerc/reports/NERCLIS%20Vol%201%20FINAL.pdf>
- NERCLIS Report Vol 2 <http://cf.ac.uk/cwerc/reports/NERCLIS%20Vol%202%20FINAL.pdf>
- NERCLIS Report Vol 3 <http://cf.ac.uk/cwerc/reports/NERCLIS%20Vol%203%20FINAL.pdf>
- Öberg, S. (2011). Hur var det tänkt och hur blev det,, in Röster om lönebildning och medling. Medlingsinstitutet, Stockholm.
- OECD (2011a). Growing income inequality in OECD countries: What drives it and how can policy tackle it? OECD, Paris.
- OECD (2011b). Recruiting Immigrant Workers: Sweden 2011. OECD, Paris.
- Palmer, E. (2005). Sjukskrivning och förtidspension den närmaste åren, in S. Marklund et al. (eds). Den höga sjukfrånvaron – problem och lösningar. Arbetslivsinstitutet and Försäkringskassan, Stockholm.
- Perrin-Thorau & Associates Ltd. (1998). Comparative Review of Workers' Compensation Systems and Governance Models. Prepared for the Royal Commission on Workers' Compensation in BC. Vancouver.
- Prevent (2011). Vägledning – Belastningsergonomi. Prevent, Stockholm.
- Proposition (2011). Proposition 2011/12: 1. Förslag till statens budget för 2012. Utgiftsområde 14.
- Quist, M. (2011) Mails and sales statistics on training material from Mats Quist, market manager at Prevent, 17 and 18 October 2011.
- Rasmussen, J. (2010). Safety in the Making: Studies on the Discursive Construction of Risk and Safety in the Chemical Industry. Örebro University, Örebro.
- Rothstein, B. and J. Bergström (1998). Den postkorporativa staten. Statsvetenskapliga institutionen, Göteborgs Universitet, Göteborg.
- SACO (2010). Färdriktning 2010-2013. SACO, Stockholm.
- SCB (1976). Statistisk Årsbok, p. 361. Statistiska centralbyrån, Stockholm.
- SCB (2010). Statistisk Årsbok. Statistiska Centralbyrån, Stockholm.
- SCB (2011). Arbetskraftsundersökningarna (AKU), tredje kvartalet 2011. Tema: Högre andel långtidsarbetslösa bland de utrikes födda. Pressmeddelande 2011-11-15. Nr 2011:296. Statistiska Centralbyrån, Stockholm.
- SCB (2012). Arbetskraftsundersökningarna (AKU), första kvartalet 2011. Statistiska meddelande AM11SM1202, Statistiska Centralbyrån, Stockholm.
- Schmidt, L., J. Sjöström and Ann-Beth Antonsson (2011). Väger till framgångsrikt samarbete med företagshälsovård. Rapport B1990. IVL, Stockholm. Available at: Väger till framgångsrikt samarbete med företagshälsovård. Rapport B1990
- SLIC (2008). Evaluation of the Swedish Labour Inspection system. Senior Labour Inspectors Committee.
- Socialstyrelsen (2011). Ekonomisk bistånd i det närmaste oförändrat. 2011-11-29 www.socialstyrelsen.se.
- SOU (2002). Handlingsplan för ökad hälsa i arbetslivet. SOU 2002: 5. Fritzes, Stockholm.

- SOU (2007). Bättre arbetsmiljöregler II. SOU 2007: 43. Fritzes, Stockholm.
- Sundström-Frisk, C.and J. Weiner (2005). What do the occupational injury statistics tell us?, in. R. Gustavsson and I. Lundberg (eds.) *Worklife and health in Sweden 2004*. National Institute for Working Life, Stockholm.
- SvD (2011). Del Näringsliv, p. 4: Växande gap mellan fattiga och rika. Svenska Dagbladet 2011-12-18.
- Svenskt Näringsliv (2008). Det ska vara lätt att göra rätt - företagare och arbetsmiljöinspektörer om dagens arbetsmiljöregler. Svenskt Näringsliv, Stockholm.
- TCO (2011). *Jobben och jobbet - Om jobbens betydelse och arbetets villkor*. Rapport till TCO-kongressen 2011. TCO, Stockholm.
- Toren, K. (2010). *Arbetskadeförsäkringen – en historia om sambandet mellan arbete och sjukdom*. *Arbete & Hälsa*, Vol 44: 1. Göteborgs Universitet, Göteborg.
- Wikman, A. (1991). Att utveckla sociala indikatorer - en surveyansats med exemplet arbetsmiljö. Urval nr 21, Statistiska Centralbyrån, Stockholm.
- Wikman, A. (2010). Changes in power, influence and organization in Sweden, in S. Marklund and A. Härenstam (eds), *The Dynamics of Organizations and Healthy Work*. *Arbetsliv i omvandling 2010:5*. Linnéuniversitet, Växjö.

THE UNITED KINGDOM

David Walters & Emma Wadsworth



1. Introduction

The European Survey of Enterprises on New and Emerging Risks (ESENER) has recently been the subject of a number of secondary analyses (see EU-OSHA 2012a, 2012b, 2012c and 2012d), all of which highlighted the significance of the context in which occupational health and safety (OHS) management takes place in determining the form and approach taken to such management. Among the most important contextual factors influencing the translation of legislation into workplace practice identified by these analyses, as well as by other research, were: regulatory frameworks; traditions and systems of industrial relations and social protection, and the current style and character of both of these; OHS support infrastructures (such as the availability and appropriateness of health and safety support services and information); the nature and style of labour relations and compensation systems; and wider contextual features such as the economic climate, the structure of the labour market and the organisation of work. This paper considers the effects of such determinants of workplace occupational health and safety management practice in more detail by examining the impact of features of the environment in which establishments operate on the way in which they manage OHS in the United Kingdom. In addition, there were some indications from the previous secondary analyses of the ESENER data that in Member States in which participatory and process based approaches to OHS management were more embedded in regulation and in regulatory policies, there was a better uptake of approaches to health and safety management within establishments even after accounting for known barriers to such uptake such as workplace size and institutional support for prevention strategies on OHS. This paper examines the basis for this finding, by undertaking a more detailed look at the British experience.

The aim of the paper, therefore, is to explore how the characteristics of the national regulatory, employment and wider context affect the way in which establishments manage health and safety at work in the United Kingdom. In order to address this aim, it first describes the context, focusing on regulation and wider support for health and safety management, as well as labour relations, the structure and organisation

of the labour market and of work, and the wider economic, social

and political climate. This is followed by a consideration of the evidence of health and safety management and outcomes in the United Kingdom drawn from the ESENER dataset and also from a range of other sources. Finally, the paper discusses the key determinants of workplace OHS management practice in the United Kingdom by examining its most significant contextual influences and assesses the extent to which these influences help to explain the findings reported in the previous ESENER analyses.

2. The context of occupational health and safety management

The United Kingdom, which includes England, Scotland, Wales and Northern Ireland, is a constitutional monarchy and parliamentary democracy. Currently approximately 62 million people make up the country's increasingly multi-ethnic population.

Historically, the United Kingdom was at the forefront of the industrial revolution, playing a dominant role in the global economy in the 19th century. Today it remains one of the largest economies in the EU and one of the most globalised economies in the world. Like most developed countries, the United Kingdom has a post-industrial and increasingly services-based and private sector dominated economy: the services sector accounts for approximately 75% of gross domestic product (GDP); and the public sector accounts for about a fifth (21%) of the workforce. The City of London is a world centre for financial services, though other sectors such as aerospace, pharmaceuticals, construction and technology also make significant contributions to economy.

The United Kingdom joined the European Union (EU) in 1973, though it is not a member of the Euro-zone. In common with other Member States, it has been strongly affected by the economic crisis and, since the election of the Conservative–Liberal Democrat coalition government in May 2010, it has been undergoing radical austerity measures intended to tackle the national deficit. These include measures that imply both a reduction in public expenditure on regulating health and safety management and a

political orientation towards enhancing the freedom of capital from regulatory burdens.

2.1 Regulatory regime and wider occupational health and safety support

The United Kingdom's tradition of health and safety inspection, intervention and regulation is one of the longest in the world, going back over 200 years, and its regulatory inspectorate for health and safety is the oldest in the world, originating as a requirement of the 1833 Factory Act. The United Kingdom also has a longstanding occupational injury insurance system dating back to the Workmen's Compensation Act of 1897. Current legislation (from 1992) provides that, with the exception of the self-employed (who have a voluntary scheme), those paying income tax are covered by state occupational injury insurance. This state Social Security system pays temporary and permanent disability benefits, though these are not based on earnings; nor are its benefits as generous as those in some other national social insurance systems in the EU. In contrast to the approach in some other EU Member States, the British system is a mixed one in which, in addition to these forms of social insurance benefits, victims of work related accidents or health damaging exposures have a right to sue in civil law. Moreover, to ensure adequate compensation is available in such cases, under the Employers' Compulsory Liability Insurance Act of 1969 (ECLI) employers have a duty to insure themselves against occupational injuries' liability. Insurance is provided by private, chartered companies. If they can prove fault, therefore, victims of accidents or other work-related harm have the possibility to win damages either through the courts or as the result of out of court settlements (see Walters 2007 for a comparative account of British and other European systems).

The regulatory approach towards preventive health and safety at work in the United Kingdom was heralded by the Robens Report (Robens 1972), which led to the introduction of the Health and Safety at Work Act (HSW Act) in 1974 (modified in 2008). This has been the cornerstone of the United Kingdom regulatory system for health and safety at work the past 30 years and provides a framework of process-based regulatory standards in which duty-holders' responsibilities to manage occupational health and safety are generally defined. It introduced the so-called 'goal-setting' approaches to workplace health and safety management and thus represented a significant shift from prescriptive to process-based regulation. In this respect it was influential in the introduction of similar reforms elsewhere in the world, including those of Framework Directive and its daughter Directives in the EU.

In the United Kingdom, the Framework Directive is primarily implemented by the Management of Health and Safety at Work Regulations (1999), which set out broadly based obligations for employers to evaluate, avoid and reduce workplace risks, under the overall regulatory framework already provided by the HSW Act. Implementation occurred during a period of political hostility towards European Union influences on British OHS regulation and therefore, as has been well documented, the implementation of the Framework Directive was achieved with minimal disruption to existing United Kingdom provisions (see Walters ed 2002; James and Walters 2005).

The HSW Act contains provisions for securing the health, safety and welfare of persons at work and protecting others against the risk to health and safety in connection with the activities of persons at work. It also defines the structure and functions of the United Kingdom's main regulatory organisation, the Health and Safety Executive (HSE). An adaption of this act was extended to Northern Ireland in the Health and Safety at Work (Northern Ireland Order).

Under the Act, regulatory activities were originally performed by three main sets of actors – the tripartite Health and Safety Commission (HSC), the Health and Safety Executive (HSE) and the local authority Environmental Health Departments. Recent restructuring has merged the first two of these into one, with the old HSC, now essentially the Executive Board of the HSE, holding responsibility for policy matters, while retaining broadly the same tripartite structure as previously. The HSE remains the lead regulatory inspection body for occupational health and safety in the United Kingdom, with local authorities following its direction. The HSE, therefore, enforces the law in the majority of workplaces, as well as working closely with the over 400 local authorities responsible for enforcement in a number of "lower" risk areas of activity, such as retailing, leisure, and hotels and catering. An HSE/local authority liaison committee (HELA) exists to provide liaison between HSE and local authorities and, in particular, to ensure that a consistent approach is adopted towards enforcement. Local authority Environmental Health Officers (EHOs) have the same powers to enter premises, issue notices and prosecute as HSE inspectors.

The HSE's work covers three main areas: inspections and other regulatory activity to secure legal compliance; policy formulation, including the development of new legislation and approved codes of practice (ACoPs); and "science and technology" – a term that encompasses both the carrying out and commissioning of research and the provision of scientific and technological advice. Its activities also

encompass the provision of information and advice about the hazards and risks of work activities to employers, workers and members of the public, and assessment, approval and certification of particular products and substances under various statutory schemes.

In addition to “inspection and other regulatory activity”, the other most significant use of HSE resources is on developing policy and proposing legislation. “Inspection and other regulatory activities” not only encompass preventive inspections and the investigation of accidents and complaints, but also a number of other types of activity such as advisory visits, visits in connection with the issuing of enforcement notices or court attendances, Sector work and workplace contact officer³ involvement with low hazard/low risk workplaces.

The United Kingdom’s political climate over the last thirty years or so has had a significant impact on the HSE. During the 17 years of Conservative governments from 1979, there was an avowed deregulatory approach to the United Kingdom economy, a commitment to curb public expenditure and a reluctance to implement EU requirements. This left a legacy that stimulated calls for a more robust approach across a wide range of regulatory issues including the clearer specification of requirements for the management and organisation of health and safety, greater support for worker representation, reform of the law on corporate manslaughter, and the specification of legal responsibilities and liabilities for company directors (James and Walters 2005). The election of a Labour government in 1997 raised expectations of possible reforms in the way health and safety was administered in the United Kingdom. There was widespread recognition that the structure and organisation of work and the labour market was changing and that approaches to regulating the management of health and safety needed to change apace with these developments.

From 1999 there was an unprecedented abundance of national policy and strategy statements relating to health and safety at work delivered either by or in conjunction with the HSC/HSE. For example, in 1999 HSC/HSE in collaboration with its parent government department at the time, the Department of Transport the Environment and the Regions (DETR), published a flagship policy statement ‘Revitalising Health and

Safety’, in which much was made of a set of targets to be achieved in terms of reduced rates of work-related fatalities, injuries, ill-health and absence over the subsequent decade. Shortly afterwards, in 2000, the HSC, again in collaboration with the DETR, published its ten year strategy for occupational health, known as, ‘Securing Health Together’. Also in 2000 a Public Service Agreement was published following the Government’s Spending Review 2000 in which, among other things, the HSE was committed to achieving progress on the ‘Revitalising’ targets by achieving half the improvement under each target by 2004. In 2001 it published a ‘Strategic Plan 2001-2004’.⁴ A few years later in 2004, HSC/HSE adopted a strategy document entitled, ‘The strategy for workplace health and safety in Great Britain to 2010 and beyond’. In June 2009 a further HSC/E strategy ‘The Health and Safety of Great Britain: Be part of the solution’ was launched at Westminster.

At the start of this period it was widely believed that the government would act to restore the resources of the HSE eroded under the Conservatives. However, although there were initial increases in HSE’s budget, the 2002 spending review effectively introduced a cut in real funding by freezing the budget for the next two years. Not least of the consequences of this was a fall in the number of field inspectors through natural wastage and non-replacement. This has continued in subsequent years. According to Tombs and Whyte (2010), in April 2002 there were 4,282 staff in post. By April 2008, this had reduced to 3,753 (a reduction of 12% over six years). Of these, 1,333 were frontline operational inspectors. HSE currently has approximately 3500 staff in total. However, in fact there are considerably fewer personnel involved in actual workplace inspection activities than these figures suggest since by no means all of the ‘inspectors’ counted as operational inspectors actually undertake inspection activities. According to the trade union Prospect, which represents the inspectors, in mid-2004 only 500 or so of the Field Operations Division (FOD) inspectorate were engaged in front-line inspection, accident and complaint investigation and prosecution in the more than 600,000 premises for which the HSE was responsible. In terms of operational activities, these budgetary reductions contributed to a 26% fall in inspections by the Field Operations Directorate and a 19% fall in regulatory contacts between 2002–03 and 2004–05 (Hazards 2004). More recent research by UNITE/CCA (2008) showed, for example, that investigations of major injuries fell by 43% between

³ Workplace contact officers are a category of HSE administrative staff whose functions include contact with firms to gather and supply information supporting the work of inspectors. They are not inspectors.

⁴ see: <http://www.hse.gov.uk/aboutus/strategiesandplans/hscplans/strategicplan0104/misc319a.pdf>

2001/02 and 2006/07, with the consequence that in 2006/07 HSE investigated only a third of the number of over three-day injuries it had investigated in 2001/02 and only a quarter of the major injuries to members of the public investigated in 2001/02. A similar decline is seen in measures of enforcement. According to Tombs and Whyte (2010:58), the first of two recent declines occurred roughly between 1999–2000 and 2003–04 (a 16% fall) and the second was a sharper decline between 2003–04 and 2005–06 (a 38% fall). The pattern is similar for local authority inspection activities.

The current Conservative-Liberal Democrat Coalition Government was returned to office following the 2010 Parliamentary election. The Conservative Minister of Justice claimed in his speech at the Tory party conference that “the powers of government inspectors will be drastically curbed” and that businesses should be allowed to run their own internal inspections; a proposal that was described by the inspectors’ union, Prospect, as “sheer lunacy”⁵ but which was nevertheless part of the Conservatives’ election manifesto. The new government has created the means to achieve this by implementing a Public Bodies Reform Bill⁶, announced as part of the Queen’s Speech on 25 May 2010. The Bill gives Ministers the power to “abolish, merge or transfer functions from public bodies, in order to achieve the aim of cutting the number of public bodies”.

Following its election the Coalition Government launched an inquiry, chaired by Lord Young, into ways of reducing ‘regulatory burdens on business’, that seemed to be deliberately structured to reach conclusions likely to further reduce the resourcing and regulatory inspection role of the labour inspectorate. The report itself, published in late 2010, lived up to this expectation, beginning with a statement setting out its aim “to free businesses from unnecessary bureaucratic burdens and the fear of having to pay out unjustified damages claims and legal fees”, and going on to make recommendations including the simplification of (for “low hazard workplaces”) and exemption from risk assessments (for employers of those working from home in a “low hazard environment” and for self-employed people in “low hazard businesses”) (Young 2010). Other recommendations include the combining of food safety and health and safety inspections and that “the United Kingdom should take the lead in cooperating with other Member States to ensure that

EU health and safety rules for low risk businesses are not overly prescriptive, are proportionate and do not attempt to achieve the elimination of all risk” (Young 2010).

The Government response had three main thrusts. First, through further cuts in the resources of the HSE, it aimed to reduce the number of inspections by at least one third. It argued that “responsible” employers should not need health and safety inspections; inspectors should concentrate their efforts on ‘high risk’ locations, like major energy facilities, and on rogue employers. Second, in response to concerns about the quality of advice available to employers, it established the Occupational Safety and Health Consultants Register (OSHCR), which is administered by HSE. OSHCR members are required to have a degree level qualification and at least two years experience. Third, it continued in its deregulatory quest with the announcement of a further review of existing health and safety law with a view to abolishing measures regarded as no longer needed.

The Löftstedt Inquiry (Löftstedt 2011) was set up to achieve this and as Löftstedt himself publicly admitted, his mandate from government was ‘clearly a deregulatory one’ (Safety and Health Practitioner April 2012). The findings and recommendations of the Inquiry included rationalisations that were anticipated to lead to a removal of about one third of existing regulatory provision; greater coordination with the planned EU review of legislation to ensure regulation is risk based and evidence based; exempting self-employed persons whose work activities ‘pose no potential risk of harm to others’; greater directing powers for the HSE over the enforcement activities of local authorities; and a review of regulations imposing strict liabilities, to bring them more in line with the concept of ‘reasonably practicable’. Shortly after the review was published, in his New Year speech the Prime Minister made an extraordinary attack on health and safety regulation in which he proposed waging a ‘war’ on the ‘excessive health and safety culture that has become the albatross around the neck of British businesses’ and to ‘kill off the health and safety culture for good’ (Safety and Health Practitioner February 2012).

The response of the HSC/HSE to these developments has been muted but suggestive of the desire to use them to further target its activities to achieve ‘greatest impact’. Not surprisingly, employers’ organisations have broadly welcomed them while trades unions have condemned them as watering down protective regulation and reducing regulatory inspection, resulting in increased risks for workers.

⁵ <http://www.prospect.org.uk/news/newsstory.php?news=672>

⁶ <http://www.number10.gov.uk/queens-speech/2010/05/queens-speech-public-bodies-reform-bill-50682>

2.2 Other features of the infrastructure for OHS support – prevention services and the social protection system

As far as support from prevention services is concerned the United Kingdom system is rather different from that found in other western European models. Firstly, there is no statutory requirement on employers to provide access to an occupational health service except in relatively rare and specified circumstances such as where workers are known to be working with highly toxic substances and biological and environmental monitoring are important aids in the prevention of disease. As we demonstrate in subsequent sections, one of the consequences of this would appear to be the relatively low level of provision and access to qualified medical and nursing professionals in the United Kingdom. Also in the United Kingdom, as in other EU countries, during recent decades there has been a decline in provision of specialists in occupational hygiene, which is in the main a reflection of the consequences of the decline in manufacturing, the extractive industries and heavy engineering. It is also to some extent a consequence of the decline and fragmentation of large organisations and the privatisation of formerly nationalised industries in which central occupational health departments frequently housed such services. In contrast, in the United Kingdom there has been a considerable growth in the profession of the ‘health and safety practitioner’ and the membership of the professional body representing them (the Institution of Occupational Safety and Health – IOSH) has grown considerably over the same period: IOSH membership topped 30,000 in 2007 (making IOSH the largest professional health and safety body in Europe at the time) (IOSH Annual Report 2007) and has risen to over 40,000 (including over 13,000 Chartered Safety and Health Practitioners – the professional practitioner status recognised by the Institution) in the five years to 2012 (now making the institution the largest health and safety professional membership organisation in the world) (IOSH website).

As indicated above, the British system for compensating work-related harm and rehabilitating injured workers also contrasts with that of some continental European models. This is a deeply rooted difference between these systems that has its origins in different political attitudes to the role of law, insurance and the state in social protection, dating back to the origins of these systems in the late 19th and early 20th centuries. As Newman Taylor and Walters (2010:96-97) have outlined, there are two main types of compensation for occupational accidents and diseases available under English law: damages at common law and benefits under the Industrial Injuries Scheme. The

former requires proof of negligence or breach of statutory duty while the latter is a no fault scheme. It nevertheless requires that certain prescribed conditions are met regarding the nature and cause of the condition to be compensated, including, in the case of an accident, those ‘arising out of and in the course of employment’ and in the case of diseases, those ‘which are a recognised risk to workers in an occupation or exposed to a particular agent, or where the disease can be attributed to an occupation or agent on the balance of probabilities...’. Thus the system is designed to focus on consequences arising out of work. Also, unlike in countries such as Germany, the United Kingdom scheme solely addresses compensation and makes no provision for either prevention or rehabilitation. Generally both systems have been subject to criticism concerning the extent of their coverage and the benefits available under them. In the case of civil litigation, generally only a small proportion of the cases that are potentially eligible are actually settled through the courts, while the administrative costs of the system are a cause for concern as is the contribution of the system to promoting a so-called ‘compensation culture’ in United Kingdom society. In the case of the Industrial Injuries Benefits scheme, it is well known that the number and range of eligible conditions are substantially fewer than those that are associated with work, the scale of the benefits available is limited and they are considerably smaller than many of those available under comparable schemes in other EU countries (Walters 2007).

Systematic institutional support for rehabilitation and return to work is also relatively weak in the United Kingdom with considerable discretion vested in employers in terms of how it is achieved. Arrangements are piecemeal and suffer a marked lack of co-ordination, with the consequence that it is difficult for any one organisation to take responsibility for the welfare of a particular individual (James and Walters 2005). Indeed, these arrangements lag well behind those that exist in other major European economies. This said, there have been various state led initiatives to encourage early return to work following absence in recent decades as part of a general drive to reduce long-term absence from work among the working age population.

2.3 Labour relations

The profile of employment relations in the United Kingdom has changed significantly over the last 30 years. In particular, membership of trade unions and the coverage of collective agreements have both declined substantially. There has been a general movement away from industry level collective bargaining towards greater focus on individual

arrangements. Employers' organisations are voluntary and membership is by no means universal in the sectors and trades in which they exist. Many employers – especially smaller ones – do not belong to an employers' organisation. In comparison with other major EU economies, there is a marked underdevelopment of corporatist infrastructure in the United Kingdom. This is significant in relation to the governance of health and safety because although a tripartite infrastructure was established covering OHS issues both by subject and sector under the HSW Act, its coverage is not universal and its functioning is to some extent dependent on the traditions and wider arrangements in place at sectoral level. Since these vary considerably between sectors, the operation of the tripartite system for the governance of OHS and the implications for its support by the HSE also varies between sectors. Although such differences are generally acknowledged, there is no detailed research that has systematically or comparatively evaluated its consequences.

Historically, the United Kingdom has a strong tradition of trade unionisation. However, membership levels reached their peak in 1979 at 13.3 million and fell 38% to 8.3 million by 1994 (Sweeny 1996, Millward et al 2000). In 1998 trade union membership had fallen to

under 7 million according to the TUC. Although there has been some stabilisation since the late 1990s, numbers are still falling with most recent figures (see Achur 2011) showing that the proportion of employees belonging to a trade union in 2010 was 26.6%, a reduction of 2.7% from 2009.

Union density varies significantly by sector: it is highest in the professional and lowest among sales occupations (43.7% compared with 12.9%) (Achur 2011). Most recent figures (Achur 2011) show that, across all sectors, just under half of United Kingdom employees (46.1% in 2010) were in a workplace where a trade union was present. This reflects a steady decline (of 0.5 percentage points from 2009 and 2.8 from 2000). Similarly, just over 20% of United Kingdom employees said that their pay and conditions were affected by a collective agreement, down from 36.4% in 2000. In fact, collective agreements have declined in both the public sector, where they are much more common, (they covered 64.5% of employees in 2010, down 3.6% from 2000) and the private sector (they covered 16.8% of employees in 2010, down 5.7% from 2000) (Achur 2011). Figures from the WERS survey (2004 – see Kersley et al 2006), also show that union density varies significantly with both sector and management attitudes towards unions (Table 1).

Table 1: Union representation (Figures from Kersley et al 2006)

		Union member employees	Workplaces with no union members	Workplaces with a union density of 50% or more	Workplaces recognising unions
Overall		34%	64%	18%	30%
Sector	Public	64%	7%	62%	90%
	Private	22%	77%	8%	16%
Management approach to unions	In favour	60%	8%	58%	84%
	Not in favour	5%	93%	1%	4%

Of course, management attitudes towards unions and sector are linked (with favourable management attitudes much more prevalent in the public sector), but the association between membership density and management attitudes in the WERS data was just as strong among private sector workplaces. These WERS figures also show a decline; in 1998 57% of workplaces had no union membership and 22% had a union density of 50% or more. Among the workplaces with union members, 76% recognised one or more union for negotiating the pay and conditions of at least some of their employees, and these workplaces accounted to 27% of all workplaces and employed 48% of all employees (down from 33% and 53% respectively in

1998). Most of the decline in the rate of union recognition occurred among small workplaces: only 18% of workplaces with 10-24 employees recognised unions in 2004 compared with 28% in 1998. This is of particular concern given the recent growth in small business numbers and the increasing fragmentation of larger organisations, and their associations with poorer workplace health and safety management and outcomes (see below). However, the incidence of union recognition among workplaces with 25 or more employees remained stable (at 39% in 2004 and 41% in 1998), following continual decline in the 1980s and 1990s.

Despite its recent decline, trade union influence in the United Kingdom was at its height when the country's approach to workplace health and safety management was developed in the HSW Act and when the measures to achieve representative participation that are found in the Safety Representatives and Safety Committees Regulations 1977 were introduced. This influence was significant in determining the nature of these provisions in relation to participatory arrangements for health and safety management. How they have fared in relation to the crisis in representation that has occurred subsequently is explored in greater detail in a following section. In short, the decline in access to trade union representation is now well-established (see for example Millward et al 2000, Moynagh and Worsley 2005 and Kersley et al 2006) and there is some evidence that it extends to representation on health and safety matters, while there is no reliable evidence to suggest that more recently introduced statutory measures to provide consultation and representational rights for non-trade unionists (the Health and Safety (Consultation with Employees) Regulations 1996), have had any significant impact on this situation (see Walters and Nichols 2007; Nichols and Walters 2009).

2.4 The wider context – the structure and organisation of work and the labour market

Employment rates in the United Kingdom are higher than average for the EU-27. Figures from the Eurostat Labour Force Survey for 2007 show that, in the United Kingdom, the employment rate among 15-64 year olds was 71%, with rates for men and women 78% and 66%; this compared with 66%, 73% and 59% for the EU-27. Latest figures for the United Kingdom put employment among those aged 16-64 at 70.3% in early 2012, a level that has stayed relatively constant since 1998. However, the unemployment rate among young people (those aged 16-24) stood at 22.2% in December 2011, an increase of nearly 10 percentage points from 12.8% in 2005. Most recent GDP figures also show that the United Kingdom economy shrank by 0.2% in the last quarter of 2011; a sharp reversal in economic growth from the third quarter of 2011, when GDP expanded by 0.6%. The fall in GDP was largely driven by the biggest drop in business investment for a year. The production sector, which includes manufacturing, fell 1.4%, the output of the service industries was unchanged, with output for the construction sector falling by 0.5%.

Given these figures, a significant corresponding fall in workforce training might be expected. However, a recent review (Felstead et al, in press) suggests only small cuts in training expenditure by employers and a minimal impact on training participation. In fact,

employers in the United Kingdom spend relatively more on training than those in other EU countries (for example, Germany and Austria) (Ok and Tergeist 2003). Of course, there is variation in the extent of provision, but in general a 'training floor' of some kind, reflecting external pressures or constraints (such as general legislation, industry/activity-specific regulation or client requirement) is universally encountered (Felstead and Green 1994, Felstead et al in press). Furthermore, in Felstead and his colleagues' (in press) recent qualitative study, respondents expressed their commitment to maintaining training coverage despite the harsh economic conditions not only to meet regulatory requirements (in terms of statutory minimum training and mandatory continuing professional development) but also for longer-term skills enhancement and succession planning. This reflected a general pattern of maintaining training coverage as far as possible, but also seeking more cost effective ways of delivering it, for example by shifting from external to in-house provision and increasing the use of online and e-learning (Felstead et al in press).

There is no doubt, however, that there have been profound changes in the structure and organisation of economic activities in the United Kingdom in recent decades. They are well documented and similar to those experienced in much of North West Europe. Business management trends have included greater efforts to outsource activities and greater use of both temporary contracts and agency workers. At the same time, as a result of these changes in management practices, there have been corresponding increases in the proportions of workers on temporary contracts, the self-employed and those employed in smaller organisations (Monyagh and Worsely 2005). There have been changes in the composition of the labour force with increased proportions of women in work as well as greater numbers of migrant workers, while the age profile of workers in general has become skewed towards higher ages. Networks of production and supply of goods and services are now more common and more complicated than in the past and contractual relations between labour and capital that were once based around the contract of employment have become more fluid and complex as a result. A parallel decline has occurred in the extent of organised labour, brought about under the influence of many of these changes as well as by periods of political hostility towards trades unions resulting in legal constraints on their activities.

These changes have consequences for the health and safety of workers as well as for the arrangements made to manage it. The former have been well documented in reviews of the international research literature and they apply as much in the United Kingdom as they do

elsewhere (for such reviews see for example: Walters et al 2011b; Quinlan et al 2001; HIRE 2009). There has been a substantial shift in the pattern of employment away from manufacturing, engineering and mining, towards the service sector and private services especially. This has meant that, as in other former industrialised countries, employment in manufacturing had already declined by 25% during the period 1980 – 1990 with a corresponding rise in employment in services (HSC 1996, Nolan and Walsh 1995). This trend has continued subsequently.

Fragmentation and downsizing of enterprises with the break up of large business units into smaller ones, either within the same organisation overall or separately, has led to devolution of managerial responsibility but not necessarily managerial authority to ensure the delivery of this responsibility (Sisson 1995). As indicated in early HSE supported research, business process re-engineering does not always afford health and safety the position or priority it may have enjoyed in former organisational structures (Wright 1996a and 1996b). Furthermore, while the reduction of employment in more hazardous industries may have contributed to reducing the contribution of serious injuries and fatalities experienced by the (predominantly male) workers employed there to the total picture of injuries and fatalities arising from workplace incidents in the United Kingdom, the parallel rise in employment in services (in which proportionally more women are employed) has contributed to substantial increases in the work-related health effects of the psycho-social risks with which such work is associated.

Both self-employment and contingent forms of employment have increased significantly in recent decades. For example, self-employment as a proportion of total employment almost doubled between 1979 and 1995, rising from 7.3% to 13% (HSC 1996); with latest LFS figures for 2011 showing an increase of 3.5% (138,000 people) in the previous year. Similarly, the proportion of employees engaged on temporary work increased from 5.5% in the mid-1980s to 7% in 1996, a rise of over half a million (Sly and Stillwell 1997), with a recent report identifying the United Kingdom as one of the three largest agency work markets in 2009 (with Japan and the USA) (CIETT 2011). The CIETT report suggests that the United Kingdom had 11,500 private employment agencies operating in 2009, accounting for 1,068,197 agency workers; this represents 5% of the United Kingdom workforce.

Although contingent workers and the self-employed are ostensibly included under the HSW Act 1974, their relationship to the illegal economy and the blurring of

its boundaries with the legal economy makes this area notoriously difficult for regulatory inspection. They represented further challenges to a system for health and safety regulation that in the United Kingdom was primarily geared towards protecting the health and safety of people working in large organisations on permanent contracts. Wider research findings have established that not only do temporary and casual workers experience worse working conditions than those on permanent contracts (European Foundation 2005 and 2010) but adequate inspection of such conditions by regulatory agencies may be problematic (Quinlan et al 2001).

A significant level of unemployment has become a sustained feature of the economy from the 1980s (OECD 1996) and there is much data to indicate that unemployment leads to more negative health outcomes than employment does (see for example Waddell and Burton 2006 for a review of the evidence of this). This has also had several consequences relevant to regulatory inspection on health and safety. For example, it has been long established that unemployment and concern over employment security, as well as increases in precarious and illegal employment, may affect attitudes toward the acceptability of risks, with even risky forms of employment being regarded as preferable to unemployment.

Growth of employment in small enterprises was a well-established feature of economic trends by the early 1990s. In 1993, for example, 44% of employment was in businesses with fewer than 50 employees and 50% in those employing fewer than 100 employees (Nolan and Walsh 1995). This trend has continued, with over 99% of the United Kingdom's 4.5 million private sector businesses employing fewer than 50 people in 2011 (BPE 2011). As we have already emphasised, traditional health and safety structures and strategies were best developed in relation to large enterprises. Institutions of employee representation also have only limited application in small workplaces (Walters and Nichols 2007). In addition, in the United Kingdom there is evidence that small enterprises are proportionally more dangerous. Research on United Kingdom manufacturing, for example, shows that workplace size is a significant influence on trends in occupational injuries with SMEs accounting for proportionally higher rates for major injuries than larger enterprises (Nichols et al 1995, Nichols 1997, Walters 2001). Similarly, recent figures for the construction sector (for the five years between 2003/2004 and 2007/2008) show that two-thirds of fatalities were among the self-employed or those working for firms employing 15 or fewer workers and similarly that two-thirds of accidents occurred on small sites (with 15 or fewer workers),

making it very clear that those working for smaller firms in the industry are at greater risk (HSE 2009).

There has also been an increase in part-time work in the United Kingdom. In 1971, approximately 15% of jobs were part-time, increasing to 26% in 1991 (Watson and Fothergill 1993) and 29% in 1996. European Labour Force Survey (2007) figures show that 24% of 15-64 year olds in the United Kingdom are employed part-time, and that part-time work is more common among women (41% compared to 9% of men). Comparable figures for the EU-27 are 17% (30% for women and 7% for men). There is an association between such work, disadvantaged workers and the hidden, unregulated economy. Instruments and strategies of occupational health and safety regulation have little effect on health and safety outcomes in this sector. Concern over the observation that immigrant workers appear to suffer greater numbers of occupational accidents has also grown as their numbers have increased. Vulnerability is usually attributed to their employment in industrial sectors such as the construction industry with high accident rates and a significant element of unregulated, illegal work practices where health and safety standards are not applied, but it may also reflect communication and management problems resulting from a failure to address language and cultural differences adequately (Mackay et al 2006).

The rise of human resource management techniques (HRM), flexible working, just in time (JIT), lean production and other techniques characteristic of the past 20 years have also sometimes undermined employment security, worsened working conditions and intensified work with adverse consequences for health and safety (James 2006). Indeed, calls from Conservative MPs *"to restore competitiveness ... by deregulating the labour market"* (Liam Fox, 2012⁷) suggest that, under in the current political climate in the United Kingdom these changes are likely to continue.

In addition, the Skills Surveys show a marked decline in task discretion for United Kingdom workers in the 1990s, which flattened off after 2001 (see Felstead et al 2007). Those in 'skilled trades' were least affected, whereas 'associate professionals' and 'personal service workers' suffered the biggest fall. The decline was slightly greater in the public than the private sector, and particularly pronounced in education. The Surveys found that the decline was linked to more intrusive performance management systems and increasing pressures from customers, clients and colleagues.

WERS indicates that less than half of employees in 2004 reported a lot of influence over how work was done and the order in which tasks were undertaken, and only a third did so in respect of the tasks performed (Kersley et al 2006: 95-97). There is also evidence of significant work intensification (Green 2009), rising levels of 'over-qualification' (Felstead et al 2007), and skills not being fully utilised at work (Kersley et al 2006).

To this can be added evidence of significant labour market polarisation, with growth in professional and managerial occupations occurring alongside rapid increases in low skill, low paid jobs, such as sales assistants and shelf-stackers (Noland and Wood 2003, Goos and Manning 2003, Warhurst and Thompson 2006). In 2006, there were an estimated 7 million jobs in the United Kingdom that did not require any qualifications to obtain them (Felstead et al 2007). It has also been argued that many United Kingdom firms produce low specification goods and services in price-competitive markets, using a predominantly low skill, low wage workforce and neo-Fordist forms of work organisation which afford employees limited scope for discretion (Keep and Mayhew 1998, Delbridge et al 2006).

Work systems requiring relatively high levels of skill and autonomy are more likely to be found in sectors exposed to international competition, where organisations compete on the basis of high-specification goods and services and high added value, and where innovation and creativity are at a premium (see Geary 2003). Research also suggests that highly routinised forms of work organisation remain entrenched in many parts of the United Kingdom economy, such as call centres, food processing and large parts of retailing (see Lloyd et al 2008a). Case studies of meat and confectionary firms have uncovered 'very simple jobs', such as packing, 'placing a chicken onto a conveyor belt', 'counting and placing ten sweets into a confectionary box seven times in one minute' (James and Lloyd 2008). While there is some high-end call centre work in the United Kingdom, studies indicate that the vast bulk of agents work in large 'mass production' type call centres, with Taylorist work organisation, reflected in high call volumes and an average call length for the industry of under four minutes (see Taylor and Bain 2007, Lloyd et al 2008b).

Such structural change has also served to reduce the proportion of workplaces in which trades unions are well established and increased the proportion in which they are less prevalent (such as in small enterprises and in private services for example). They have further served to present significant challenges for the operation of established workplace representational

⁷ <http://www.bbc.co.uk/news/uk-politics-17123137>

practices (such as in multi-employer worksites; or where jobs have been outsourced from unionised employers to non-union contractors; or where supply chain pressures concerning price and delivery override agreements between employers and unionised employees concerning productivity and working conditions).

2.5 A summary of contextual change and its consequences

In summary, therefore, contextual facets with significant implications for health and safety management and outcomes in the United Kingdom fall into six main areas. First, the United Kingdom has one of the longest standing traditions of process based regulation in the EU. Second, in the last 10 years or so there has been a re-orientation of HSE policies towards an acknowledgement of broader relationships between work and health. Third, over about the last 25 years there has been an increasing trend towards deregulation, both of the labour market and of the management of health and safety. Fourth, there have been ongoing cuts in the budgets of the regulatory authorities, resulting in fewer inspections and prosecutions. Fifth, there has been a significant decline in trade union density, and consequently worker representation and collective agreements. And finally, there have been very significant changes in the structure and organisation of both work and the labour market in the United Kingdom, resulting in sweeping and very rapid changes in what many people do for work and the way that many of them are employed. The implications of these six areas for health and safety management and outcomes are discussed in the final section of this paper. Before this, however, we outline the evidence of the operation of workplace health and safety management at the present time.

3. Evidence of workplace health and safety management

In very broad terms, the ESENER data suggest that the management of health and safety in workplaces in the United Kingdom compares favourably with the rest of the EU 27 countries. This is something HSE endorses with its inclusion of the following summary of United Kingdom working conditions on its website:⁸

- Most workers think that their workplace has a good health and safety environment (European Working Conditions Survey 2010)

- Three quarters of workers feel they receive the right amount of health and safety training and instruction (ONS Opinions Survey 2010).

However, the same site⁹ also suggests that there are still some areas that could be improved:

- 18% of workers think their job risks their health or safety (European Working Conditions Survey 2010).
- Workers understand their health and safety obligations but around half think that these are excessive (ONS Opinions Survey 2010).
- Workers are more likely to have received recent training if they work for a large organisation (ONS Opinions Survey 2010).

In the following sections we describe United Kingdom health and safety management and its outcomes using ESENER as well as other data sources.

3.1 Policies and services for managing health and safety

Respondents to the ESENER management survey were asked whether their establishment had a documented policy, established management system or action plan on health and safety. In comparison with the EU 27, significantly more respondents from United Kingdom enterprises agreed that they had (98% compared with 76%). Similarly, proportionately more United Kingdom respondents reported that their establishment routinely analysed the causes of sickness absence (67% compared to 50% in the EU 27) and took measures to support employees' return to work following a long-term sickness absence (85% compared with 64%).

These results are similar to those of a recent United Kingdom survey suggesting that 93% of a sample of 1,002 United Kingdom establishments of various sizes (though most were SMEs) from a range of sectors reported having a written health and safety policy (IES 2006). Other sources suggest that this may overstate the situation. For example, figures for 2005 from the HSE's Workplace Health and Safety Survey Programme (see Hodgson et al 2006) showed that 56% of employees were aware that their employer had some kind of policy or arrangements in place to help people return to work following sickness absence or injury (which 75% of whom thought were fairly or very effective), with 17% saying nothing was in place. This and other similar discrepancies probably reflect both the ESENER sample (these respondents were managers rather than workers) and the response bias inherent in

⁸ <http://www.hse.gov.uk/statistics/workingconditions.htm>

⁹ <http://www.hse.gov.uk/statistics/workingconditions.htm>

all large surveys of this type (in this case towards organisations at the ‘better end’ of the spectrum).

Table 2 shows the proportion of respondents in the ESENER survey from United Kingdom establishments reporting the use of five types of health and safety service, together with proportions for the EU 27 as a whole.

Table 2: Use of health and safety services

Use of health and safety services	The UK %	EU 27 %
Occupational health doctor	33	69
Safety expert	72	71
Psychologist	10	16
Ergonomics expert	28	28
General health and safety consultancy	66	62
At least 1 of the above	86	92

Broadly, these suggest similar proportions of service use in the United Kingdom and the other Member States, although overall they are rather generous estimates that do not entirely match more qualitative evidence concerning the experience of such use. The exception, however, is the occupational health doctor, where United Kingdom use is substantially lower, which might be anticipated given the peculiar features of the United Kingdom provision for prevention services outlined previously. In addition, further ESENER data show that significantly fewer United Kingdom management respondents agreed that the health of employees was monitored through regular medical examinations (20% compared to 68% for the EU-27). These differences are also not surprising given that routine health monitoring is not a universal requirement in the United Kingdom nor is there a regulatory requirement in place for the provision of occupational medical services (except in very few specified work situations). However, the Workplace Health and Safety Survey (WHASS) (see Hodgson et al 2006) showed that just over half of employees (51%) have access to occupational health advice or treatment through their job, with an estimated 30% having no such access (the remainder did not know (10%) or did not respond (9%)). This is similar to recent HSE figures (from the ONS omnibus survey), suggesting that almost half of workers said that their workplace provided an occupational health service, around a third of whom reported having used it. The ONS omnibus survey data showed that the presence of such a service was more

common in larger workplaces than medium or small ones (66% compared to 39% and 25% respectively)¹⁰; which is of particular concern given the growing numbers of smaller enterprises in the United Kingdom. These recent United Kingdom figures themselves present a more favourable picture of access to occupational health service provision than previous ones in which the occurrence of services in which access to qualified medical and nursing personnel was consistently reported to be especially limited (see for example Bunt 1993; Pilkington et al 2002; Welsh Assembly Govt. 2006). It is probable that such differences represent the consequences of changes in the ways in which such information has been sought in surveys, rather than evidence of significant recent increases in provision or access

The ESENER data also suggest that United Kingdom workplaces are more likely than those elsewhere in the EU 27 to have procedures in place to deal with psychosocial risks in the workplace (Table 3).

Table 3: Presence of psychosocial risk policies

Presence of policies on psychosocial risks	The UK %	EU 27 %
Work-related stress	57	26
Bullying or harassment	80	30
Work-related violence	71	26
At least 1 of the above	86	41

Similarly, 51% of United Kingdom management respondents reported that their establishment took action if individual employees worked excessively long or irregular hours, compared to 40% for the EU-27; and 51% reported informing employees about psychosocial risks and their effect on health and safety, with 84% confirming that employees had been informed about whom to address in case of work-related psychosocial problems. Comparable figures for the EU-27 were 53% and 69% respectively.

Considering the role of employees in psychosocial risk management, however, ESENER figures for the United Kingdom and the EU 27 were similar. Among United Kingdom management respondents, 56% reported that employees had been consulted regarding measures to deal with psychosocial risks and 68% that employees were encouraged to participate actively in the implementation and evaluation of these measures. This compared with 54% and 67% for the EU 27 Member States.

¹⁰ <http://www.hse.gov.uk/statistics/pdf/survey-data-brief.pdf>

On risk assessment, the ESENER data again paint a particularly positive picture, with 97% of respondents from United Kingdom enterprises reporting that workplaces in their establishment were regularly checked for safety and health as part of a risk assessment or similar measure, compared to 87% for the EU 27. In addition, 91% reported that these risk assessments or workplace checks were carried out at regular intervals without any specific cause, compared to 83% for the EU-27. Risk assessments were mainly carried out by enterprises' own staff (74%).

The IES United Kingdom survey suggested that 89% of establishments with a written health and safety policy in place (93% of the survey sample - see above), reported that the policy included a risk assessment procedure, with 94% of respondents overall claiming to be operating some form of risk assessment, either as part of a health and safety policy or as a stand-alone procedure (IES 2006). There was, however, variation with size: a greater proportion of large and medium sized organisations reported having risk assessment procedures in place; and all aspects of 'good' risk assessment behaviour were more common amongst large and medium establishments. Furthermore, although the majority of organisations (regardless of size) operated a regular programme of risk assessments, they were not always comprehensive and in some cases not all areas of work or all groups of employees were included. In addition, very few organisations (less than 5%) cited psychosocial hazards as presenting health and safety risks. The report's authors commented that there was 'considerable variation in understanding of the concept' of risk assessment across their sample. This suggests a more complex picture than the simple, and positive, 'headline' proportions in ESENER; something that is supported by a survey of Engineering Employers Federation (EEF) members (Hinde and Ager 2003). The survey showed that, while 95% of respondents reported that risk assessments were carried out, just 14% felt they were very effective and a third (34%) said they needed improvements (only just over half (51%) described them as adequate). Here the authors concluded that 'the key elements of risk assessment and H&S training are likely to be in place but many companies perceive they are ineffective' indicating 'a high level of awareness, but a difficulty in implementing these areas successfully' (Hinde and Ager 2003).

3.2 Perceptions of health and safety among managers and workers

Recent HSE survey data on the workplace health and safety environment (collected as part of the ONS

omnibus survey) suggest that most (over 80%) workers interviewed viewed their workplace health and safety climate positively, with a little under 25% giving a maximum score¹¹. This is consistent with ESENER figures suggesting that, in comparison with all EU Member States, more employee representative respondents from the United Kingdom reported that health and safety is an integral part of management philosophy at their workplace (90% compared with 83%) and that management gives proper consideration to health and safety issues raised by employees (95% compared to 88%). Similarly, among workers responding to the same HSE survey, almost 93% agreed or strongly agreed that workers' health and safety is a priority with their management, with 96% agreeing or strongly agreeing that they felt free to report safety problems and 73% that workers are fully involved when health and safety procedures are developed or reviewed¹². Around 70% of workers also felt that management were good at seeking the views of workers on health and safety matters, though only around 60% agreed that workers are allowed to influence decision making.

This is broadly supported by data from the 5th European Working Conditions Survey (Eurofound), in which 52% of United Kingdom respondents reported being always or most of the time involved in improving the work organisation or work processes of their department or organisation. The Eurofound survey also suggested that half of the United Kingdom respondents reported being able to take a break when they wished always or most of the time, 67% also reporting that their manager or supervisor encouraged them to participate in important decisions.

These data paint a generally positive picture, supporting HSE's view when considering the ESENER survey data that: 'management of health and safety in United Kingdom workplaces is integral to line managers and supervisors roles, slightly more so than in EU countries as a whole, suggesting that health and safety management in United Kingdom workplaces is largely a shared worker/manager responsibility' (in United Kingdom workplaces, 37% rated the degree of involvement of the line managers and supervisors in the management of health and safety as very high and 59% as high, compared to 20% and 61% for the EU countries).

Further HSE survey data¹³ were collected from managers on their views on: a) who is responsible for

¹¹ <http://www.hse.gov.uk/statistics/pdf/survey-data-brief.pdf>

¹² <http://www.hse.gov.uk/statistics/pdf/survey-data-brief.pdf>

¹³ <http://www.hse.gov.uk/statistics/pdf/survey-data-brief.pdf>

controlling health and safety risks in the workplace; and b) what they thought would help improve workplace health and safety. In response to the first question, 46% said only the employer, 39% both employer and employee, 10% said the employee only and 5% said neither (other options included specific layers of management such as team leader, line manager, as well as agencies including the government, HSE and local councils). In response to the second question, 65% said workers' commitment to their own health and safety, 61% HSE providing accessible information and advice, 52% HSE promoting good practice, 35% HSE enforcing health and safety laws and 16% the threat of compensation claims from staff. Taken together, these findings suggest a significant role and opportunity for HSE to guide and work with organisations to improve health and safety management and encourage active worker participation and involvement; something which may be increasingly difficult to deliver in the current 'hands-off' and budget-cutting climate.

Similarly, among managers, 64% agreed or strongly agreed that health and safety requirements benefitted their company as a whole and 55% that they saved money in the long term, though 60% felt they were over-bureaucratic, 50% that they were expensive to implement and 31% that they were biased against small businesses. Among these management respondents, agreement or strong agreement that the following were motivators for investing more in health and safety: when it was part and parcel of everyday compliance – 80%; demonstrates commitment to employees – 74%; expected from clients and customers – 67%; reduces the threat of prosecution – 64%; reduces employers' liability to pay compensation – 58%; improves productivity through reduction in sickness absence – 57%; and reduces employee insurance costs – 45%. HSE suggest that these results indicated that: 'investment in health and safety is driven in part by practical or financial considerations' but that social norms were also important concerns. Furthermore, when health and safety managers were asked whether they had seen or heard of any enforcement activity in the last 12 months, and if so, to what extent this made them consider the consequences of health and safety failures, only 22% were aware of any enforcement action and, of those who could recall any, the majority had considered the consequences to some extent, but this accounted for less than 20% overall. On the basis of these findings, a recent HSE Survey Data Brief suggests that 'it would seem that regulatory consequences are a weak driver of health and safety compliance' and summarises them

by saying that 'enforcement activity is a weak motivator of the health and safety system'¹⁴.

In terms of health and safety information and training, around three quarters of all employee respondents to the same HSE survey felt they received enough information relating to health and safety from their employer. However, levels of training or instruction varied with enterprise size, with more of those from large organisations reporting having received training or instruction in the last year (75% compared with 64% and 59%). Almost 5% of all employees said they have never received any such training or instruction (9% in small organisation and 3% in medium to large organisations). Employees were generally positive about the training they had received: for example, 88% agreed or strongly agreed that it had made them better able to manage the health and safety risks that they faced at work.

Eurofound figures for the United Kingdom also show that most workers (95%) feel well or very well informed about health and safety risks related to their job (an increase from 91% in 2005, 92%, 87% in 1995 and 88% in 1991). In 2010, 45% reported having received training paid for by their employer in the past year. However, this was significantly higher among those on permanent contracts (53%) than among those with other employment arrangements (33%) and the self-employed (19%). Similar figures for on-the-job training were: 45% overall, 52%, 43% and 13%.

Here, therefore, both HSE and Eurofound data suggest that where people work and the way they are employed are significant factors in their levels of health and safety training and information; again this is of concern given the recent and continuing changes in the organisation of work and the labour market in the United Kingdom.

These figures from both United Kingdom and European surveys present an especially favourable picture of health and safety practice in United Kingdom workplaces. However, it should also be pointed out that some caution is warranted in their interpretation. They may reflect a bias common in these types of surveys towards responses from organisations in which best practices predominate, since a greater proportion of these organisations are likely to participate in such surveys than those with less interest in OHS. Moreover, some responses may be subject to alternative interpretation, for example, the interpretation of what HSE survey data say about the attitudes of managers towards regulatory drivers contradicts considerable

¹⁴ <http://www.hse.gov.uk/statistics/pdf/survey-data-brief.pdf>

previous research evidence. Many older studies have demonstrated that awareness of inspection and its consequences is a strong driver of compliance. There are a plethora of studies pointing to this, some of the more prominent include for example: Fairman and Yapp 2005; Davies 2004; Vickers et al 2003; Tombs and Whyte 2007. The HSE survey findings on regulatory drivers may therefore merely demonstrate the very limited current presence of regulatory inspection in British workplaces which, if so, given the weight of previous evidence concerning the effectiveness of its presence, is considerably more worrying than it is reassuring.

3.3 Worker representation

Turning to worker representation, the ESENER data suggest that proportionately more United Kingdom workplaces have an internal health and safety representative and a health and safety committee than for the EU 27 as a whole, while proportionately fewer have a shop-floor trade union representative (Table 4).

Table 4: Forms of worker representation

Presence of forms of worker representation	The United Kingdom %	EU 27 %
Works council	37	36
Shop-floor trade union representative	13	24
Internal health and safety representative	85	65
Health and safety committee	38	28

The WERS (2004) survey (see Kersley et al 2006) also showed that lay union representatives were present in 13% of workplaces with 10 or more employees (these workplaces employed 39% of all employees) and joint consultative committees were present in 14% (down from 20% in 1998) (these workplaces employed 42% of all employees). The latter were more common in larger workplaces. However, the WERS consultative committee figure of 14% is significantly lower than the ESENER figures for both the United Kingdom and EU-27.

Figures for 2005 from the HSE's Workplace Health and Safety Survey Programme (see Hodgson et al 2006) also showed that an estimated 61% of workers had a health and safety officer appointed by their employer in their workplace, 27% had a health and safety representative appointed by a trade union (or someone other than their employer) and in total 8% had no health and safety officer or representative. All these figures are substantially lower than the ESENER

level for internal health and safety representation in the United Kingdom.

Analysing WERS and other data from several surveys from the 1980s onwards Nichols and Walters (2009) demonstrate that although early surveys showed a significant rise in the appointment of health and safety representatives and establishment of joint health and safety committees following the introduction of the Safety Representatives and Safety Committees (SRSC) Regulations (see for example the evidence of surveys conducted in the United Kingdom by the HSE (1981) between 1978 and 1981), later surveys demonstrated less clear cut effects. This is well illustrated by the WIRS/WERS series. Between 1980 and 1998 these surveys present broadly comparable information relating to the presence of three types of arrangements whereby employees had a formal voice: joint committees for health and safety, joint committees for health and safety and other matters and individual health and safety representatives. There are no clear trends in the patterns of these arrangements, as can be seen from comparison of the results over time during this period (see Table 5).

Table 5: Health and safety arrangements in British industry, 1980-1998 (Source: adapted from Millward et al 2000:117 Figure 4.1)

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

Workplaces with 25 or more employees

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

The effect of this new legislation did not become clear until a recent WERS survey. Using a new categorisation of health and safety arrangements, the 2004 WERS indicated that, since 1998, there had been a drop in the established means of giving employees formal voice through joint committees and worker representatives – from 51 to 42 per cent of

workplaces; and a rise in so-called 'direct methods' – from 47 to 57 percent (see Table 6).

Table 6: Health and safety arrangements in British industry, 1998-2004 (Source: Kersley et al 2006: 204 Table 7.12)

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

Workplaces with 10 or more employees

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

More widely, the recognition of a trade union continues to play a significant role in determining the nature of consultation over pay and conditions. For example, 61% of workplaces recognising trade unions normally negotiated over pay, compared to 18% of all workplaces (Kersley et al 2006). Comparable figures for negotiations over health and safety were 15% and 5%, with 69% of all workplaces reporting that they did nothing, 9% that they informed only and 17% that they consulted only on health and safety (Kersley et al 2006). Again, these figures are illustrative of the decline in union density in the United Kingdom and the effects of restructuring, while at the same time they are considerably lower than the comparable ESENER data.

3.4 Health and safety outcomes

For a number of practical reasons, the ESENER survey did not collect data on health and safety outcomes in any Member States. However, a number of sources of such data exist for the United Kingdom.

In 2008/2009 the rates of fatal, major and over 3 day (i.e. resulting in more than 3 days absence from work)

accidents at work were: 0.6, 109.4 and 412.8 per 100,000 respectively. Corresponding figures for 2010/11 were: 0.6 (i.e. 171 deaths), 99.0 (i.e. 24,726 major injuries) and 363.1 (90,653 over-3-day injuries). Broadly, these rates all represent steady declines over the last 15 years and compare well with those of other Member States. According to HSE¹⁵, in 2008 the rate of fatal injuries in the United Kingdom was the lowest of those published by Eurostat and the United Kingdom's overall performance is 'better than many other European countries in the key outcome areas of accidents, fatalities and levels of self-reported work-related ill-health'.

However, it is also acknowledged that reported injury and ill-health data significantly underestimate the real situation and while fatal accidents are invariably reported, in common with many Member States, there is considerable concern about the level of reporting of non-fatal injuries (even serious ones), illnesses and dangerous occurrences. In fact, most recent HSE comparisons (for 2009/2010) between data obtained under the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) and that from the Labour Force Survey (LFS) suggest that RIDDOR major and over 3 day injury rates capture only around 58% of the true extent of those injuries. Recent Labour Force Survey figures, for example, identified 200,000 reportable (over 3 day) injuries, a rate of 710 per 100,000, clearly showing the significant under-reporting of non-fatal injuries under RIDDOR (in which there was a rate of only 462.1 per 100,000 employees).

HSE figures for 2010/2011 show that 1.2 million working people suffered from an illness they believed was caused or made worse by work, with 0.5 million representing new cases. Most recent Labour Force Survey (LFS) data suggest that for 2008/2009 approximately 3,890 per 100,000 workers felt that had suffered from an illness causes or made worse by work in the previous 12 months. The most commonly reported conditions were musculoskeletal disorders (1,770 per 100,000), and stress, depression or anxiety (1,370 per 100,000). This is reflected in the latest figures from THOR and THOR-GP (voluntary Health and Occupation Reporting Networks), which show that musculoskeletal disorders and mental ill-health accounted for 54.7% and 30.0% of new work-related ill-health diagnoses in 2009. Increases in the levels of occupational illnesses such as musculoskeletal disorders and mental ill-health have been associated in particular with the kinds of changes in the organisation and structure of work experienced in the United

¹⁵ <http://www.hse.gov.uk/statistics/overall/hssh1011.pdf>

Kingdom, as elsewhere in the EU, in recent years. This is clearly shown by surveys, including United Kingdom research (e.g. Stansfeld et al 2000, Smith et al 2000). Furthermore, such studies have linked at least half the annual total of days off work to stress related illness (Dyer 1998, James and Walters 2005, James 2006).

Recent HSE figures also suggest that the annual number of work-related cancer deaths is currently around 8,000, of which about half were the result of past exposure to asbestos. HSE also estimates that around 15% of Chronic Obstructive Pulmonary Diseases (COPDs) annually may be work-related – which equates to about 4,000 deaths per year as a result of past occupational exposure to fumes, chemicals and dusts. HSE's figures for 2009 suggest that 2321 people died from mesothelioma, with thousands more from other occupational cancers and diseases.

Figures from the 5th European Working Conditions Survey (Eurofound) showed that in the United Kingdom in 2010 5% of employees reported that they had been subject to discrimination at work, 15% to verbal abuse, 8% to threats or humiliating behaviour, 3% violence and 5% bullying or harassment.

Overall, HSE figures suggest that 26.4 million working days were lost, with an average of 15 days per case of work-related illness or workplace injury; 22.1 million due to work-related ill-health and 4.4 million due to workplace injury. Workplace injuries and ill-health (excluding cancer) were estimated to cost society £14 billion in 2009/2010.

In terms of enforcement, HSE prosecuted 551 cases in 2010/2011 (conviction rate 95%), with the local authorities prosecuting 129 cases, and all enforcing authorities issuing 18,290 enforcement notices (an increase of 16% on the previous year). Recent politically driven changes in inspection and enforcement practice look set to substantially reduce these numbers in the future.

4. Conclusions

The ESENER and other data summarised in the previous section portray a complex picture in terms of the management and outcomes of health and safety in the United Kingdom. In this paper we have tried to examine the United Kingdom context and environment in which OHS management operates and in which these outcomes occur. We have sought to understand how context and environment might influence and explain trends in the data in ESENER and other surveys

concerning the operation and outcomes of OHS management in United Kingdom workplaces. In particular we have focused on the regulatory framework; traditions and systems of industrial relations and social protection; OHS support infrastructures; compensation systems; and wider contextual features such as the economic climate, the structure of the labour market and the organisation of work. In this final section we summarise our findings and offer some tentative conclusions concerning the relationship between the operation of OHS management and the wider regulatory, economic and political environment in which it occurs.

OHS management outcomes in the United Kingdom are relatively good (though, along with virtually all other Member States, there is very significant under-reporting of work-related ill-health and all but fatal accidents). In terms of risk management policies, including those for managing psychosocial risk, survey data are also positive. Even though the ESENER data probably substantially overestimate the actual proportions, overall it seems clear that in general more United Kingdom workplaces have documented policies for managing traditional and psychosocial risks than is the case in many other Member States. This would seem to be at least in part a reflection of the United Kingdom's longstanding tradition of process-based health and safety regulation, which requires enterprises to have well-developed health and safety management systems – something that necessitates initial policy documentation. Furthermore, the trend towards increasing recognition of the link between work and health combined with concern about economic loss as the result of absence from work has raised the profile of psychosocial risk both: within the regulatory bodies, and hence in the support and guidance they provide to organisations; as well as among employers, trades unions and society more widely. Perhaps in keeping with this, the perceptions of both managers and workers of health and safety in their organisations seem to be generally positive, with relatively high proportions feeling that health and safety is integral to the management and success of their organisation and that good health and safety management requires the involvement of both employers and employees. Again, this reflects the United Kingdom's long tradition of a participatory approach to health and safety management, which in turn is related to the historical role and influence of organised labour in United Kingdom workplaces as well as in the determination of collective bargaining arrangements at sector and national levels.

However, within this largely positive set of findings, some less positive data emerge. These include: the most commonly reported work-related illnesses

(musculoskeletal disorders and mental ill-health) remaining those associated with changes in the way that work is organised and structured; the perception of some managers (and politicians) that health and safety requirements are over-bureaucratic, expensive and discriminatory to small firms; the relatively rare awareness of regulatory enforcement; the more frequent health and safety training and information provision within large organisations and to those with permanent contracts; and the falling levels of worker representation, with certain types of workplaces (such as small firms for example) especially poorly served. These factors, of course, are of particular concern given the current downward trends in relation to union density, funding for regulatory authorities, regulation of both health and safety and the labour market (again, particularly in relation to small firms), and the current upward trends in the fragmentation of large organisations, the number of small firms and the levels of contingent and precarious employment in the United Kingdom.

The United Kingdom's neo-liberal political and economic environments both prior and subsequent to the introduction of the Framework Directive have provided strong contextual influences on regulation and the regulatory inspection of workplace health and safety management. Following the implementation of the HSW Act in the mid to late 1970s, the United Kingdom regulatory authorities paid increasing attention to the role of OHS management as the key to improving prevention performance. They did so in an environment that regulatory scholars would broadly describe as an example of a form of 'regulated self-regulation' (see for example Gunningham and Johnstone 1999). The culmination of this approach is found in the HSE guidance on managing health and safety at work, known as HS(G)65, which was first published in the early 1990s. It embodies an approach to health and safety management which echoes that developed in health and safety management systems more generally. It demonstrates that effective control of workplace risks requires their systematic assessment, the consequent identification of areas where risks need to be better controlled and adoption of appropriate methods to secure this, the subsequent introduction of strategies to effectively implement the controls in question, and the adoption of mechanisms to monitor and review their adequacy and identify whether action is needed to improve them.

The approach encapsulated by HS(G)65 has been much praised for its clarity and comprehensiveness. However, it is equally clear that as with other interventions in the context of 'regulated self-regulation,' for it to be effective a set of supportive preconditions is required. They include, at the very

least, the will and capacity of employers to use a management systems approach, competent support for its application to health and safety matters and effective means of representation and consultation with workers in relation to them. And all these within a regulatory framework in which, while the regulatory inspectorate might be supportive and facilitating of self-regulation, the presence and actions of this inspectorate remain a powerful driver of compliance and a significant deterrence of deviance on the part of duty-holders. However, these are the very features that are eroded by the kinds of change in the structure and organisation of work that have taken place in recent decades. For example, reduction in the proportion of larger organisations in the economy implies a corresponding reduction in the proportion that is likely to have robust management systems in place, since it is in these firms that such systems are most developed. Fragmented and multi-employer worksite arrangements further contribute to such erosion. Both imply reduced access to competent advice on health and safety matters because there are fewer organisations able to resource internal preventive services and further limitations on the use of external services by many organisations because of cost, as well as other issues of access. Absence of robust requirements on the qualifications and competence of individuals and organisations providing such services allows little confidence that many of the consultants offering them at competitive prices are in fact competent to do so.

Decline in the presence of organised labour means fewer firms with effectively operating joint arrangements for managing health and safety such as are required under the Safety Representatives and Safety Committees Regulations. Finally, the increase in temporary and casual workers, and the increases in the precarity of workers' jobs generally, contributes to their vulnerability to workplace risks in a variety of ways identified in the literature including unfamiliarity with the work, poorer communication, weaker unionisation, more limited training and so on, all of which are established risk factors for increased accidents and ill-health arising out of work.

If recent changes in the structure and organisation of work have eroded the preconditions for successful health and safety management, they have at the same time made it more difficult to inspect and control. Many of the situations that have grown in proportion in the current economy, such as those found in small firms, on multi-employer worksites, and in relation to precarious work and vulnerable workers, are more difficult for inspectors to access. These same situations may also necessitate more fundamental steps to require systematic approaches to arrangements for

health and safety management on the part of employers, as well as greater efforts on the part of inspectors to support and sustain them in the absence of the pre-existing knowledge and support associated with larger, stable organisations and among trade union representatives. But the resources of inspectorates to undertake these tasks have been substantially reduced and such reduction is on-going.

A further complication is that, as the nature of the economy has shifted from a manufacturing to a service base, at the same time measurable effects of work on health have also changed. This is especially so in terms of the relative frequencies of conditions necessitating time off work. As we have already described, incidence rates of serious and fatal accidents have declined roughly in proportion to the decline in the risks of such injuries but there have been considerable increases in the proportion of workers suffering conditions such as work-related stress and musculoskeletal disorders. Yet many health and safety management systems are themselves focused predominantly on reducing the causes of injury rather than on dealing with the issues of work organisation that cause stress and musculoskeletal injuries among workers. The prevention of these conditions and their causes is also acknowledged to be in many respects harder for traditionally safety orientated regulatory inspectorates to address; particularly if there are fewer resources at their disposal to do so. This has clearly been the case in the United Kingdom during the last decade

Moreover, under New Labour, the extent of worklessness within the population helped fuel a wider United Kingdom discourse on health in the working age population. The desire on the part of the state to reduce the costs to the economy of welfare payments to those not in work focused on strategies encouraging return to work. This led to something of a repositioning of the relationship between work and health in a policy discourse in which a strong case was made for the health benefits of work over worklessness (see for example Waddell and Burton 2006). Following its relocation within the DWP, the HSE also attempted to accommodate policy orientations adopted within its new home. As previously noted, these were with the costs of sickness absence, absenteeism and unemployment, and strategies and support for new employment, return to work and rehabilitation to help reduce these costs to the economy. But they concerned more broadly defined causes of ill-health that result in time off work than those that are caused solely by work itself. The HSE, whose traditions and structure are entirely based on achieving the prevention and control of the latter as well as with issues of safety, has found this broader perspective sometimes difficult to accommodate. At a time in

which state provision for regulatory inspection was being cut back in successive budgetary restrictions, the risk-based strategies on which it is predicated arguably were, as a result, downplayed in the policy discourse around the health of the working age population. These developments have been somewhat unhelpful in supporting a regulatory role in the surveillance of new and emerging risks resulting from the growth of the elements of disorganisation, outsourcing and precarity in employment that contribute to making the task of inspection simultaneously both more significant and more difficult (see Walters et al 2011b).

Such trends have continued and arguably intensified under the present government where a wider political campaign has linked (albeit somewhat spuriously) health and safety regulation with the existence of a so called 'compensation culture' and a 'risk averse' society which act in combination to limit the entrepreneurial activity of business.

Therefore, while the United Kingdom context has been broadly supportive of OHS management in the past, the challenges for regulators in effecting the continued improvement of health, safety and well-being at work in the current climate are significant and substantial. Several developments stand out. One is the introduction of an Enforcement Policy Statement in compliance with the Regulators' Compliance Code, and the Legislative and Regulatory Reform Act 2006. The Regulators' Compliance Code requires that regulators perform their duties in a business-friendly way, by planning regulation and inspections in a way that causes least disruption to the economy.¹⁶ Another concerns the drive towards a wider compliance strategy which emerged, in part at least, from recognition of the challenges that economic restructuring posed and which has caused the HSE to invest considerable time and effort in exploring the possibilities of strategies to increase its impact on achieving OHS improvement in addition to conventional approaches to inspection. At the same time this latter strategy needs to be understood within the context of government enthusiasm for so called "light touch regulation" and continuing trends in the reduction resourcing of the regulator. Moreover, these developments, which were instigated under a New Labour administration, have acquired a harder and more deregulatory edge under the present Coalition Government.

¹⁶ See <http://www.berr.gov.uk/whatwedo/bre/inspection-enforcement/implementing-principles/regulatory-compliance-code/page44055.html>

The effects of these broad changes are seen more specifically in the delivery strategies of the regulator. For example, the HSE's Field Operations Directorate (FOD) inspection strategy, which in 2003 was embraced within a programme called FIT 3,¹⁷ was developed to deliver the targets laid down in its Public Service Agreement. It is intended *'to focus on new methods of interventions, concentrating on priorities that will best deliver the targeted reduction in injury and ill-health'*.¹⁸ It also identified new and emerging risks resulting in stress and ergonomic issues concerning manual handling and the sectors in which FOD should increase its efforts, namely construction, agriculture and the health services.

The 'enabling' and 'delivery programmes' for FIT 3 were intended to develop 'closer partnerships and seek to secure improved health and safety by working with and through local authorities, businesses, other organisations and workers'. One such programme, for example, the Enforcement Strategic Enabling Programme, distinguished efforts to achieve better co-ordination of work with large, multi-site organisations on the one hand, while, at the same time, a greater focus on 'poor performers' on the other. Strategies deployed to achieve this included involving a wider range of staff in front line work. This was to be achieved partly by reducing bureaucracy through minimising record keeping and data collection, but more controversially through introducing more junior staff into front line teams to undertake operational work and developing the roles of non-inspector positions such as those of workplace contact officers (WCO), working time officers (WTO) and compliance officers.

At the same time as public-spending restrictions have been introduced by successive governments, the HSC/HSE has increasingly presented its strategies as addressing a future with fewer resources available to its inspectorates to undertake regulatory intervention in an environment in which the over-riding political consideration concerns freeing business from 'regulatory burdens'. Its policy has placed greater emphasis on advice, education and other 'soft' means of securing co-operation from duty holders with greater engagement of other actors and processes in the economic relations of production, as well as inspection and investigation, that together could help to promote good health and safety practice through 'winning the hearts and minds' of employers. The role

of more multidimensional approaches to raising duty-holders' awareness of the positive reasons for undertaking their health and safety responsibilities has been stressed and efforts have been focused on exploring other alliances and levers in the economy that could be used to bring pressure to bear on duty-holders to comply with their OHS responsibilities. At the same time there have been fewer enforcement actions.

In summary, therefore, key contextual influences in the United Kingdom include both its longstanding traditions (of industrialisation, health and safety management and regulation, and worker representation) and its current trends towards deregulation in a climate of significant economic austerity, strong political conservatism and rapid changes in the way people are employed, how their work is organised and in the extent to which their collective interests in their health and safety are represented. These seem to pull in what are effectively opposite directions, resulting in the complex picture we have tried to outline in this paper. Overall, perhaps, the management of health and safety at the workplace in the United Kingdom might be characterised as 'talking the talk' but having some increasing current difficulty 'walking the walk' (i.e. the policies are in place but the practice may be less effective), particularly for the growing numbers of smaller firms, non-permanent workers, fragmented worksites and non-union workplaces that characterise the current structure and organisation of work in the United Kingdom.

¹⁷ FIT 3 stands for 'fit for work, fit for life, fit for tomorrow' and as such, very much reflects the policy lexicon used by the DWP to address the health of the working age population.

¹⁸<http://www.hse.gov.uk/aboutus/meetings/committees/charge/strategic.htm#fit3>

References

- Achur, J. (2011), *Trade Union Membership 2010* (London, Department for Business Innovation and Skills).
- BBC (2012) Budget 2012: Liam Fox calls for business tax cuts, BBC News, 22 February 2012. Available at: <http://www.bbc.co.uk/news/uk-politics-17123137>
- Bunt, K. (1993) *Occupational Health Provision at Work*, HSE Books Sudbury
- Business Population Estimates (2011) Business Population Estimates for the UK and Regions 2010 [Online], Department for Business Innovation and Skills: Statistical Release. Available at: http://www.bis.gov.uk/assets/biscore/statistics/docs/b/bpe_2010_stats_release.pdf
- CIETT (2011) The agency work industry around the world. CEITT (International Confederation of Private Employment Agencies). Available at: http://www.ciett.org/fileadmin/templates/eurociett/docs/stats/Ciett_Economic_Report_2011.pdf
- Davies, C. (2004) *Making companies safe: What works?* London: Centre for Corporate Accountability
- Delbridge, R., P. Edwards, J. Forth, P. Miskell, and J. Payne (2006) *The Organisation of Productivity: Re-thinking Skills and Work Organisation*, London: Advanced Institute of Management.
- Dyer, C. 1998 *Sick of work?* SW195, Health and Safety Bulletin, 270 pp 9-16 July/August 1998 and Health and Safety Commission, 1997, op cit.
- EU-OSHA European Agency for Safety and Health at Work (2012a) *Drivers and barriers for psychosocial risk management: an analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER)*. Available at: <https://osha.europa.eu/en/publications/reports/drivers-barriers-psychosocial-risk-management-esener>
- EU-OSHA European Agency for Safety and Health at Work (2012b) Management of psychosocial risks at work: An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER). Available at: <https://osha.europa.eu/en/publications/reports/management-psychosocial-risks-esener>
- EU-OSHA European Agency for Safety and Health at Work (2012c) *Management of psychosocial risks at work: An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER)*. Available at: <https://osha.europa.eu/en/publications/reports/management-psychosocial-risks-esener>
- EU-OSHA European Agency for Safety and Health at Work (2012e) *Worker representation and consultation on health and safety. An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER)*. Available at: https://osha.europa.eu/en/publications/reports/esener_workers-involvement
- Eurofound – European Foundation for Improvement of Living and Working Conditions, (2005) Fourth European Survey of the Working Environment, <http://www.eurofound.europa.eu/surveys/ewcs/2005/index.htm>
- Eurofound – European Foundation for Improvement of Living and Working Conditions, (2010) Fifth European Survey of the Working Environment, <http://www.eurofound.europa.eu/surveys/ewcs/2010/index.htm>
- Fairman, R. and Yapp, C. (2005) *Making an impact on SME compliance behaviour: An evaluation of the effect of interventions upon compliance with health and safety legislation in small and medium sized enterprises*, HSE Research Report 366, Sudbury: HSE Books.
- Felstead, A., Green F., and Jewson N. An analysis of the impact of the 2008-09 recession on the provision of training in the UK. *Work, Employment and Society*, in press.
- Felstead, A and Green, F (1994) 'Training during the recession', *Work, Employment and Society*, 8(2): 199-219.
- Felstead A, Gallie D, Green F, Zhou Y (2007). *Skills at work, 1986-2006*. ESRC Centre on Skills, Knowledge and Organisational Performance.
- Geary, J. (2003) *New forms of work organisation: still limited, still controlled but still welcome?*, in: P. Edwards (ed.) *Industrial Relations: theory and Practice (2nd edition)*, Oxford: Blackwell.
- Green, F. (2009) *Job Quality in Britain*, UKCES Praxis Paper No.1, London: UKCES.
- Goos, M. and Manning, A. (2003) McJobs and MacJobs: The Growing Polarisation of Jobs in the UK, in: R. Dickens, P. Gregg and J. Wadsworth (eds), *The*

Labour Market Under New Labour, London:
Palgrave.

- Gunningham, N., Johnstone, R., 1999. *Regulating Workplace Safety: Systems and Sanctions*. Oxford University Press, Oxford.
- Hazards (2004) *Making safety dangerous again*, No. 88, Oct/Nov.
- Hinde, A. and Ager, R. (2003) *Benchmarking the competent person in manufacturing and engineering sectors*, Research Report 121, HSE Books
- HIRES (2009) *Health in restructuring: Innovative approaches and policy recommendations*, Rainer Hampp Verlag, Munich.
- J T Hodgson, J R Jones, S D Clarke, A J Blackburn, S Webster, C S Huxtable and S Wilkinson (2006). *Workplace Health And Safety Survey Programme 2005 Worker Survey First Findings Report*. HSE.
- HSC (1996) *The Health and Safety Implications of Changing Patterns of Employment, 1996*, London: Health and Safety Commission.
- HSE (2009) *Phase 1 Report: Underlying causes of construction fatal accidents – A comprehensive review of recent work to consolidate and summarise existing knowledge*, Health and Safety Executive, Construction Division. Available at: <http://www.hse.gov.uk/construction/resources/phase1.pdf>
- Institution of Occupational Safety and Health (2007) *Annual Report*, IOSH, Leicester
- IES (2006). *An evaluation of the five steps to risk assessment*. HSE Research Report 476.
- James, P (2006) *The Reshaping of Workplace Risks in Institutions, Production and Working Life*, Oxford: Oxford University Press.
- James, S. and C. Lloyd (2008) 'Supply Chain Pressures and Migrant Workers: Deteriorating Job Quality in the UK Food-Processing Industry', in: C. Lloyd, G. Mason and K. Mayhew (2008) (eds.) *Low-Wage Work in the United Kingdom*, New York: Russell Sage Foundation, 211-246.
- James, P and Walters D. (2005) *Regulating Health and Safety at Work: An Agenda for Change?* Institute of Employment Rights, London
- Keep, E. and K. Mayhew (1998) 'Was Ratner Right? – Product Market and Competitive Strategies and their Links with Knowledge and Skills', *Employment Policy Institute Economic Report*, 12, 3.
- Kersley, B., Alpin, C., Forth, J., Bryson, A. Bewley, H., Dix, G. and Oxenbridge, S. (2006) *Inside the Workplace: Findings from the 2004 Workplace Employment Relations Survey*, Routledge, London.
- Löftstedt, R. (2011) *Reclaiming health and safety for all: An independent review of health and safety legislation*, London: Department of Work and Pensions. www.dwp.gov.uk/docs/Loftstedt-report.pdf
- Lloyd, C., G. Mason and K. Mayhew (2008a) (eds.) *Low-Wage Work in the United Kingdom*, New York: Russell Sage Foundation.
- Lloyd, C., G. Mason, M. Osborne and J. Payne (2008b) 'It's Just the Nature of the Job at the End of the Day': Pay and Job Quality in the United Kingdom Mass-Market Call Centers', in: C. Lloyd., G. Mason and K. Mayhew (eds) (2008) (eds.) *Low-Wage Work in the United Kingdom*, New York: Russell Sage Foundation, 247-283.
- Mason, G. (2004) *Enterprise Product Strategies and Employer Demand for Skills in Britain: Evidence from the Employer Skills Survey*, SKOPE Research paper 50, SKOPE: Warwick and Oxford Universities.
- McKay, S, Marc Craw, M. and Chopra, D (2006) *Migrant workers in England and Wales: An assessment of migrant worker health and safety risks*, HSE RR 502, Sudbury: HSE Books
- Millward, N. Bryson, A and Forth, J. (2000) *All Change at Work?* London: Routledge.
- Moynagh, M. and Worsley, R. (2005) *Working in the Twenty-First Century*, ESRC: Leeds
- Newman-Taylor, A. and Walters, D (2010) *Compensation Schemes*, Chapter 8 in *Hunters's Diseases of Occupations (Tenth edition)*, eds. Baxter, P.L. Aw, T-C., Cockcroft, A. Durrington, P. and Harrington, J.M. London: Hodder Arnold.
- Nichols T., (1997) *The Sociology of Industrial Injury*, London: Mansell, 1997, chapter 7.
- Nichols, T., Dennis, A. and Guy, W. (1995) *Size of Employment Unit and Industrial Injury Rates in British Manufacturing Industry: A Secondary Analysis of WIRS 1990 Data*, *Industrial Relations Journal*, 26, 45-56.
- Nichols T. and Walters D (2009) *Worker Representation on Health and Safety in the UK: Problems With the Preferred Model and Beyond*, in Walters D. and Nichols T., eds. *Workplace Health and Safety:*

International Perspectives on Worker Representation, Palgrave Macmillan, Basingstoke.

- Nolan, P. and Walsh J. (1995) 'The Structure of the Economy and the Labour Market' in P. Edwards (ed), *Industrial Relations: Theory and Practice in Britain*, Oxford: Blackwell
- Nolan, P. and Wood, S. (2003) Mapping the future of work. *British Journal of Industrial Relations*, 41 (2), pp.165-174.
- OECD, (1996) *Employment Outlook 1996*, Organisation for Economic Cooperation and Development, Paris
- ONS Opinions Survey 2010.
<http://www.esds.ac.uk/government/omnibus/>
- Ok, W., & Tergeist, P. (2003) Improving workers skills: Analytical evidence and the role of social partners, OECD Social, *Employment and Migration Working Papers*, No. 10.
- Pilkington, A., Graham, M.K, Cowie, H.A, Mulholland, R.E., Dempsey, S., Melrose, A.S and Hutchinson, P. A (2002) Survey of Use of Occupational Health Support, Contract Research Report 445/2002, HSE Books, Sudbury.
- Quinlan, M., Mayhew, C. and Bohle, P. (2001) The Global Expansion of Precarious Employment, Work Disorganisation, and Consequences for Occupational Health: A Review of Recent Research, *Int. J. Health Serv.* 31(2): 335-414.
- Robens Report (1972) *Committee on Safety and Health at Work*, London: H. M. S. O. (Cmnd. 5034).
- Safety and Health Practitioner (2012) *PM vows to 'kill off the health and safety culture for good'*, Safety and Health Practitioner, February 2012.
- Safety and Health Practitioner (2012) *PM's approach to H&S not helpful says Prof Löftstedt*, Safety and Health Practitioner, April 2012.
- Sisson, K. (1995) "Organisational Structure" in S. Tyson (ed), *Strategic Prospects for HRM*, Institute of Personnel and Development.
- Sly, F. and Stillwell, D. (1997) 'Temporary Workers in Great Britain', *Labour Market Trends*, September 1997
- Smith A., Johal S., Wadsworth E., Davey Smith G. and Peters T (2000). *The scale of occupational stress: The Bristol Stress and Health at work study*. Contract research report 265/2000. Health & Safety Executive. HSE Books: Sudbury.
- Stansfeld, S. Head, J. and Marmot, M. (2000) *Work-related factors and ill-health: The Whitehall II study, CRR266*, Sudbury: HSE Books
- Sweeney K. (1996) Membership of Trade Unions in 1994: An Analysis Based on Information from the Certification Officer, *Labour Market Trends*, 49-53
- Taylor, P, and Bain, P. (2007) 'Reflections on the Call Centre – A Reply to Glucksmann', *Work, Employment and Society*, 16, 1, 133-150.
- Tombs, S. and Whyte, D. (2010) A Deadly Consensus: Worker Safety and Regulatory Degradation under New Labour. *British Journal of Criminology* 50, 46–65
- Tombs, S. and Whyte, D. (2007) *Safety Crimes*, Cullompton, Devon: Willan
- Vickers I, Baldock R, Smallbone D, James P, Ekanem I, 2003 *Cultural Influences on Health and Safety Attitudes and Behaviour in Small Businesses RP 150*, Health and Safety Executive,
- Rose Court, 2 Southwark Bridge, London SE1 9HS
- Waddell, G. and Burton, A.K (2006) *Is work good for your health and well-being?* London: TSO.
- Walters, D. (2001) *Health and safety in Small Enterprises*, Brussels: Peter Lang
- Walters, D. (2002) *Regulating Health and Safety Management in the European Union: A Study of the Dynamics of Change*, Peter Lang International Publishers: Bruxelles, Bern, Berlin, Frankfurt/M., New York, Oxford, Wien
- Walters, D. Johnstone, R., Frick, K, Quinlan, M., Baril-Gingras, G and Thebaud Mony, A. (forthcoming 2011) *Inspecting Health and Safety Management in Changing Times*, Cheltenham: Edward Elgar
- Walters D, Wadsworth EJK et al (2011b). *The NERCLIS Project: Contract to assess the potential impact of emerging trends and risks on labour inspection methodologies in the domain of occupational health and safety*. European Commission. In press, November 2011.
- Walters, D. (2007) *An International Comparison of Occupational Disease and Injury Compensation Schemes: A research report prepared for the Industrial Injuries Advisory Council*, London: DWP. <http://iiac.independent.gov.uk/reports/index.shtml>
- Walters D and Nichols, T. (2007) *Worker Representation and Workplace Health and Safety*, Basingstoke: Palgrave Macmillan

- Warhurst, C. and P. Thompson (2006) 'Mapping Knowledge in Work: Proxies and Practices?', *Work, Employment and Society*, 20, 4, 787-800.
- Watson G. and Fothergill B. (1993) 'Part-time employment and attitudes to part-time work', *Employment Gazette*, 213-220.
- Welsh Assembly Government (2006) *A mapping exercise of occupational health service and training provision across Wales*, Cardiff: The Welsh Assembly Government
- <http://www.awardresearch.org.uk/completedprojects.html>
- Wright, M. (1996a) *Business Re-engineering: Literature Survey*, HSE Contract Research Report 124/1996, Sudbury: HSE Books.
- Wright, M. (1996b) *Business Re-engineering and Health and Safety Management: Best-practice Model*, HSE Contract Research Report 123/1996, Sudbury: HSE Books.
- Young (2010). *Common Sense Common Safety*. HM Government.