

**Labour Administration and Inspection Programme
LAB/ADMIN**

**A Guide to Selected Labour Inspection Systems
(with special reference to OSH)**

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International Labour Organization – Geneva

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Preface

At its 100th Session of the International Labour Conference (June 2011), the Resolution concerning labour administration and labour inspection as well as a set of Conclusions on labour administration and labour inspection were adopted. The two instruments reiterate that promoting and enforcing decent working conditions, safety and health standards and respect for fundamental principles and rights at work are at the core of labour inspection activities. They call upon the ILO to continue to carry out research in the area of labour administration and labour inspection with a view to promoting the exchange of best practices among the various regions.

This “Guide to Selected Labour Inspection Systems” is part of the current research programme carried out by the ILO Labour Inspection and Administration Programme (LAB/ADMIN). Labour inspection has the mission of monitoring compliance with labour legislation and operates as a part of labour administration. Labour inspections systems reflect their own realities, though the implementation of labour legislation remains the key mission whether it is assigned to one single administrative body, or shared across various sections of a labour ministry, or even in some cases, distributed across several specialized ministries and public agencies. The diversity and coverage of labour legislation makes it difficult to comprehend their full scope but, viewed broadly, they cover employment relationship, pay, working conditions, occupational safety and health, industrial relations, social security, employment and vocational training. Bearing in mind that each country organizes its public administration in its own way, it is also sometimes difficult to obtain an exact picture of what labour inspection is, which bodies comprise the native labour inspection system, what the precise functions of the system are, what the sphere of action is, how far its purview extends and what its powers are.

The labour inspection system has the potential to play an even greater role than it has hitherto, in ensuring the protection of both men and women workers in all sectors and at all levels, the compliance at the national level with national labour laws, and, ultimately, in assisting and strengthening the international supervisory system. At a time of globalization and increased competition, rapid technological change and new production methods, protecting workers remains a vital task; it is also a difficult task. In this regard, an effective labour inspection needs to be composed of inspectors who are trained, qualified and free of any undue outside influence.

A significant component of the changing world of work influencing inspectorates has been the increasing globalization of manufacture and service provision. Major sectors of work are moved around the world in the search for optimal cost-effectiveness, with enterprises seemingly flourishing one day and closing the next. OSH inspectorates are challenged by new merging issues due to the acceleration of global businesses moving jobs from one country to another with the primary aim of saving money, including on health and safety through inadequate provisions. In this context, one of the biggest changes to the day-to-day work of health and safety inspectors in recent years in a number of countries has been in giving more prominence to occupational health. Traditionally, inspectors have spent most of their time on safety issues, machine guarding, preventing falls, making power-presses and workplace transport safer, and preventing explosions, among others. Most have had an engineering solution. There were exceptions, of course, but that was the general picture – important work yielding major reductions in accidents (essentially, where the benefits were most evident). Ill health was viewed as being related to toxic substances and recent years have seen an exponential growth in

chemicals, together with sophisticated analytical equipment to detect their presence. The reality, however, is that the biggest contributors to work-related ill health are stress and musculoskeletal disorders. In the last few years, the number of people in Europe, for example, reporting that they are suffering from work-related stress has more than doubled. Guidance is being published advising managers how to carry out risk assessments of their workplaces. This guidance, or voluntary standards, covers six key aspects of work that, if properly managed, can help reduce work-related stress. These 'stress factors' include areas such as whether employees are able to cope with the demands of their job and whether employees receive adequate information and support in their work. Inspectors are beginning to be more confident in probing these issues during their inspections but different professional skills are required for this in comparison to handling a machine-guarding issue.

Participative initiatives are present in several labour inspection systems. They take various forms but all seem to benefit from a similar range of supports from legislation, collective agreements, bi-partite and tripartite bodies. However, further action should be taken with a view to promoting and securing workers' health, workplace security, and investment in a preventative culture. A preventive approach for better health and the reduction of accidents and diseases in the workplace must be linked to labour inspection services. These services have a pivotal role in giving advice, providing information, and promoting compliance with labour legislation in the workplace. Labour inspectors are the controlling authority for working and employment conditions including OSH activities. Strengthening labour inspection is crucial for ensuring a high standard in labour protection, including OSH promotion, thus contributing to overall economic stability.

The aim of this Guide would present a useful tool for labour inspectors, workers and employers as well as researchers and academicians with a view to better understanding the implications and complexities of labour inspection from a comparative viewpoint. Special thanks go to Professor Gianni Arrigo of the University of Bari (Italy) and Dr. Mario Fasani, Labour Administration and Inspection Officer who co-authored this study. I hereby thank Ms. Caroline Augé, Ms Angela Onikepe and Ms. Riette Lagarde for their assistance in the editing and formatting of this document.

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I. Introduction

As an institution, the purpose of labour inspection is to monitor compliance with labour legislation. Labour inspection operates as a part of labour administration. Its role is usually identified with specific services within labour ministries and is personified by labour inspectors. Labour inspection activity is exercised within workplaces, which are in essence, economic units where labour relations occur – in other words, where a natural or a legal person employs others. Labour standards are a broad and complex field, usually embodied in a number of different legal texts of varying content. The monitoring of these standards may be assigned to one single administrative body, or shared across various sections of a labour ministry, or even in some cases, distributed across several specialized ministries and public agencies. The diversity and coverage of labour standards makes it difficult to apprehend their full scope but, viewed broadly, they cover employment relationship, pay, working conditions, occupational safety and health, industrial relations, social security, employment and vocational training. Bearing in mind that each country organizes its public administration in its own way, it is also sometimes difficult to gain an exact picture of what labour inspection is, which bodies are part of it, what its precise functions are, what its sphere of action is, how far its purview extends and what constitutes its powers.

The labour inspection system has the potential to play an even greater role than it previously had in ensuring the protection of both men and women workers in all sectors and levels and in ultimately, assisting and strengthening the international supervisory system. Such is the conclusion of a General Survey on labour inspection, which was submitted to the International Labour Conference in June 2006¹. Certainly, labour inspection is a vital link in the promotion of decent work for all. At a time of globalization and increased competition, rapid technological change and new production methods, protecting workers remains a vital task. It is also a difficult task – and sometimes a dangerous one. The preconditions for worker protection and respect for decent work can be summarized as the following: labour legislation that is respectful of international labour standards; strong, independent, representative workers' organizations which enjoy the basic rights to organize and negotiate; and effective labour inspection, equipped with the necessary means and presence of inspectors who are trained, qualified and free of any undue outside influence.

Unfortunately, as many studies show, labour inspection is neglected by many governments. Sometimes this gets to the point where even those whom labour inspection is supposed to protect begin to doubt its effectiveness. However, we should not forget the great progress that labour inspection has made since it was first introduced by law in different countries. Nor should we overlook the existence of proposals for better inspection. They come mainly from the inspectors themselves.

¹ ILC, 95th Session, 2006, Labour Inspection, ILO, Geneva

Central to labour inspection is ILO Convention, 1947 (No. 81). Like its twin sister for the agricultural sector, Convention No. 129 (adopted in 1969), Convention No. 81 is recognized as a priority Convention². This Convention, which calls for labour inspectors to play an active role in the compliance of labour legislation, has been ratified by 141 countries. This represents one of the highest rates of ratification for any international labour standard. Nonetheless, the ILO Committee of Experts, which prepared the General Survey for the 2006 Conference rightly, insists on the need to campaign for further ratifications of these two Conventions, with priority going to Convention No. 129, which covers a particularly sensitive sector and has been ratified by 43 ILO member States.

Convention No. 81 assigns three basic missions to labour inspectors: ensuring that labour legislation is applied, advising employers and workers on the most effective means of achieving that aim and drawing the authorities' attention to abuses or shortcomings not currently covered by the law. The Convention states that, "[c]onditions of work and the protection of workers while engaged in their work" are the fields to be covered by labour inspection. Therefore, while safety and health and the fight against forced labour or child labour are crucial issues for inspectors, they are also concerned with other matters ranging from working time to pay, maternity protection, weekly rest times, leave, equality and diversity in the workplace. In addition, inspectorates need to be knowledgeable about trade union rights in general, including the protection of workers' representatives against abuse and discrimination.

Where good governance is absent, labour inspectorates cannot reasonably be expected to guarantee their own independence and integrity. If a government assigns low status to labour inspection or the inspectorate is understaffed and undertrained and the inspectors' own employment conditions are deplorable, then they will not be in a position to carry out their tasks properly. The ILO Committee of Experts agrees to recommend that governments and the international institutions recognize "the vital contribution to development and social cohesion made by an efficient labour inspection service" and reflect this priority in the resources allocated to labour inspection. However, labour inspection can also be weakened if it is assigned tasks beyond its mandate, as defined in the ILO instruments. In some countries, for example, government orders may mean that an inspectorate spends more time monitoring the unions than protecting the workers. In other countries, labour inspectors are given the task of seeking out illegal migrant workers. On this point,

² These Conventions set out general principles and provide the universal framework for status, structure and function of labour inspection. The goal of Convention No. 81 is the establishment of a labour inspection system in industry and commerce that is capable of enforcing labour laws and closing holes that exist in the current legal framework. Convention No. 129 looks to realize similar goals in the agricultural sector. This system is designed with the purpose of enforcing laws and investigating complaints through labour inspection. It also provides technical support to employers, workers and their organizations. National law and practice shows that the functions entrusted to labour inspection are generally those envisaged by the instruments, securing the enforcement of legal provisions relating to conditions of work and the protection of workers while engaged in their work. This practical relevance of labour inspection in both developing and developed countries can and should be further developed, especially in view of the ILO's Decent Work Agenda and the fact that labour inspection at the workplace can identify problems which require action at the national and legislative levels. Both Convention Nos. 81 and 129 along with Conventions Nos. 122 and 144 are considered to be, by the Governing Body of the ILO, as "governance instruments" (ILO, GB November session 2009).

the Committee of Experts issued a reminder that “the primary duty of labour inspectors is to protect workers and not to enforce immigration law”. Labour inspectors, experts and workers’ representatives also warn against the trend towards relying on company self-regulation of working conditions and believing that “private monitoring” is a substitute for action by the State and by public labour inspection services. Can firms really be left to draw up for themselves the rules that they intend to abide by and then be entrusted with the monitoring of their own compliance with their own rules? In following the international labour standards, the great strength of labour inspection lies in those thousands of sworn public servants, those inspectors who daily prove their commitment to decent work and their determination to get labour standards respected. To do so, they take up all sorts of challenges and overcome all sorts of obstacles, while the risks to their own safety grow.³

II. Effects of globalization on labour inspection

Globalization has had a profound impact on the world of work in both positive and negative ways. One effect is that much of the manufacturing sector has moved to less developed nations, which often use technology that is considered dangerous or obsolete in their production processes. As corporations have begun to transcend national boundaries, institutions including those of collective bargaining and state regulatory commissions, which have traditionally maintained secure and humane working conditions, have begun to deteriorate. In recent years, industry has shifted to developing countries that often have comparatively lower standards in OSH and Work Health Promotion (WHP). Globalization has contributed to the alarmingly high rate of workplace casualties that exists today. About 2.2 million work-related deaths are reported on an annual basis and the costs of accidents in the workplace reach 4 per cent of the global GDP. In light of this, it is essential that worldwide health and safety standards be brought to the attention of everyone.

Globalization affects all facets of the working world, giving rise to new forms of work and expanding other existing working models. This phenomenon is at least partially to blame for a certain lurking menace to workers’ health. For example, in many western countries, the average number of hours worked in a year has been climbing recently.⁴ The increased pressure and related stress exposure has led to the development and spread of work-related ailments. This phenomenon is far from new, but has been shifting from primarily physical maladies to more psychosocial afflictions. This presents a clear and serious problem because these sorts of ailments have been shown to be more serious than usual.

Additionally, with the current crisis, there are effects on the health and safety of workers. Fatal accidents have increased, especially in the construction and manufacturing sectors. Good mental health is important for both individuals and society. At the individual level, good mental health enables people to realize their intellectual and emotional potential and to find and fulfil their roles in social and working life. At the societal level, it is a resource for social cohesion, better social and economic welfare and facilitates the transition into a knowledge-based society.

³ For more details on the various challenges ahead in the area of labour inspection see ILO, GB. 309/ESP/3, November 2010.

⁴ Landsbergis, 2003.

Good mental health for any worker is essential, but by the year 2020, it has been estimated that depression is expected to be the second most common cause of disability in the developed world. Mental health problems are a challenge not only for the health sector, but for society as well. Beyond the obvious implications they hold for affected citizens and their families, mental health problems impose significant costs on society and its economic, educational, social, criminal and justice systems. Mental disorders are one of the top three causes of absenteeism from work and are a leading cause of early retirement. It has been estimated that the economic costs of mental health problems result in the loss of up to 3 to 4 per cent of the European Union's (EU) GDP, mainly through a decrease in productivity. It is important to remember that workers' health is just as fundamental in today's demanding and competitive business environment as it has always been. A close watch must be kept on the increasing demands on employees in order to avoid causing work-related health problems.

Globalization has also caused the transfer of low-skilled manufacturing and processing jobs to less developed countries. This is one of the major factors that have led to the formation of numerous export processing zones (EPZs). Restraints on trade union freedom, restrictions on the right to strike, an absence of collective bargaining – these are still all-too-often the rule rather than the exception in EPZs.⁵ While employers point out that many of the problems cited for EPZs also arise elsewhere, and that conditions in firms within the zones are often better than those outside, the report nonetheless emphasized that working conditions and worker health and safety remained a major concern in the zones of some countries.

The EPZs represent a special case of the effects of globalization on the workplace and health. It has been linked to the frequent incidences of high stress levels among workers, and exposed them to hazardous labour conditions. The workers in these zones often develop health problems, such as cardiovascular, reproductive, and psychosocial disorder. Additionally, workers in EPZs are often housed in unsanitary conditions, in which sexually transmitted infections such as HIV/AIDS are prevalent.⁶

Another facet of globalization is the rapid growth in the number of migrant workers. For example, the number of Mexican migrants to the United States has been on the rise. In 1970, 3 per cent of Mexico's total labour force resided in the United States but in 2008, the number had risen to 18 per cent. Less developed nations have had a large presence of these workers for quite some time and globalization has only served to increase this trend. Migrant workers may be found in various industries,

⁵ For more information see: ILO; *Good labour practice compilation of labour inspection practices in EPZs* (Geneva, 2010); and *ILO Guidelines for an effective labour inspection in EPZs*. (Geneva, 2010).

⁶ The ILO has introduced a handbook for labour and factory inspectors to deal with the issue of HIV/AIDS in their work. HIV/AIDS has a profound impact on the workplace as it can hinder production, raise costs and create many other problems. On this issue, the ILO has published another handbook, which aims to establish effective communication between workers and employers in the hope of preventing the spread of the illness, and dealing with the consequences of its presence. The ILO Code of Practice on HIV/AIDS provides a framework for action resting on the three pillars of prevention, care and rights (ILO, 2001). Please see for further information, *An ILO Code of practice on HIV/AIDS and the world of work*, Geneva. Recently the ILO has adopted Recommendation No. 200 concerning HIV and AIDS and the World of Work in June 2010.

chiefly in construction, agriculture and manufacturing. They are often exposed to poor working conditions and may be further disadvantaged by a limited knowledge of the language and laws in their host country⁷. For example, in Southern Africa there has been a multitude of unreported cases of serious respiratory disorders among miners that were most likely developed on the job⁸. As globalization continues to grow the sort of economic and trade policies that are developed tend to encourage certain trends. As production spreads throughout the world, trade barriers are beginning to fall and manufacturing centres are starting to spring up in many less developed nations, often leading to lower health and safety standards in the workplace. This is partially caused by the labour surplus that always nearly exists in less developed nations and by the related growth in the uncovered labour market. As many workers cannot find traditional employment, they are forced into the unenviable position of taking jobs that are wrought with hazards due to the lack of enforcement of labour laws⁹.

One of the fundamental tenets of the new economic reality is the desire for the lowest costs of production. The cost of capital is generally lower in places where worker health is a secondary issue and OSH rules are often overlooked. Some are of the opinion that the rise in globalization and the spread of capital to unindustrialized nations will lead to a “race to the bottom” in labour standards.¹⁰ There is much support in the international community for the formation of worldwide versions of national regulatory agencies that will establish minimum standards of workplace safety and health, and national inspectorates to monitor and enforce them. This support rallies around the ILO’s core labour standards with the view to securing decent work for all. These core standards include freedom of association and collective bargaining, freedom from forced labour and discrimination and the abolition of child labour. Equal treatment of migrant workers and nationals and respect for the basic human rights of all migrant workers, as enshrined in ILO Convention Nos. 97 and 143, are central to this approach. The ILO framework encourages the use of labour inspection to apply national standards to the case of migrant workers. While the government has the responsibility of adopting standards, labour inspectors play an essential part in promoting compliance with these standards, including those concerning migrant workers. The inspectors monitor conditions of work and present a forum in which the workers may seek help. The inspectors also fill a crucial gap in the field, as migrant workers are often poorly regulated by the national government.

Globalization requires that labour inspection services are better coordinated, taking into account the changes in the world of work and the advent of new risks and opportunities. This would include coordination among the technical, medical, social,

⁷ The ILO report on migrant workers describes safety and health issues as a major concern as these workers may be involved in hazardous and risky jobs. Language barriers, exposure to new technology, family disruption, poor access to health care and stress and violence are the specific problems faced by migrant workers, leading to higher vulnerability to safety and health risks at the workplace. Please see, ILO, *Towards a fair deal for migrant workers in the global economy*, Geneva, 2004).

⁸ ILO, Technical Memorandum, South African Labour Administration and Inspection Audit, LAB/ADMIN, Geneva, 2011.

⁹ Portes, 1994.

¹⁰ Singh/Zammit, 2004.

psychological, economical and legal areas. To protect and enhance the well-being of people in the workplace in the worldwide economy, practical strategies have to be elucidated in order to make decent work a reality. In this regard, labour inspection plays an important role, acting as the enforcer of labour legislation and guidelines set in place by them. Although, much of the responsibility for promoting wellbeing of workforce in the workplace lies with the companies themselves, the promotion of a sound workplace must be pursued from within the company as well.

III. International framework agreements

Corporations, as the physical site of the workplace, hold an extraordinary amount of influence over worker health and safety. Corporate social responsibility (CSR) has grown in importance in recent years, receiving much attention from the academic world.¹¹ Corporations have begun to undertake simultaneous operations in economic growth, environmental protection and social equity in business planning and decision making in order to appeal to the interests of all of their stakeholders. These days, social responsibility initiatives are primarily the result of actions by consumer groups and other non-governmental organizations, as well as by the trade unions at all levels in various sectors of industry and services. According to an information note on corporate social responsibility discussed by the ILO Governing Body in 2003¹², international labour standards, including those concerning safety and health at the workplace, are cited more frequently within international framework agreements (IFAs) between multinationals and unions than in any other initiatives on corporate social responsibility. Even if the IFAs are not, strictly speaking, part of the corporate social responsibility concept, they are often mentioned in this context. Another interesting aspect of the IFAs emphasised in the note is their follow-up procedures for verification, dialogue and, if necessary, complaints. Between 1999 and 2010, approximately 60 IFAs have been signed. Apart from the eight core Conventions of the ILO, the IFAs also often cite the ILO Convention concerning Protection and Facilities to be Afforded to Workers' Representatives in the Undertaking (No. 135). In addition, the company party to an IFA should often agree to offer decent wages and working conditions as well as to provide a safe and healthy working environment. Furthermore, there is a general agreement that suppliers must be persuaded to comply with the content of IFA and, finally, the IFA includes trade unions in the implementation. On the other hand, the codes of conduct adopted by multinational enterprises rarely refer to the core international labour standards. Lastly, it should be noted that the OECD Guidelines for Multinational Enterprises and the ILO Declaration on Multinational Enterprises and Social Policy also remain important mechanisms in the context of corporate social responsibility¹³.

¹¹ Zimmer/Rühl, 2005.

¹² ILO: Information note on corporate social responsibility and international labour standards, Working Party on the Social dimension of Globalization, Governing Body, 288th Session, November 2003, GB.288/WP/SDG/3.

¹³ For more details on IFAs see K. Papadakis, G. Casale, K. Tsotroudi, *International Framework Agreements as elements of a cross-border industrial relations framework*, in K. Papadakis (ed.), *Cross-Border Social Dialogue and Agreements*, ILO, Geneva, 2008.

IV. Public-private partnerships

Public-private partnership (PPP) initiatives in monitoring working conditions may increase the rate of compliance at the workplace. There are many dangers inherent in work. These could be reduced or eliminated with the promotion of a prevention culture, established through education. The ILO and the World Health Organization (WHO) participate in a number of PPPs, especially in the OSH area. These coalitions transcend national boundaries and bring together at least two parties, a corporation (or industry association) and an intergovernmental organization. There has been a proliferation of PPPs in recent years and they are rapidly reconfiguring the landscape of safety and health. Several factors have caused this trend. There are generic factors, such as market failure in special research product development and a lack of high safety standards. These partnerships demonstrate exciting new possibilities for tackling problems that formerly seemed intractable, including research and development on drugs and vaccines for diseases that disproportionately affect the poor. PPPs have been able to promote sustainable practices by showing that these goals are achievable along with financial gain. Industry incentives for the development of safer and healthier products are being generated and with an improved image, the commercial sector may be able to attract new investors and establish new markets. By establishing a health and safety prevention culture, the economic losses caused by accidents, incidents, early retirement, or sickness benefits could be significantly decreased. These unspent budgetary funds could then be invested in increasing the enterprises' performances and creating new jobs, thus allowing the poor to be able to escape the vicious cycle of poverty. Numerous studies have shown that health promotion saves money on medical costs.¹⁴ Policy makers, labour inspectors as well as health and safety experts all play an important role in the prevention process and the initiation of a shift from short-term profits towards long-term investments in safety and health.

Establishing and implementing a culture based on health and safety prevention at the national level requires the active participation of the labour inspectorates. Labour inspectors are the only state enforcement agents that have access to all of the enterprises necessary to transmit health and safety messages in an effective manner. Therefore, it is crucial to increase the labour inspectorates' capacities in terms of organizational structure, frequency and quality of inspections, knowledge on its advisory role and competency in a sustainable approach. This shall be achieved through a range of proposed activities, such as policy analysis and policy reform, the development of training modules, the training of national labour inspection trainers, the setting up of a competency network, and the development of international guidelines on supply chain management.

V. Labour inspection and the informal economy

The informal economy accounts for about half of the workers in the world and includes workers that are self-employed, work in a family-run business and work in informal enterprises. There is a growing divide between a formal global economy and the expansion of an informal local economy in most societies. Social protection and employment issues are interwoven due to the manifold related risks. Low capital

¹⁴ Kreis, 2004.

supply, the use of primitive tools and production equipment and poor working conditions cause critical deficiencies in this sector: low safety awareness, common occupational illnesses and serious hazards.

The term “informal economy”, although widely used, has only recently been adopted in some countries. There are still misunderstandings as to its actual meaning. Its connotations and nuances may also vary from one language to another. Ask what the informal sector is and who the informal workers are and the answers provided will often describe either particular situations or muddled amalgams of various situations that are often ill defined and have few characteristics in common. In 2002, the International Labour Conference (ILC) noted that although there is “no universally accurate or accepted description or definition” of the term informal economy, it may be taken to refer to “all economic activities by workers and economic units that are – in law or in practice – not covered, or insufficiently covered, by formal arrangements¹⁵. Their activities are not included in the law, which means that they are operating outside the formal reach of the law; or they are not covered in practice, which refers to the fact that – although they are operating within the formal reach of the law, the law is not applied or not enforced...”¹⁶

This notion of an informal economy covers two completely different situations:

- in the first case, the informality is due to the lack of a formal reference point; that is to say, there is no applicable labour standard and thus there are no obligations to be fulfilled, nor any rights to be respected or demanded; and
- in the second case, the informality is due to non-conformity with a legal reference point, meaning that applicable labour standards do exist, but are completely or partially flouted. Obligations are not met and rights are not recognized.

Although the consequences for workers in each of these cases may appear to be similar, their origins are quite different. In the first case, when there is no standard applicable to a certain situation, the cause is the lack of legal provisions covering that situation or of a specific legal exclusion. In such situations, it is entirely appropriate to speak of “informality”. The cause of the second situation (non-compliance) may be ignorance, as the content or even the existence of standards may not be known. However, it may also be a deliberate decision not to comply with the standards in order to avoid costs. In these situations, many countries use the term “illegality”. There are also situations not sufficiently taken into account by formal systems. For instance, there are cases where working conditions are regulated but social security is not. This situation is usually due to the poor development of social security institutions and is generally linked to the presumption, or the reality, that those subject to the system, or who are supposed to be protected by it, are unable to pay contributions.

¹⁵ ILC General Discussion, Decent work and the informal economy, Committee on the Informal Economy, Governing Body, 90th Session, June 2002, paragraph 3, <http://www.ilo.org/public/english/standards/relm/ilc/ilc90/pdf/pr-25.pdf>.

¹⁶ Ibid.

Here too, the term “informality” may be properly applied, as indeed may be the case with the converse situation in which a group of enterprises or workers is included in a compulsory social security system but excluded from the regulation of working conditions.

Not all the formalities which enterprises are required to comply with have to do with labour law and not all the rights demanded by informal economy workers concern labour rights or elements of social protection. If the requirements are imposed by law and compliance with them is the essence of formality, then informality may appear to be a negative phenomenon – a matter of not being or not doing. Achieving a working concept of “labour informality”, so that it could serve as a reference point for action by a national labour administration, entails looking at a country’s labour standards as a whole and identifying precisely which types of enterprise and worker fall within their scope and which do not. Even though illegality is the opposite of legality, and formality may be synonymous with legality, illegality cannot always be equated with informality.¹⁷

There are many national variations in this distinction between informality and illegality. Linguistic nuances are important as they often point to different perceptions of similar phenomena. For instance, it is usually said in developing countries that labour legislation is “not applied” in the informal sector, whereas in the developed countries, it is more commonly said to be “not complied with”. In contexts where the majority of the populations live within traditional frameworks and the social rules do not correspond to the legal rules, of which they may simply be unaware, informal productive activities or units are not usually termed “illegal”. However, in more developed countries, activities that are regarded, in juridical terms, as illegal as they do not comply with certain legal requirements or they violate some standards, may be popularly called “informal”. The terms applied to the informal economy are not always the same, but in Europe, when work or employment is concerned, terms such as “black economy”, “hidden employment”, “clandestine labour” and “undeclared work” are frequently utilized. The term most used to describe the labour impact, at least officially in European Union documents, is “undeclared work”. One of the main characteristics of informal activities in developed countries is that they are hidden or clandestine. The most prominent effect of this cover-up is that workers are not registered for social security, and contributions are not paid.¹⁸

There are also activities in which the law is not applied or not complied with in practice. Setting aside for a moment the issue of undeclared work and bearing in mind the different degrees of compliance with standards in each country, non-compliance with labour standards and with social security is frequently found in domestic work, home work, rural work and in micro- and small-scale enterprises.

The sector of domestic work is recognized as problematic worldwide and one that is mainly carried out by women. Only a few countries are without any regulatory framework and in fact, many have special labour regulations and social security schemes for domestic workers. These special labour regulations involve many

¹⁷ J. Daza, “*Labour inspection and the informal economy*”, in Labour Education, ILO, (Geneva, 2005).

¹⁸ See, ILO, “*Labour Inspection in Europe: undeclared work, migration and trafficking*”, WD No.7, LAB/ADMIN, (Geneva, 2010).

exceptions to the general legislation, regarding pay (the option of counting board and lodging as part of the wage), daily working hours and rest periods (compulsory attendance times, standby, restrictions on leaving the premises, calculation of night work, among others) and termination of employment (broad definition of “just cause” and lower indemnity entitlements). The applicable social security provisions are usually based on reduced contribution and lower coverage. The labour inspectorate conducts only limited checks in this sector. As employment within a household is not regarded as an entrepreneurial activity, business registration is not required for the hiring of domestic workers. Taxation is difficult as the inspection services do not generally have the legal right to enter private homes in order to make checks.

In most countries, work in the employer’s residence is covered by regulations similar to those for any other employment relationship. As far as pay is concerned, piece-rates are very common and in some cases, the wage received may be below the legal minimum. General social security schemes are usually also applicable to domestic workers. Labour inspectorates find it difficult to check on work in the home, which in many cases is hidden and not declared by the employers, sometimes in collusion with the workers, in order to avoid paying contributions and taxes, or to disguise fraudulent contracts or subcontracts. In many cases, only one employee is declared even when the employee’s entire family, including children, work in the home. As inspectors may not have the authority to enter workplaces located within private residences, the task of supervision is therefore very difficult, unless there is access to the payrolls or bookkeeping records of the firms that contracted the domestic workers.¹⁹

Three general factors make it difficult to apply general or special standards to rural labour. First, in many countries, rural workers may be generally unaware of the existence or the content of applicable standards. One reason for this is that in many parts of the world, rural populations have higher illiteracy rates and speak languages other than the official one in which legal standards are available. In addition, they tend to hold ancestral customs in higher esteem than legislation. Second, as agricultural work is mostly performed by seasonal and temporary workers, the complicated and expensive documentation procedure may be a deterrent to their registration (the end of which, it must be remembered, is the deduction of taxes and social security contributions from their wages). Furthermore, they may not particularly want to contribute to social security if it cannot provide them with local, accessible health care services. Finally, the State itself does not usually have at its disposal a labour administration capable of informing, assisting and inspecting agricultural enterprises which, as a sector, is a frequent user of child labour. Thus, labour standards are not enforced, occupational safety and health regulations are not known and the failure to declare workers goes undetected.²⁰

In every country, micro and small-scale enterprises have the highest rates of non-compliance with labour regulations, according to information from the labour inspection authorities. Non-compliance begins with the failure to declare a new business, to obtain the necessary permits, to provide the requisite employment

¹⁹ See: A.Sivananthiram, C.S.Venkata Ratnam (eds.), *Informal Economy: the Growing Challenge for Labour Administration* (ILO, New Delhi, 2005).

²⁰ For more details, see G. Reinecke, S.White, *Policies for small enterprises: creating the right environment for good jobs* (ILO, Geneva, 2004).

documentation and to declare workers for social security purposes. This non-compliance with the initial registration procedures leads to non-recognition of substantive non-compliance: workers' rights such as the minimum wage and other situations including that of safety regulations not being respected and unpaid social security contributions. The first challenge encountered by labour inspectors is to detect the existence of these enterprises, identify their heads, and track them down. The next difficulty is in establishing and proving the nature of employment contracts or labour relations. Checks must then be conducted on working conditions and employer compliance with requirements such as the minimum wage. When one single inspection service is charged with supervising labour standards as a whole and is provided with the necessary means, this job is simplified. It is nonetheless a big task and one that largely depends on the cooperation of local authorities and on people prepared to denounce irregularities. When separate inspection services are involved, the task becomes more difficult and complicated, since different actors have to be coordinated and mobilized to apply different standards and procedures, in line with work assignments whose priorities may not always coincide.

In addition, there are activities of persons or enterprises that are not regulated by labour law. The situation in many countries could be one in which certain work circumstances are generally outside the scope of labour laws, such as self-employment, or work within the family. Nonetheless, in the majority of countries, self-employed workers are required to declare their status to the appropriate agencies. In the developed countries, they are also compulsorily covered by the social security system. The obligation to declare and to pay contributions falls upon the self-employed workers themselves and they may be required to respect safety regulations in their own workplace.

In some developing countries, casual work is unregulated, as are micro- or small-scale enterprises employing less than a certain number of workers. The ceiling ranges from five to ten employees, and up to 20 in a few cases. The situation of casual workers is complex, as part of their work may occupy an "informal" space in the midst of more formal employment relationships. In some cases, casual work may be of such duration that it becomes equivalent to a temporary or seasonal job. In both cases, the casuals may be working alongside formal workers on permanent contracts within the same enterprise. The permanent workers will have full entitlements, while the casuals will have only their pay and, at best, some coverage against occupational accidents. In the case of micro- or small-scale enterprises with a fixed maximum number of workers, the law itself exempts the employer from legal obligations. This situation exists primarily in Asian and East African countries. Three common variants may be found: first, micro- and small-scale enterprises that are not covered by any applicable labour regulation; second, those in which standards on labour conditions are applied, sometimes limited to pay and daily hours, without the application of occupational safety standards and social security requirements, and third, those from which only social security standards are excluded. When employers or other responsible parties do not have any attributable legal obligations, labour inspection has limited options in terms of the measures or actions it can take. For example, a labour inspector will not be able to inspect the micro- and small-scale enterprises that are exempt from the application of labour standards and will not have the means of requiring that certain safety measures be implemented into a production process or that workers be given a payslip; nor will an inspector be able to oblige the firm to register workers for social security. Any grievances from workers in exempted enterprises or employment relationships can be lodged only through the procedures laid down by civil or criminal law. In the case of purely informal working relations, the labour administration will generally refrain from taking any initiatives.

At best, it may engage in information work aimed at preventing workplace risks or promoting voluntary social protection schemes.

When dealing with problems posed to labour inspection by the informal economy, the first problem identified concerns the labour inspectors' knowledge of the standards and their application to different types of enterprises and workers. Inspectors need to have a thorough knowledge of the labour standards they are charged with monitoring. Nowadays, labour inspectors deal with many different kinds of enterprises and within complex production systems, which make extensive use of subcontracting and labour intermediaries and cover a wide range of contract types. The solution is to be found first in the rigorous selection and training of inspectors and second, in administrative resources dedicated to handling information about enterprises, which means the creation and maintenance of registers or databases and sharing them with other units of the public administration.

The second problem concerns the decisions to intervene in cases where standards are not complied with; in places, sectors and enterprises for which sufficient evidence of non-compliance exists or from which denunciations of non-compliance have been received. In some countries, the appropriate decisions have not been taken and the laxness of the administration has contributed to the growth of informality. The solution depends on decisions taken by the government at the highest level, with the support of the social partners. It should consist of guiding the inspection system through the provision of clear instructions to the inspectors. The instructions should set criteria for deciding where to focus inspections, depending on the resources available, and should establish priorities, which include paying attention to reports denouncing non-registration of enterprises and non-declaration of workers. As most of the irregularities occur in micro- and small-scale enterprises, inspectorate activities in many countries tend to focus primarily on such firms, in sectors with high rates of staff turnover and temporary employment (e.g. construction, hotels, and textiles and garments), as well as all types of transport and shops. In many cases, it is necessary to combine pre-programmed visits with visits responding to complaints, in order to cover as much ground as possible.

The third problem centres on difficulties encountered during the inspection visits themselves. These may include pinpointing the location of clandestine enterprises, tracing the head of the firm, identifying non-declared workers, finding ways of verifying the number of hours actually worked, calculating wages and social security contributions due, and proving possible social security fraud (which happens in certain instances, sometimes only through collusion between the employers and the workers). In many cases, only some of the workers in an enterprise have been declared. In some cases, when the non-declared workers work for contractors or subcontractors, the labour inspectors must establish the chain of responsibility. Inspectors may also find foreign workers who do not have work permits and children whose ages have to be checked. If the inspectors can refer to lists of workers in each firm, drawn from social security databases, the difficult task of proving irregularities becomes more straightforward.

A fourth, rather controversial, problem is how to regularize the situations of non-compliance that have been found and indemnify those whose interests have been compromised. Non-compliance must be dissuaded, but without putting the workers' jobs and the enterprises' survival at risk. The non-declaration of workers by some firms and the concomitant avoidance of costs, results in unfair competition for other firms. It also causes immediate economic prejudice to non-declared workers (e.g. wages below the minimum set by law, among others) and jeopardizes their future social security benefits (due to the non-payment of contributions). Faced with the

dilemma between issuing a warning and applying sanctions, several countries have opted to submit the offending firms to procedures entailing the immediate payment of the wages and contributions owed, in addition to punitive measures. The sanctions applied are, in many cases, proportional to the number of workers affected and the size of the enterprise. In some countries, awareness of the scale or growth of illegal work in the informal economy has led to the creation of administrative structures, inter-administration coordination systems, programmes or initiatives aimed at combating the various forms of illegal work. In a number of European countries, where a significant proportion of undeclared labour is performed by undocumented immigrants, regularization campaigns have been held, during which employers were encouraged to declare employment relationships, without risk of sanctions. A different problem concerns the means to be used in order to promote decent working conditions for workers in firms that are exempted from the application of labour standards, as well as for workers whose employment is unlikely to be regularized, and for the self-employed. In these cases, the labour inspectorate does not have a mandate to act, as its field of activity is limited to workplaces that are, by law, subject to labour standards. However, there is scope for purely promotional activities, which can be carried out by other advisory labour administration services; thus, the labour inspectorate does not necessarily have to be involved. The inspectors should focus on those enterprises for which they are competent and on the standards that they are charged with monitoring, and thus increase the effectiveness and efficiency of labour inspection services²¹.

VI. OSH inspection in the European Union: policies and perspectives

Since the 1990s, major sectors of work are moved around the world in the search for optimal cost-effectiveness, with enterprises seemingly flourishing one day and closing the next. OSH inspectorates have learnt to share experiences faced with accelerating technology and to “level the playing field” in order to avoid global businesses moving work to another country with the primary aim of saving money on health and safety through inadequate provision. The work of the ILO in seeking to secure decent work in a global economy is addressing these issues with some notable successes.

Within the European Union, the Senior Labour Inspectors Committee (SLIC), with senior labour inspectorate/health and safety representation from all member States, exists to improve cooperation between member States and the European Commission and to encourage the effective and consistent application of EU legislation in the member States. Iceland, Lichtenstein and Norway attend as observers. One of its key activities has been in defining common principles for labour inspection in the field of occupational health and safety (an activity that was completed in 2004) and taking full account of the ILO Convention on Labour Inspection (No. 81). These core principles address the Council and Commission’s view that “the effective enforcement of Community law is a precondition for improving the quality of the working environment”. They include sections on the need for effective planning and monitoring of annual plans, inspectors’ competencies and independence, inspectors’ powers, guidance and internal communications. Before the 2004 and the 2007 enlargements of the European Union, all 12 accession

²¹ See also, G. Casale, A. Sivananthiram, J.L. Daza, C.Mar, *Showcasing tools and experiences in Labour Administration and the Informal Economy* (ILO, Geneva, 2006).

countries, which were already observers at SLIC, had been equally evaluated by SLIC evaluation teams in order to assist in the respective countries' preparation for full membership and the inclusion of SLIC support in their labour inspection initiatives.

National OSH programmes: Progress in reducing occupational accidents and fatalities has slowed in many developed countries including in Europe. The major gains in safety have been achieved by new technology, automation and computer controls. It was clear to a number of European policy-makers that if they were to stand any chance of securing further significant improvements, a wider holistic approach was needed, identifying priority areas for attention and encouraging all those other organizations able to contribute to these priorities, to move forward with a common agenda for the next years.

Efficiency and effectiveness: Major changes have taken place in Europe in recent years in the health and safety enforcement organizations. Tight resources, increased public expectation, increasing workloads and some fundamental questioning of principles and ways of working that have been traditionally followed by labour inspectorates for many decades, have led to a number of initiatives being undertaken within inspectorates under the general areas of increasing efficiency and maximizing the impact of work in raising health and safety standards and reducing occupational accident and ill health statistics. In all countries, health and safety promotion, inspection and investigation have evolved in line with national traditions, culture, and priorities. Changes take place annually and usually in a piecemeal way, and whilst the work of organizations such as SLIC and the European Agency for Safety and Health at Work in Bilbao allow a greater insight into the working methods, priorities and achievements of other national health and safety inspectorates, it is now recognized that systematic benchmarking with other countries can deliver significant benefits in both efficiency and effectiveness.

In a number of countries, one of the biggest changes to the day-to-day work of health and safety inspectors in recent years has been in giving more prominence to occupational health. Traditionally, inspectors spent most of their time on safety issues, machine guarding, preventing falls, making power-presses and workplace transport safer, preventing explosions amongst other duties. Most inspectorates had an engineering solution. There were exceptions, of course, perhaps more notably with asbestos, but that was the general picture – with the focus of the work being done on major reduction in accidents and where benefits were the most visible. Ill health was viewed as being related to toxic substances, and recent years have seen an exponential growth in chemicals, together with sophisticated analytical equipment to detect their presence. The reality, however, is that the biggest contributors to work-related ill health are stress and musculoskeletal disorders. Between 1990 and 2006, the number of people in Europe reported as suffering from work-related stress more than doubled. Scandinavian countries have been at the forefront in tackling this as an occupational health issue and have been sharing their experiences with other national inspectorates. Gradually, guidance is being published advising managers how to carry out risk assessments of their workplaces²². This guidance, or voluntary standards, covers six key aspects of work that, if properly managed, can help to reduce work-related stress. These 'stress factors' include areas such as whether employees are able to cope with the demands of their job and whether employees

²² See, EC, [ACT, 53th Meeting of SLIC – Thematic Day Risk Assessment in Small and Medium Enterprises] (Lisbon, 29 October 2007).

receive adequate information and support in their work. Inspectors are beginning to be more confident in probing these issues during their inspections but different professional skills are required for this in comparison to handling a machine-guarding issue. In parallel with a growing range of occupational ill-health prevention initiatives, has been the recognition that we will not always be successful in preventing cases of stress and musculoskeletal disorders. More is being done by inspectors and regulatory specialists to help those affected in such cases to recover and return to work.

The drive for greater efficiency and impact in OSH inspection as part of trying to reduce the accident and occupational ill-health statistical “plateau” has encouraged operational policy-makers to attempt different initiatives to see if they make a health and safety difference. These inspectorates need now to be much more flexible, able to direct resources speedily to emerging new challenges, and need to be clear about their priorities in making most impact on health and safety performance in the workplace with the resources that are available. Alliances need to be established between inspectorates and other organizations able to contribute to a national plan for improvement, which now increasingly includes numerical targets. Inspectorates are now being expected to be able to show results and to evaluate and benchmark their performance and effectiveness against guidelines.

New developments in EU legislation: During recent SLIC meetings held in Spain and Belgium²³, it has been reiterated that the system requires further development in certain areas, and improvements to its implementation: such as a) the assurance of a high level of safety at the international level, as set out in European standards; b) the need to establish directives that provide clear implementation guidelines for manufactures and notified bodies (interpretative documents (such as technical guides) are considered helpful, but do not provide the necessary legal security); c) improvement in product safety through uniform application and monitoring of statutory provisions (a major criterion for this is better co-ordination of the tests conducted by the customs and market surveillance authorities); d) increase in market surveillance, particularly in the case of imports from third countries; e) new strategies must be uniformly implemented in order for the labour inspectorates, OSH organizations and users to be brought together in a single, cohesive system.

Participative approach to OSH in small enterprises: the role of workers' organizations: Participative initiatives are present in all of the EU countries. They take various forms but all seem to benefit from a similar range of supports from legislation, collective agreements, bi-partite and tripartite bodies.

Poor OSH performance in small firms is a problem in terms of poor health and safety outcomes, whether they are measures of fatality rates or serious injuries. There is also some evidence to suggest that occupational health outcomes may also be worse in small enterprises and related forms of work. Similarly, evidence of the experience of the working environment suggests little room for complacency when work in small enterprises is considered. However, it seems fairly clear that these poor health and safety outcomes are not a function of the greater hazards associated with work in small enterprises but rather that of poor health and safety management (OSHM). The problem for health and safety strategists is how to improve arrangements for OSHM in small enterprises while at the same time accounting for

²³ For example, SLIC Meeting, Occupational health and safety in a dual labour world, (Brussels, November 2010).

the features of the sector and especially its ‘structures of vulnerability’ that make achieving such improvements so challenging. Traditional approaches to managing/regulating prevention have limited success and are difficult to sustain in small firms. Many initiatives have been tried, but there is a strong consensus that what works best is face-to-face contact with OSH change agents. Regulatory agencies, OSH practitioners and prevention services increasingly accept that they need to change their approach if they are to reach and influence small enterprises; even in cases where they are able to do this successfully, they only reach a minority of workplaces.

Worker representatives have all the attributes of OSH change agents. They are also more numerous than most other change agents. Therefore, they could be a powerful resource. Unlike other potential intermediaries, many are trained and experienced, know about OSH and crucially, understand it from a workers’ perspective.

Recently, there have been a substantial number of initiatives in which forms of workers’ representative participation have developed in EU countries. Most are based on the actions of worker representatives, but some are based on regional/sectoral committees. Others are a mixture of both. Some have legislative support, e.g. Sweden, Italy, and France. Others are voluntary such as in Ireland and the United Kingdom. Some are focused solely on small enterprises while others take in representation of workers’ OSH in other forms of work structures such as labour hire and contracting. Many are ‘business as usual’ and simply reflect the fact that trade unions in certain sectors such as for example printing and retail, traditionally organize workers in small workplaces as they are characteristic of the industrial sector in which they operate.

Evidence for the effectiveness of representative worker participation on OSH generally is quite strong. Research evidence for the effectiveness of health and safety representatives demonstrates a substantial case for arguing that health and safety can be managed more effectively when workers’ representatives are involved, than when managers operate unilaterally and without consultation. In the United Kingdom, empirical evidence of the association between the presence of trade union health and safety representatives and lower injury rates has been found in several comparative studies²⁴. Studies have also demonstrated the mechanisms through which this positive trade union influence operates²⁵.

²⁴ See B. Reilly, P. Paci, and P. Holl, P., Unions, safety committees and workplace injuries, *British Journal of Industrial Relations*, Vol. 33, 1995, 273-88; A.S. Litwin, A.S., *Trade Unions and Industrial Injury in Great Britain*, Discussion Paper 468, Centre for Economic performance, London school of Economics and political Science, London 2000; A. Robinson, C. Smallman, *The Healthy Workplace?* Research Papers in Management Studies WP 05/2000, Judge Institute of Management Studies, University of Cambridge, Cambridge.

²⁵ N. Dedobbeleer, F. Champagne and P. German, (1990), ‘Safety performance among Union and Nonunion Workers in the Construction Industry’, *Journal of Occupational Medicine*, 32(11), 1990, p. 1099-1103; D. Biggins, M. Phillips, and P. O’Sullivan, Benefits of worker participation in health and safety’, *Labour and Industry*, 4(1), 1991, 138-59.

These effects are shown to be consistent, even under “non participatory” legislation as in the United States²⁶. Evidence of effective outcomes for small enterprises is far more limited and more studies are required. However, the findings suggest that it is more likely than not that they follow the general pattern — indicating that worker representation is effective in improving OSH outcomes.

What makes worker representation effective in improving OSH Management in small enterprises? There are supportive factors concerning participative methods for improving OSHM in small enterprises. They include: a) a legislative framework of representation rights; b) support from other stakeholders in OSH systems (e.g. employers’ organizations and regulatory agencies); c) training, (especially for the role of the representative as ‘outsider’), information provision and coordination; and d) resourcing. These forms of support are found to varying degrees in the current schemes that we have studied in different EU countries. They all raise difficult but important questions on OSH policy that need to be answered effectively if such forms of participation in OSHM are to make a significant contribution to improving OSH performance in small enterprises.

Regulatory requirements in the EU demand greater competence from employers as well as participative approaches to OSHM. To achieve this in small enterprises, various forms of support are required, including worker representation. The development of such forms of representation that are relevant to the needs of workers in small enterprises requires a degree of adaptation. Participants involved also require different kinds of support from that provided for more traditional workplace representatives. However, such development and support is a potentially important strategic choice for trade unions that acknowledge the limitations of their conventional approaches to organizing for OSH (which are increasingly less relevant to the experiences of growing number of workers in small enterprises and in temporary and peripheral employment).

VII. Conclusions

The globalization of the world economy is changing the way individuals work, the hazards workers face and the intervention strategies needed for worker protection. It is also creating a deficit in the quest for decent work. Although globalization is viewed differently depending upon one’s country, culture, workplace and employment status, ensuring that it is beneficial to workers depends upon how well countries, organizations and persons responsible for labour and employment inspections, workplace safety and health, and indeed general working conditions, achieve a balance between often competing interests. Labour rights can best be achieved in this global arena through partnerships between governments, industry and workers’ organizations, amongst others. Millions of workers die from occupational injuries and diseases every year. Others suffer from poor working conditions that are not in conformity with ILO standards. The suffering in terms of human life is enormous, while the economic costs place a considerable burden on the competitiveness of enterprises and the general productivity of labour. It is estimated that the annual losses resulting from workdays lost, interruption of production,

²⁶ M. Quinlan and C. Mayhew, The implications of changing labour market structures for occupational health and safety management, in K. Frick, P.L. Jensen, M. Quinlan and T. Wilthagen. *Systematic Occupational Health and Safety Management - Perspectives on an International Development*, Elsevier, Oxford 2000.

training and retraining, medical expenses and so on, amount to over 4 per cent of the gross national product of all countries worldwide. The ILO, with its tripartite constituency, has developed Conventions and Recommendations aimed at the implementation of a global policy. In its Global Jobs Pact of June 2009, the ILO entrusts labour administration and labour inspection with new roles and responsibilities. The idea is to ensure compliance with labour legislation, including health and safety. This implies a better coordination of different fields of inspection, including enforcement, advisory, consultation, control and implementation.

The clear need for an improvement in worldwide OSH standards has been illustrated by more than 5,000 deaths that occur every day due to work-related accidents and diseases. In this regard, the 2009 creation of the LAB/ADMIN Programme at the ILO provides the kind of coordination machinery that is lacking in member States. Additionally, this coordination falls in line with the global OSH strategy promoted by the ILO since 2003. Labour inspectorates can provide a helping hand to employers in ensuring that their workplace is compliant with safety rules and regulations. They can also inform workers of the hazards that may be present in the workplace. In addition, they can provide the government with guidance in setting effective labour policy that promotes well being at the workplace.

Global problems require global responses, although these must be anchored in the realities of local life and work. Nevertheless, that alone will not be enough; more is needed. ILO Convention Nos. 81, 129, 155 and 187 are essential to securing more decent living and working conditions and ensuring that progress improves our daily existence, wherever we live and work. On labour inspection issues, the main task is not to achieve formal ratification, although that is certainly necessary. Rather, the main task is the need to achieve concrete implementation in practice.

What must be established and agreed upon are fair rules for international trade, investment, finance, and the movement of people, which take differing needs and capabilities into account. This requires an intensified dialogue process at all levels, bringing the key actors together to work out methods for handling major global issues and putting them into practice. Fair globalization also calls for more emphasis on a national level, for improved governance, and policy coherence. After all, globalization is an important issue for every worker. Action should be taken with a view to promoting and securing employees' health, workplace security, and investment in a preventative culture. A preventive approach for better health and the reduction of accidents and diseases in the workplace must be linked to labour inspection services. These services have a pivotal role in providing counsel and information, and promoting compliance with labour standards in the workplace. Labour inspectors are the controlling authority for working and employment conditions including OSH activities. The strengthening of labour inspection is crucial to ensuring a high standard in labour protection, (including OSH promotion), and thus contributing to overall economic stability.

ALBANIA

The core labour legislation is included in the Labour Code of the Republic of Albania (Law No. 7961/1995), which has been amended by Law No. 8085/1996 and Law No. 9125/2003. Subjects such as employment relation, occupational safety and health, working hours and breaks, night work, additional relevant payments, national holidays and annual leave for workers are included and regulated.

In 2006, Albania adopted a new law on Labour Inspection and State Labour Inspectorate, which sets out the principal powers and rights as defined in ILO Convention No. 81.

The law includes provisions related to the functioning of the labour inspection system, general mission of State Labour Inspectorate (SLI), which was set up in 1995 as a public and autonomous institution, the organizational structure and management hierarchy of SLI, the jurisdiction, functions and powers, and the sanction and procedural system. The law also introduces cooperation with other public and private institutions and areas that are always to be regulated by the Council of Ministers Decrees.

Complementing the Law is the Decree of the Council of Ministers No. 457/1998 “On the Approval of SLI Statute”, which defines the purpose of the creation of SLI, the area of activity of the inspectorate, the management structure of the institution and the process involving the appointment of its chief.

Structure and Organization: At the national level, *the Ministry of Labour, Social Affairs and Equal Opportunities (MoLSA)* is the main authority administrating labour and social matters, including labour inspection and OSH. The mission of MoLSA is the development, coordination and implementation of effective employment systems, promotion of labour market opportunities, social insurance and social assistance. MoLSA is decentralized in its main structure and has regional divisions concerning social services, employment services and labour inspection.

The Minister elaborates policies and takes measures, for the:

1. implementation of labour legislation provisions in all kinds of jobs;
2. fostering of safety precautions in the workplace where dangerous substances are used;
3. enforcement of measures and for the prevention of accidents at work and the prevention of profession-related diseases.

The Minister achieves these responsibilities and competences through SLI. At the same time, there are bodies with specific inspection tasks. For example, the defence or national security institutions have special structures, which inspect the safety and health regarding entities and persons subject to these institutions. In addition, the Central Technical Inspectorate, operating under the Ministry of Economy, Trade and Energy, includes specialized inspectorates such as the Inspectorate for Electrical Equipment and Installations, the Inspectorate for Control of Petroleum and Gas and the Inspectorate of Mine Inspection and Rescue; the latter performing technical safety controls in mines and

carriers. Concerning the responsibilities of MoLSA and SLI for occupational safety and health, there is a certain duplication of efforts with those of the Ministry of Health and the State Sanitary Inspection (SSI). The SSI has been accorded competencies in OSH, including inspection functions, by Law No. 7643/1992, “On the State Sanitary Inspectorate”, as amended by Law No. 9635/2006.

All companies liable to be monitored by the SSI should make a self-declaration on the fulfilment of health and hygiene in their premises. The SSI is also charged with the monitoring and control of exposure to toxic substances, radiation, noise, vibration and extreme temperatures. It also deals with occupational accidents and diseases. The same law assigns the SSI to cooperate closely with other state institutions, including the labour inspectorate, when exercising its activities. A cooperation agreement has been signed by the Ministries of Labour and of Health to establish relations between SLI and the SSI.

As to social security legislation, it is enforced by several bodies. On the one hand, it is enforced by the State Labour Inspectorate, and on the other hand, by the National Fiscal Administration (NFA). The NFA also monitors the payment of contributions for social and health insurance, as it is responsible for the collection of these contributions from urban workers. The Social Insurance Institute manages and supervises the collection of social contributions from rural workers.

The National Labour Council (NLC) is the main tripartite body and operates at the national level. The activity of the NLC is based on the DCM No. 730 of 6 November 2003. The NLC reviews issues that have to do with common interests of the employers and workers, especially those related to policies and legislation for the promotion of employment, vocational education, wages in the private and public sector, social insurance, occupational safety and health and social issues. In 2008, the National Labour Council included government representatives of different Ministries such as the Ministry of Labour, Social Affairs and Equal Opportunities, the Ministry of Finance and the Ministry of Economy, Trade and Energy. The Ministry of Labour and Social Affairs provides the Secretariat of the National Council of Labour. It is composed of several tripartite commissions including the Commission on Occupational Safety and Health, whose chairperson is the General Inspector of SLI.

The State Labour Inspectorate was established in 1995. The labour inspection law is applicable to legal and natural persons, private or public, foreign or domestic, who undertake profitable or non-profitable economic activity(ies) within the country. Workplaces that are subject to a specific OSH and labour relations-related inspection regime and those linked to institutions and activities of national defence are excluded from its scope of coverage. It grants permits for starting any economic activity, which implies an initial verification and assessment of premises plans, including equipment, devices and number of workplaces. SLI is responsible also for inspection in the agricultural sector. It has the responsibility to enforce legal provisions and collective agreements. SLI is also represented in the commission, which screens license applications of private employment agencies. It is composed of three General Directorates at the national level in Tirana, and of regional directorates with district labour inspection offices.

There are three main directorates at the central level: *The Inspection Directorate*, *the OSH Directorate* and *the Internal Services Directorate*. In parallel, there is an *Audit Department*. There are 12 regional directorates which, through their regional directors, report directly to the General Inspector who heads the labour inspectorate (Regulation No. 512/2006, “Regulation on the functioning of SLI at the central and regional levels”).

Likewise, the heads of the three Directorates report to the General Inspector.

The General Inspector is appointed by the Minister and the appointment is approved by the Council of Ministers. They represent SLI and manage its activity. The General Inspector has the duty to set the general strategy of SLI, exercise disciplinary authority and propose inspectors for appointment to the Ministry of Labour at the central, regional, and district level. They determine internal regulations, administrative functioning and cooperation within the State Labour Inspectorate.

The General Inspector also transmits the annual labour inspection report to the Minister of Labour and to Parliament.

The Directorate of Inspection in SLI has, as its main duty, the control and management of all inspection processes on worksites. It coordinates work with the OSH directorate in SLI, prepares progressive reports on the activity of the inspectorates in districts and regions in collaboration with the Internal Services Directorate, assists in the preparation of annual work programs and the annual report, assists in the identification of training needs for labour inspectors and elaborates inspection methodologies (for instance, giving guidance on how to impose sanctions).

The Directorate of Inspection includes several departments.

In particular, the *Department of Legal and Administrative Issues* prepares the cooperation agreements with other institutions such as the Sanitary Inspectorate. It harmonizes labour and OSH related legislation with EU standards, hosting the Ministry's focal point for EU standards harmonization and gives legal advice to the General Inspector. It ensures an internal control of labour inspection activities concerning its legal aspects. It also represents the labour inspectorate in court during legal proceedings against violations of labour inspection legislation.

The *Audit Department* supervises the internal use of resources. It surveys labour inspectors in the application of their code of conduct, proposing eventual disciplinary measures to the General Inspector.

The main duty of the *OSH Directorate* is the monitoring and implementation of the labour legislation in the OSH field, with the purpose of preventing accidents and occupational diseases. It is involved in strategy setting and in the drafting of OSH legislation.

The *Department of Accidents Prevention* provides directives to the regional directorates and elaborates procedures in the area of occupational safety and health with regards to accident investigation. It verifies permits for new enterprises that are starting-up, such as for water, fire, sewage and perimeter fences. Additionally, the regional directorate identifies high risk areas as an inspection priority and, in collaboration with the Inspection Directorate and the Internal Services Directorate, identifies training needs and elaborates on annual work plans and work programmes in the area of OSH, which are circulated through the directorates at the central level, for comments under the coordination of the Internal Services Directorate.

The *Department of Hazardous Substances and Occupational Diseases* has been established in 2008. It proposes and develops promotional material in the area of occupational safety and health and develops educational material on hazardous substances.

The *Internal Services Directorate*, which includes a Human Resources Department and the Finance Department, serves as a coordination and internal control unit and entrusts with the coordination of examinations, recruitment, performance appraisal and need assessment.

At the regional level, there are 12 regional labour inspectorates. Under the supervision of a regional director, labour inspectors enforce labour legislation, including legislation on occupational safety and health. The regional directors define the priorities of inspection in their respective regions and suggest monthly and annual work plans to the General Inspector, setting the targets for their inspection teams.

Cooperation and communication between the labour inspectorates in the field and the central authority take place through monthly meetings between the General Inspector and all regional office directors. Furthermore, all inspection-visit minutes, minutes on fines, filled-in inspection forms and monthly work reports are circulated from the regional directorates to the central level for information and data assessment purposes, and inspection plans at the central level are elaborated under the consultation and upon proposals submitted by the regional directors.

Visits: Labour inspections visits are carried out in a planned, random, and coordinated (in theory) manner with other similar institutions such as SSI, the Inspectorate for Electrical Equipment and Installations (IEEI) and the Inspectorate for the Control of Petroleum and Gas (ICPG). As a rule, inspections are at least made by two people, one inspector and one controller, or two inspectors.

Inspectors use a form that is completed by the inspector/controller during the inspection and signed by both the inspector and the employer.

The inspection form contains eight parts, which are as follows:

1. General data on the entity;
2. Labour relations;
3. Data on the employee;
4. Data on work duration and breaks;
5. Data on the technology and raw materials;
6. Data on the occupational safety and physical conditions and other hazardous items;
7. Data on occupational accidents and diseases; and
8. Data on the occupational safety and health documentation.

The labour inspector prepares the following documentation for labour inspections:

- The registry of entities that declare their economic activity in SLI;
- The file of labour legislation and OSH;
- The file of monthly and annual work programmes;
- The file of entities controlled and inspected;
- The file of entities that benefit from government programmes of employment promotion;
- The file of monthly and annual work reports;

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- The file of claims from entities; and
 - The file of occupational accidents.

Inspections usually last one to three days depending on the size of the company, problems, working occupational safety and health conditions and on the number of inspectors that are carrying out the inspection. After conducting the inspection in the presence of the owner/manager, an inspection report is prepared; it indicates all places/equipment that were inspected on the premises and all actions to be undertaken following the inspection visit.

Labour inspectors are also in charge of the investigation of work accidents.

The employers should make the following available to the labour inspector each time it is required:

- a) Declarations of accidents at the workplace for the last three years;
- b) The list and job positions;
- c) List of hazardous substances used in the enterprise.

Authorization and registration: The Decree of the Council of Ministers No. 513, of 30.07.2004, "On the classification of the activity and documentation for permission from the Labour Inspectorate before the start an economic activity" defines the obligations of private and public entities, which before starting their activity, are required to complete the necessary documentation, before applying for permission from SLI.

The employer who intends to perform an activity that is classified as difficult or hazardous to human life and health, in conformity with DCM No. 207/2002, "On defining hazardous and difficult works", has to obtain a permission from the labour inspector before preparation of the work premises or the start of the activity or the introduction of any important changes in the work process. To receive this licence, the employer should submit a written request and the following documentation to the labour inspectorate of the respective region:

- a) The plans of the premises accompanied with the standards and norms on air conditioning, lighting, vibration, noise and pollution;
- b) The list of dangerous machinery and substances which will be put into operation;
- c) The exact dimensions of the workplace (i.e. surface area); and
- d) The layout of machinery and equipment, and the approval given by the IEEI.

Within five days from the termination of the workplace verification, the labour inspector decides on whether to issue the permit.

Notification of workplace accidents and diseases: A Decree of the Council of Ministers, DCM No. 460/ 1998 on "Occupational Accidents" states that in the event of an occupational accident, which causes death of a worker or serious damage, the employer, after giving first aid, should immediately report the accident to the Prosecution Office, the State Labour Inspectorate and the Social Insurance Institution.

A further DCM on "Employer registration for occupational accidents and diseases" has been also issued in 1998 in support of the Labour Code. It states that the employer

shall keep within the company offices a registry of occupational accidents and diseases. All accidents or quasi-accidents (near-misses), diagnoses of occupational diseases, a record of and diagnoses of the injury(ies) relative to body parts that were/are damaged, cause factors and the number of days an employee is absent due to occupational accidents or diseases, shall be recorded in this register. Each sheet of the register is signed by the labour inspector and should be preserved by the employer for a five-year period. After this period, these registers are archived in the Regional Directorate of Social Insurance Institute. Reports on accidents and their details, in order to define the causes, go to the Department of Statistics.

Private and public entities are legally obliged to record occupational accidents and diseases. DCM No. 742/2003 amending DCM 692/2001 on “Specific measures for occupational safety and health” states that employers must provide access to occupational doctors in all companies with more than 15 employees, and for all entities classified as “dangerous” or where some activity is classified as “hazardous” or “difficult”, no matter how many employees.

Collaboration with other authorities: Several agreements, which have the status of enforceable by-laws, have been concluded between MoLSA or SLI, and other institutions such as the Ministry of Health and the State Sanitary Inspectorate (SSI) and the Public Health Institution (PHI), the Environmental Protection Inspectorate, the Mining Inspectorate and the Tax Office amongst others.

Of particular concern is the lack of cooperation between SLI, the State Sanitary Inspectorate and the Public Health Institution.

The SSI is the highest body of public health inspection and control, including occupational health and hygiene. It is managed by the State Sanitary Chief-Inspector, who, at the same time, is the Director of the Public Health, Directorate within the Ministry of Health. The SSI and the Public Health Directorate, together with the Public Health Institution, are responsible for the scientific study, control and identification of factors that are harmful to the health of the population in fields defined by the law. The SSI is a specialized executive body that controls the implementation of sanitary laws in private enterprises and public institutions. Sanitary inspectors operate at the central and regional levels and study the working conditions of employees, including workstations and ergonomic factors, as well as monitor environmental risk factors, such as chemicals, dust, and noise. The local sanitary inspector has no authority to enter workplaces and will do so only when asked by the business itself or directly by the labour inspector to take measurements. Sometimes, workers will ask for measurements of workplace exposures when they are entitled to extra pay for work in poor conditions (for example, workplaces with more than 5 per cent dust in the atmosphere give the right to an additional 5 per cent of the workers’ salary).

A formal agreement signed between the Ministers of Labour and of Health ensures cooperation in the field of OSH inspections between SLI and the SSI. This allows the inspection service to alert the other when they suspect poor working conditions in an enterprise they are visiting. For example, a labour inspector has the right to ask a sanitary inspector to measure contaminants in the working environment and a sanitary inspector can inform a labour inspector of suspected problems.

In order to increase efficiency and cooperation of the State Labour Inspection with other administrative institutions, the Minister of Labour appointed the National OSH Commission, which is chaired by the General Inspector and in which representatives of institutions covering working conditions and safety and health matters participate.

Relations with social partners: In Albania, there are seven main employers' organizations, which have been established. They are:

- The Confederation of the Employers' Organisations (CEO);
- The Confederation of the Employers' Organisations of Albania (CEOA);
- The Albanian Agribusiness Council (AAC);
- The Albanian Association of Builders (AAB);
- The Union of Albanian Business Organisations (UABO);
- The Albanian Association of Industrialists (AAI); and
- The Confederation of the Albanian Industry (CAI).

All these organizations were established after 1990 and they represent various groupings of Albanian businesses. In the OSH field, some of these organizations have established regular relations with the ILO. The CEO and the CEOA are the most active in these mutually beneficial relations with the ILO.

A considerable number of trade unions that have been grouped around two main confederations operate in Albania: The Union of the Independent Trade Unions of Albania and the Albanian Confederation of Trade Unions. Trade unions have their representatives in the NLC Commissions. In the OSH commissions, permanent representatives are chosen from the two confederations. The OSH commission is convened at least four times a year. In big enterprises with more than 100 workers, trade unions have representatives, who in cooperation with the employer, deal with OSH issues.

ALGERIA

In Algeria, the institutional administrative system of safety and health at work comes under the Ministry of Labour, in conjunction with the Directorate General of the Labour Inspection, the National Tripartite Council of Occupational Hygiene and Medicine. The latter meets twice a year and annually works out a report on occupational hygiene, safety and medicine. Its responsibilities include delivering advice for legislative developments, supervision, promoting health and assisting businesses.

The National Institute of Hygiene and Safety (NIHS) and the Body for the Prevention of Accidents in Construction (POREBAT) were established in 1970. At the end of the 1980s, a law was introduced with the goal of aligning Algerian standards to those internationally recognized (Law No. 88-07 of 26 January 1988). This law aims to provide the necessary resources to prevent accidents in the workplace. A decree issued in January 1991 established new regulations giving priority to workers in the most hazardous occupations and sectors such as construction and mining.

An Algerian Environmental Agency was created in 1993, followed by the Algerian National Safety, Hygiene & Occupational Medicine Council in 1996. These have competencies in the fields of health, safety and environment.

Since the recruited labour inspectors are in charge of enforcing the law, but have no knowledge about OSH, the Directorate General decided to introduce an OSH training in order to initiate inspectors and improve their knowledge in OSH giving them the

possibility to enforce the law, as part of a new strategy of promoting workers health. Training programmes are provided based on different themes:

- Prevention from height falls;
- Investigation methods;
- Measuring equipment (dust, light and noise);
- Fire-prevention (use and control of extinguishers); and
- Practical visits to a construction site and a carpentry workshop.

The following are the laws and regulations that apply to labour inspection functions in the area of health and safety:

- Act No. 90-11 relating to work relations;
- Act No. 88-07 on hygiene, security, and medical insurance at the workplace;
- Executive Decree No. 91-05 on the general prescriptions of the necessary worksite protective standards on hygiene and security;
- Law No. 83-13: Relating to occupational accidents and occupational diseases;
- Decree No. 86-132: Protection of workers against ionized radiation and usage procedures of radioactive ionized radiating substances;
- Law No. 88-07: Hygiene, safety and occupational medicine;
- Executive decree No. 91-05: General protective regulations on hygiene and safety in the working environment;
- Decree No. 93-120: The organization of work-related Medical care;
- Decree No. 96-209: Composition, organization, and functioning of a national council of hygiene, safety and occupational medicine;
- Executive decree No. 01-285: The public places where tobacco is prohibited and the means of applying this prohibition;
- Executive decree No. 01-341: Composition, attributions, and the operation of the national commission of homologation (ratifying/approving) of the standards of effectiveness of the products, devices or apparatuses of protection;
- Executive decree No. 02-427: Instructing, informing, and training workers in the field of prevention from occupational hazards;
- Executive decree No. 05-09: Relative to the Joint Committees with the workers on hygiene and safety;
- Executive decree No. 05-10: Attribution, composition, organization and procedure of the enterprises' hygiene and safety committees;
- Executive decree No. 05-11: Conditions of creation, organization and operation of the hygiene and safety services.

All the above-mentioned legal instruments deal with the following areas:

- Organization of OSH, training and information;
- Prevention of chemical and biological hazards;
- Prevention of physical, mechanical and electrical hazards;
- Occupational medicine and diseases;
- Responsibilities and obligations of employers and workers and the role of occupational medicine;
- Use of tobacco;
- Dangerous substances, products and preparations;
- Electric Risks;
- Risks related to asbestos;
- Risks related to radioactive substances and apparatuses emitting ionizing radiations; and
- Devices used in the building and construction sectors.

Today, there are about 466 operational inspectors including technical and administrative inspectors. Most notable among them are the presence of 14 labour inspectors who coordinate the work for the aforementioned areas. These inspectors are assisted by 28 assistant inspectors each and 74 head clerks.

ARGENTINA

The Department of Work Risks, SRT (Superintendencia de Riesgos del Trabajo), an administrative unit under the Ministry of Labour, is the agency that regulates and controls the system for occupational accidents and diseases. It compiles and publishes statistics on occupational accidents and diseases. The construction sector presents the greatest risks for occupational accidents, followed by manufacturing and agriculture.

The principal law implementing the practice of OSH in Argentina was passed in 1972. Due to the provisions of this law, medical services are under the supervision of a specialized doctor, while hygiene and safety issues are under a specialized engineer. Legislation on occupational health services covers work related accidents and occupational diseases and is closely related to that of occupational health services.

The legal system was changed in 1996, giving birth to a system of work risks based on the legal duties of employers to hire a private company for covering insurance risks. These companies have control of ensuring the improvement of working conditions through prevention and promotion of hygiene, safety and health. The government controls the system and contributes to the definition of occupational diseases and the corresponding compensation. The insurance companies, ART (Aseguradoras de Riesgos del Trabajo), also supervise the application of measures such as the payment of compensation for work injuries; medical and pharmaceutical assistance, supply prosthesis and all other duties concerning rehabilitation and training of injured workers. They also pay a workers' salary if the injuries they experience stems from a work accident or disease. The day of payment

is always 11 days after they have stopped working. Although the law has brought undeniable improvements, currently there are discussions about whether to raise the amounts of compensation and other benefits.

The authorities try to exercise a strict control over the system through the SRT, but there is a chronic lack of inspectors that reduces the effectiveness of the system's control, especially in small and medium-sized enterprises. Although Argentina is a federal state, each province is also responsible for implementing and monitoring the system through its ministries or secretaries of labour.

There are tripartite bodies involved in some decision making related to changes in the OSH system, such as the incorporation of new occupational diseases. While some provinces are making bipartite committees on hygiene and safety in factories mandatory, they are not mandatory nationwide.

Occupational health services in enterprises are organized according to the criteria of the ILO standards, such as the ILO Convention on Occupational Health Services (No.161, 1985; not ratified by Argentina). Both occupational health services and hygiene and safety services are handled by qualified university graduates. The number of such professionals meets the country's needs, although much remains to be done in terms of wide campaigns on risk prevention.

ARMENIA

The Armenian Parliament approved a new Labour Code, which improved labour and OSH legislation in 2004. The country had not had a functioning labour inspectorate since the breakdown of the Soviet Union. The Ministry of Labour has defined as one of its highest priorities, the creation and development of a labour inspectorate to monitor employment and working conditions. In parallel with this process, Armenia is in the process of ratifying 21 ILO Conventions, including the Workmen's Compensation (Accidents) Convention, 1925 (No. 17) and the Labour Inspection Convention, 1947 (No. 81). The Ministry and the social partners have identified labour inspection as one of the first priorities for cooperation with the ILO. In 2005, Armenia created the labour inspectorate, after the twelve-year absence of a functioning inspectorate. It consists of a central office and regional offices, totalling about 140 inspectors (a central unit, ten regions and the capital). The new Labour Code includes a chapter on OSH, but no related regulations. Employers were given two years to implement the requirements. This period was used to consolidate the inspectorate, improve the competence of its staff and improve its capacity to provide information, advice and training, including the establishment of health and safety committees. The core labour legislation is included in the Labour Code of 21 December 2004 (last amended in 2008). It regulates among other subjects occupational safety and health (OSH). In Armenia, there is no separate legislation relating to OSH; the only existing legislation is included in the Labour Code, as Articles 208 and 242-262. The law establishes the employer's obligations relating to: safe working conditions; collective and personal preventative measures; the protection of workers from exposure to dangerous chemical substances; compulsory medical examinations; training on OSH issues; sanitation facilities; employee participation in the implementation of preventive measures; first aid; workers under the age of 18; maternity protection; disabled workers; and the notification of occupational diseases and accidents at work. There are no by-laws or rulebooks that contribute to the further development of these articles. Moreover, these articles did not come into effect until three years after their enactment.

In addition to the Labour Code, the Law on the Regulation of Technical Safety of 24 October 2005 applies to all hazardous industrial installations, with the exception of those relating to the military, nuclear plants, aviation, auto and railway transports. The law

requires the operator of such an installation to write an annual report about its technical safety conditions; it is, however, the National Technical Safety Centre that carries out technical inspections, not the State Labour Inspectorate (SLI).

The Ministry of Labour and Social Affairs (MOLSA) is the main national authority for labour and social matters. The structure of the Ministry consists of 13 internal units and three external units - two agencies (namely, the State Employment Service Agency and the Medical-Social Expertise Agency) and one inspectorate (SLI) - through which the Ministry performs its tasks. These units have different territorial structures.

The Medical-Social Expertise Agency has as its main duties: delivering services in the medical-social field; medical-social examinations; and investigating and analysing the loss of ability to work, and defining the percentage of disability, in cases of accident or disease of any origin. Other bodies undertake specific or labour-related inspection tasks.

The State Hygiene and Anti-Epidemic Inspectorate (SHAEI) under the Ministry of Health is in charge of registration and case studies of occupational diseases; scientific research for the Ministry of Health; the creation of hygienic workplaces profiles based on measurements relating to the working environment; and the implementation of all the legislation on occupational health. The SHAEI has 17 territorial offices in all the ten regions and in Yerevan city and has six “Expertise Centres”, each of which acts separately under the supervision of the Director at the central level. The SHAEI conducts hygienic control over all industrial facilities regardless of the form of ownership, including laboratory tests and measurements made according to an order from SLI. The Law on Ensuring Sanitary-Epidemiological Safety of the Population of 16 November 1992 and the Law on Organizing and Conducting Inspections regulate the SHAEI activity. Further, the National Technical Safety Centre under the Ministry of Emergency Situations is responsible for monitoring dangerous industrial installations and equipment; this does not, however, cover any issue in the field of labour protection and workplace safety as industrial safety and technical security are separated in Armenia from occupational safety.

Other supervisory bodies responsible for monitoring and supervision in specific sectors include: the State Rescue Service under the Ministry of Territorial Administration in charge of the prevention and liquidation of emergencies, civil defence, fire safety, safety in industry and mining; the State Energy Inspection under the Ministry of Energy, in charge of state monitoring and supervision in the energy sphere; the State Food and Veterinary Inspection under the Ministry of Agriculture in charge of state monitoring and supervision of food safety; the State Agricultural Machinery Inspection under the Ministry of Agriculture in charge of the state monitoring and supervision of the safe operation of agricultural machinery and technologies; the State Environment Inspection under the Ministry of Nature’s protection in charge of nature conservation; the State Transport Inspection under the Ministry of Transport and Communications, responsible for state monitoring and supervision of transport safety; the State Nuclear and Radiation Safety Inspection under the Ministry of Energy in charge of supervision of facilities with nuclear and radiation hazards; and the State Taxation Authority, in charge of the supervision of taxes and social contributions.

In the case of a fatal accident, an inspection order (the order is mandatory in any inspection) is issued. Officials not mentioned in the order are not entitled to take part in the inspection and no visit without an order is possible, even in urgent cases. It is noted, however, that this requirement may be contradictory to the ILO Convention Nos. 81 (Article 12.1(a)) and 129 (Article 16.1), which state that “labour inspectors provided with proper credentials shall be empowered to enter freely and without previous notice at any hour of the day or night any workplace liable to inspection”.

According to Article 260 of the Labour Code, any employee who suffers an accident at work or develops an acute occupational disease, along with any witnesses, should immediately notify the head of their division, the employer and the department in charge of OSH. Only if an employee dies at work and in cases of acute occupational diseases should the employer immediately inform the Prosecutor's Office and SLI.

Occupational diseases and accidents are subject to mandatory registration by the employer. The Government defined the procedure for the registration and official investigation of accidents at work and occupational diseases in the first two appendices (Guidelines) to Decree No. 458-N of 23 March 2006. A third appendix establishes a list of diseases defined as "occupational".

Those accidents that are subject to registration and internal investigation are those involving workers during the performance of their duties both on and outside of the employer's premises, including: during business trips; during breaks; before and after the beginning of the work shift; during the time required to prepare equipment, tools and protective measures; while travelling in company transport; and while using city transport to complete duties. To conduct an internal investigation of the accident, the employer must establish a commission comprising at least three members. The commission may include representatives of the employer, the workers and the Prosecutor's Office.

If five or more workers die, the Government establishes an investigatory commission. In the case of collective, serious or fatal accidents, such a commission will comprise representatives of the employer, the victim and the Ministry of Health (an Occupational Health Service).

Generally, for accidents at work, the commission conducts an investigation within three days. The employer enters the accident in the register. For collective, serious or fatal accidents, the Commission should conduct the investigation within 15 days and, once it begins, it has 24 hours in which to make a statement. Within three days of the completion of the internal investigation, the records are sent to SLI, the local Prosecutor's Office and the State Social Insurance Agency. If an acute occupational disease occurs simultaneously with an accident, the accident is investigated in accordance with the procedure for investigating accidents at work. The victim may participate in the official investigation of the accident at work or occupational disease and has the right to view the materials available to the investigating officials. The victim is obliged to participate in any official investigation, but, under Article 261 of the Labour Code, may appeal its result to the Head of the Inspectorate or to the courts.

The main causes of occupational diseases include unsatisfactory working conditions; high noise levels due to poor technological equipment, and a lack, or inadequate supply, of work clothes, special footwear and other protective gear.

AUSTRALIA

The Australian Constitution does not give the Commonwealth a general power to legislate for Occupational Health and Safety (OSH), hence there are ten OSH statutes (six state Acts, two territory Acts, a Commonwealth Act covering Commonwealth employees, and a Commonwealth Act covering the maritime industry). There are also specialist OSH statutes covering the mining industry in some states. In 1985, the federal government legislated for the formation of the National Occupational Health and Safety Commission (NOSHC). NOSHC was abolished in 2005 and replaced by the Australian Safety and Compensation Council (ASCC). The ASSC's functions include the declaration of national standards and/or codes of practice relating to occupational health and safety and workers' compensation matters under the Standards Act. Unlike the former NOSHC which was

established by an Act of Parliament, the new ASCC was established administratively, with functions and powers determined by the government. It has statutory powers to declare national standards and codes of practice. ASCC is a tripartite body, with members currently representing by federal, state and territory governments, the Australian Chamber of Commerce and Industry, and the Australian Council of Trade Unions. ASCC standards and codes need to be adopted by state and territory governments before they have any legal force. All of the Australian OSH statutes make provision for worker representation in OSH matters, principally through the institutions of health and safety representatives and committees. The provisions vary markedly between the jurisdictions. In all jurisdictions, except the Northern Territory, the OSH statutes make provision for workers elected health and safety representatives. In Victoria, South Australia, the powers given to representatives are quite broad, and include rights to training, inspection, consultation, information and similar issues. They include the power to issue a provisional improvement notice (a default notice in South Australia), and the right to order that work cease (though the provisions vary between the jurisdictions). Western Australia, Queensland and Tasmania give much weaker consultative powers to representatives. The Tasmanian and Northern Territory statutes codify the common law right of a worker to refuse to perform dangerous work. Each of the statutes provides for health and safety committees, comprised of employer and workers' representatives. In the Northern Territory, all consultation takes place through health and safety committees. The OSH Act 2000 imposed upon employers a duty to consult with its workers to enable workers to contribute to the making of decisions affecting their OSH. In New South Wales, the enactment of the 2000 law changed the fact that worker participation was solely through health and safety committees, although members were given some rights (for example to inspection and information) resembling those given to health and safety representatives. Consultation can take place through health and safety representatives or committees, or through any other arrangement agreed to by employers and employees. At least one health and safety representative must be elected if one of the employees requests it. The provisions appear to be much weaker than the provisions for health and safety representatives in Victoria. There has been very little empirical research done into the operation of the health and safety representative provisions.

The introduction of representatives has brought major changes in OSH attitudes and practices. The representatives work best when the OSH legislation gives them a significant role and when management adopts a positive attitude to OSH and gives representatives enough time to perform their duties. A further factor in the success of the representative provisions is union support.

An exploration of the Australian OSH legislation demonstrates its lack of uniformity. Even if the analysis is limited to the statutes, the differences in wording of the statutory standards, the differences in sanctions (particularly levels of fines and use of infringement notices) and the variation in health and safety representative provisions is a matter of great concern. The lack of uniformity is even greater if the analysis extends, as it should, to inspection and enforcement practices. There is an urgent need for OSH regulators in the various jurisdictions to develop uniform enforcement policies and strategies. A second noteworthy point is the need for OSH regulators to pay greater attention to work relationships outside the traditional employment relationship. With the changes that are taking place in the Australian labour market, mirroring changes taking place elsewhere in the world, regulators need to develop standards, guidance material, inspection programs and enforcement strategies that accommodate subcontracting, labour hire, home-based work and franchise arrangements. Particularly important is the need to think more flexibly about health and safety representatives. Currently, the provisions are limited to employees, and exclude sub-contractors and the like. One notable omission from most of the Australian OSH statutes when compared with their European counterparts is the absence of requirements to promote the use of multi-disciplinary health services by employers. In fact, there is no systematic attempt to require employers to engage OSH experts. The most

successful provision appears to be the Queensland provision requiring an employer to appoint a workplace health and safety officer when there are 30 or more workers normally employed at a prescribed workplace.

AUSTRIA

The legal basis for health and safety is the 1994 Workers' Protection Law (*ArbeitsnehmerInnenschutzgesetz*). It replaces older legislation and includes changes in the national legislation that were required to reach conformity with EU legislation. The Federal Ministry of Labour, Social Affairs and Consumer Protection in Austria has six departments, one of which is the Central Labour Inspectorate. The Austrian labour inspection system is governed by the Labour Protection Act of 1993 (*Arbeitsinspektionsgesetz - ArbIG*) which sets out the duties and powers of labour inspectors, together with the organizational and procedural requirements for monitoring compliance. The Labour Inspectorate has the responsibility to enforce the relevant health and safety legislation in the majority of workplace in Austria including factories, construction sites, shops and offices, and health services and private educational establishments. The labour inspectorate is headed by a Director General and comprises five departments at the central level:

1. construction and mining industries;
2. technical safety and health at work;
3. legislation and legal affairs;
4. occupational medicine and health; and
5. innovation in labour inspectorates and international occupational safety and health.

The labour inspectorate ensures compliance with occupational safety and health laws, laws on working hours and the protection of young and pregnant workers.

Moreover, the labour inspectorate is involved in the licensing procedure for new plants; it is entitled to appealing against the granting of a license based on raised objections.

Labour inspectors conduct proactive inspection visits, based on the risk classification of undertakings. Considerable time is spent with inspections within licensing procedures for new plants, checking for OSH compliance. More than two thirds of inspectors' working time is spent outside the office.

The labour inspectorate is involved in the licensing process which also includes ensuring that planned plants comply with OSH related standards. It is also entitled to appeal a granted license if it considers that legal requirements in the field of occupational safety and health are not met.

In this field, inspection visits are programmed as a function of the risk level of the establishment. Places of work are evaluated and classified according to their risk level. Priorities and inspection targets are set based on this classification.

According to the Workers' Protection Law, employers must appoint safety officers (*Sicherheitsvertrauenspersonen*) in undertakings, which regularly employ more than ten workers. The appointment must be approved by the works council. In undertakings with fewer than 50 workers, a member of the works council may perform the role of safety

officer. The safety officers must inform advice and support both workers and the works council on all matters relating to health and safety.

A health and safety committee (Arbeitsschutzausschuss) is a body whose work is visible both in terms of ensuring workers' participation and organising preventive services. Its role is to promote company-wide cooperation between preventive services. This committee must be set up in undertakings with more than 100 employees. The members of this health and safety committee are, in addition to the employer, the safety officers, members of the occupational safety and health departments in the undertaking and representatives of the works council, together with any member of staff whose duties are associated with safety or environmental protection.

AZERBAIJAN

Under Chapter 209 of the Labour Code, the main principles of Labour Protection are stipulated. The Labour Code was adopted in July 1999. The principles are: a) common activity of Government Executive Bodies, entrepreneurs, employers and workers for the improvement and enhancing of working conditions as well as the prevention of industrial accident, employment injury and damage in job places; b) superiority of security of health and life of workers rather than outputs and productivity of enterprises; c) co-ordination of activity on labour protection with other activities on social and economy as well as environment areas; d) definition of equal requirements for all enterprises on labour protection irrespective of its property and legal status; e) conducting of efficient and independent control system on observance of labour protection by all enterprises; f) provision of employers with the incentive bonus and other means, who use and apply new world-wide methodology and experience for labour protection in their enterprises; g) application of appropriate tax policy in enterprises for the creation and improvement of labour protection system; h) provision with Government participation in financing labour protection; i) regular improvement of norms on labour protection; l) provision of employees with special overalls, shoes and other individual protection means as well as medical-prophylactic foods on a free of charge basis; m) training of specialists on labour protection in education centres; n) investigation and analysis of any industrial accident or employment injury in job places as well as informing employees on the state of labour injuries, damage and occupational diseases; o) social, material and moral protection of employees suffering from industrial accidents, employment injuries and damages as well as occupational diseases; p) comprehensive assistance for trade union organizations, enterprises or other legal entities or natural persons in relation to their activities on provision of labour protection; q) widening of international co-operation relationships in the labour protection area.

Based on the above-mentioned principles and according to Article 212 of the Labour Code, the Executive Bodies implement unified policy on labour protection. The Ministry of Labour and Social Protection of Population prepares and provides unified policy on labour protection defines tasks and obligations of concerned Executive Bodies and employers for improvement of working conditions as well as co-ordinates and verifies their activity towards enhancing of labour protection.

In order to review the conformity of job locations to the norms and rules of labour protection, the following regulations apply: a) rules for the investigation and recording of industrial accidents; b) the list of work places (occupations) where the use of women labour force is prohibited, a list of work places (occupations) with unsafe and harmful work conditions; c) a list of work places (occupations) with the unsafe and harmful labour conditions and a list of work places (occupations) where the presence of under 18 labourers is prohibited; d) a list of job locations and occupations with high risks for employees' health and other job locations (occupations) such as the food industry and

public catering where a medical certificate is required before concluding the labour agreement; e) a list of work locations with underground working, underground mining and other underground construction works; f) a list of work locations where there is the great likelihood of occupational diseases; g) a definition of the minimum amount of the incremental salary for employees working in particular job locations with high risks and poor climatic conditions.

The above-mentioned standards apply to all spheres of economic activity.

Health protection in job places is regulated by the following norms: the Labour Code; the Law on “Health Care” (1997); the Law on “Sanitation and Epidemiological Protection” (1992); Decree N° 1 of the Cabinet of Ministers on, the “Preparation of list of job locations with high risks and harm to employee health and list of occupations such as food industry and public catering, which required submission of special medical certificate” (approved on January 3, 2000); Decree N° 7 of the Cabinet of Ministers on “Approval of the list of job places with high risks and harmful against health of employees (January 12, 2002); Order N° 13 of the Ministry of Health Care on, the “Improvement of medical and prophylactic inspection” (January 23, 1990).

In 1997, the State Labour Inspection was established within the Ministry of Labour and Social Protection of Population. Now, the responsibilities of the State Labour Inspection have been determined according to the Decree of the Cabinet of Ministers on, the “Substantiation of the State Labour Inspection within the structure of the Ministry of Labour and Social Protection of Population” approved in 2000. In February 2000, Azerbaijan ratified Convention Nos. 81 and 129 and Protocol No. 81 of 1995.

The State labour Inspection comprises general labour inspectors with medical experts on socio-medical issues. The State Control Committee on Industrial Safety and Mining Works manages all areas dealing with risk in the workplace. This Committee works according to the Law on “Technical Safety” and the Decree of the Cabinet of Ministers on “Regulation of the Activity of the State Control Committee on Industrial Safety and Mining Works”, which was adopted in 1991. The State Sanitation and Epidemiological Service is responsible for controlling the improvement of working conditions, medical and prophylactic measures in places of work as well as occupational diseases. This Service works in accordance with the Law on “State Sanitation and Epidemiological Service”, adopted in 1992, and a special Decree of the Cabinet of Ministers on “Regulation of State Sanitation and Epidemiological Service” approved in 1999.

Labour Inspection: The State Labour Inspection is responsible for the investigation of incident relating to industrial accidents or occupational diseases in the workplace. The Ministry of Health Care has prepared a guideline concerning a list of job places with high risks, according to the Decree No. 7 of the Cabinet of Ministers on “Approval of the List of Job Places with the High Risk which might be cause to the Industrial Accidents or Occupational Diseases”. The State Architecture and Building Committee has approved the “Rules of Organization, Carrying Out of Building Works” in 1999. According to these rules, the members of the State Labour Inspection were also included in the Commission, which is responsible for the acceptance of completed construction works. These inspectors from the State Labour Inspection verify the application of the norms of labour protection from the beginning of the construction. The State Control Committee on Industrial Safety and Mining Works provides the regulations and instructions on technical safety measures. These include, “Rules on transportation of hazardous commodities”, “Rules on safe operation of gas” and “Rules on safe operation of climbing cranes”.

The Ministries of Agriculture and Communication along with the State Oil Company, the State Transport Concern and other Executive Bodies of the Government prepare and approve rules and norms on labour protection. For example, the State Oil Company has

approved the following documents: packages of guidelines on labour protection of oil derricks (by occupation); instructions on labour protection, safety techniques, fire safety and industrial sanitation in “Azerneftyanajag”; typical instructions on labour protection for hydro engineering installations and other industrial constructions; and instructions on medical aid for employees of the oil industry during industrial accidents or occupational diseases in the work place. In most cases, instructions and regulations on labour protection are agreed and approved jointly by the Ministry of Labour and Social Protection of Population, the Ministry of Health Care and the State Control Committee on Industrial Safety and Mining Works.

Provisions on labour protection are also stipulated in *collective agreements* in accordance to the Labour Code. Collective contracts might be concluded at the enterprise level, whereas collective agreements should be concluded at the branch, occupation and territory levels. In practice, collective contracts are concluded at the enterprise and branch levels, as well as General at the nation-wide level, such as the Collective Agreement between the Cabinet of Ministers, Trade Union Confederation of Azerbaijan Republic and National Trade Union Confederation of Entrepreneurs (Employers) of Azerbaijan Republic. There is a labour protection section in each collective agreement. As such, there is a section on the “Protection of Labour Rights, Labour Protection, Technical Safety and Environment Protection” within the General Collective Agreement where mutual responsibilities of parties concerned in terms of preventing industrial accidents, employment injury, improving of system of compensation for poor working conditions, applying of personal insure system against industrial accident are described. Implementation of necessary activities on labour protection, establishment of more suitable working conditions, payment of compensation for risky and poor labour conditions as well as the definition of incremental increases of monthly salaries for poor working conditions are stipulated under Sector Agreements.

Technical standards: Labour protection issues in enterprises are regulated in compliance with the Labour Code. For example, responsibilities of entrepreneurs and employers are described in Chapter 215, responsibilities of workers in Chapter 216, financing of activities on labour protection in Chapter 220 as well as a guarantee on labour protection rights in Chapter 35 of the Labour Code. Employers are responsible for the observance of norms and rules on labour protection.

The following OSH regulations are stipulated by Chapter 222 of the Labour Code: 1) to provide information on safety labour conditions, control risky and harmful working conditions and inform the workers about changes on a regularly basis; 2) to prepare and implement annual action plans on the improvement of labour conditions and the protection of the health care of workers; 3) to consider an observance of the mutual obligations on labour protection measures by the employers and employees; 4) to ensure the provision of special working shoes and overalls in situations involving extraordinary climate or pollution conditions; 5) to carry out certification of workplaces in order to ensure the observance of the labour conditions by participation of the Trade Union Confederation. Workers are regularly informed of workplace certifications. Employers have to adapt outputs of certification on labour protection to the existing legal norms and juridical acts.

BELGIUM

Labour inspection in Belgium is divided into two main areas of competence: a) the control of social laws, which focuses on pay and work conditions; and b) the control of welfare whose competence is focused on safety, hygiene and health. The first service has particular responsibility for the enforcement of labour laws (hours of work, remuneration, leave and rest period, etc...), certain issues related to employment (hiring, restructuring...), the application of collective agreements (working conditions, status of the union delegation, etc...), industrial relations (social elections, protection of elected representatives of workers, etc...) and individual employment relationship (laws on employment contracts). On average, the social laws service treats on a yearly basis, about 38,000 cases including 8,000 complaints and 300 requests for information. The treatment of these cases usually results in carrying out over 23,000 inquiries and 200 conciliations. Of the 38,000 records treated, 19 per cent of "*pro justitia*" (minutes) are prepared. This operation usually brings to the Belgian State, more than 3 million Euros per year. The welfare control service (CBE), deals with the well-being in the workplace, within the jurisdiction of the federal government. This service was introduced in 2003, after a restructuring of the departments of security inspectors at work and occupational health inspection. The CBE is only concerned with the enforcement of health, hygiene and security legislation and it is not responsible for monitoring working conditions, which go beyond the well-being of the workers. The welfare control service is organized at the regional level in two units: a) basic control well-being unit; b) the construction control unit.

The control of the well-being unit is composed of inspectors whose domain depends on specific qualifications and requested regulations. Their work covers the support for the OSH committees and the monitoring of the treatment of serious accidents.

The construction unit is composed of inspectors whose area activity is exclusively limited to the monitoring of the construction sites.

In the OSH area, employers are under a legal obligation to establish one or more OSH committees in enterprises normally employing at least 50 workers. It is a bipartite body composed of representatives of the employer and employees. The employees' representatives are elected to the works council, at the same time as the employees' representatives on the works council while following the same procedure and formalities in the *four*-yearly elections (known as "social elections"). The rules concerning the employer's representatives differ somewhat from those applicable in the case of the works council. The head (or an assistant) of the enterprise's health and safety service is an ex officio member of the committee and functions as an independent expert. This person assumes the office of the secretary. The employer's representatives must be chosen from among the managerial staff. In order to preserve their independence, industrial doctors may not act as employers' or employees' representatives, but they can attend the committee's meetings within the capacity of a consultant. Lastly, members of the committee can request the presence of experts.

The responsibilities of these committees have been laid down by Royal Decree. They were given the task of "investigating and proposing all ways and means of actively contributing to everything undertaken to ensure that work is performed in the best possible conditions of health and safety". In fulfilling this task, the committee acts primarily in an advisory capacity. In addition, it is empowered to promote and monitor health and safety in the workplace. These responsibilities entail certain obligations on the part of the employer.

Such obligations include providing the committee with the information it needs in order to be able to give informed advice. Provisions are also laid down on how employers are required to apply to the committee's advice. In general, employers must pursue an active policy of prevention; and they must inform and consult the committee in connection with this policy, and give it full co-operation. The responsibilities of the workplace health and safety committee are (fairly) precisely defined. It is primarily an advisory body with the employer having to indicate to the committee the action being taken in response to its advice. The fact that the employer cannot simply ignore this advice lends it significance. However, with the exception of certain matters, which are subject to its prior approval, the committee has no decision-making powers. In accordance with Collective Agreement No. 39, in cases where new technologies are to be introduced, there must be consultation with the workplace health and safety committee. In addition to the committees at the enterprise level, there are committees at the district level and a Supreme Council for Health and Safety in the Workplace at the national level.

BRAZIL

In Brazil, labour inspection falls within the competence of the Ministry of Labour and Employment (MTE), embodied in its organizational structure, by the Labour Inspection Secretariat (Secretaria de Inspeção do Trabalho, SIT). SIT is responsible for establishing guidelines and for undertaking inspection activities that are implemented by the decentralized branches of the Ministry, the Regional Superintendencies of Labour and Employment (Superintendências Regionais do Trabalho, SRTE). It is the Inspectorate's responsibility to monitor the implementation of enforcement actions and to promote research and examine proposals for legislative changes relating to the world of work. SIT is divided into two departments: Department of Labour Inspection and Department of Health and Safety at Work.

The Federal Labour Inspection System in Brazil currently has 2,997 labour inspectors with the competence to operate throughout the national territory, in the urban, rural, port and waterway realms, covering all enterprises, establishments and work places, public and private, professional and non-profit institutions, as well as foreign vessels in Brazilian jurisdictional waters. Its role is to ensure compliance with all laws and regulations, including those relating to safety and health at work in the context of labour relations and employment, compliance with conventions and collective agreements between workers and employers, and international treaties and conventions ratified by Brazil. Other examples of its many tasks include the enforcement of quotas for the inclusion of apprentices and persons with disabilities in the labour market and the enforcement of activities for the eradication of child labour and forced labour.

The organizational structure of MTE dictates that the labour inspection system in Brazil is composed of a central agency and 27 decentralized units directly under the Minister of State. The central body is SIT, which is located in the capital (Brasília). The decentralized units, the Regional Department of Labour and Employment (SRTEs), are located in each of the 26 states of the federation and the Federal District and are administrative units subordinated to the Regional Offices of Labour and Employment and the Regional Agencies.

The territory of each federal unit (or state), is divided into constituencies, which are further divided into inspection areas bound by certain geographical criteria. The labour inspectors act in different geographical jurisdictions within the same district under a system of random rotation. However, the re-appointment of an inspector to the same area in two consecutive periods is prohibited. Labour inspectors can stay for up to 12 months inspecting a given geographical area.

The national labour inspection system works in a strategically planned and coordinated manner, involving SIT and the SRTEs. SIT has the responsibility of formulating and proposing the guidelines for the annual work plan. The SRTE implements and undertakes labour inspection activities within those parameters. The methodology for the formulation of these documents is structured in three steps: the assessment of the labour market; the identification of courses of action in order to tackle the labour irregularities identified in the assessment; and the monitoring of activities. Several sources are used to access the data needed for the assessment, including: the National Survey by Household Sampling, the Annual Report on Social Information, the General Registry of Employed and Unemployed Workers, the Federal Labour Inspection System and other data from official sources.

The Commission for Collaboration with Labour Inspection (Comissão de Colaboração com a Inspeção do Trabalho, CCIT) is a consultative forum that works together with the SRTEs. In it, trade unions are called to participate in the strategic planning of the inspection actions, especially with regard to identifying economic activities that should be prioritized due to signs of labour irregularities. According to these strategies, the SRTE establishes thematic groups in different areas of inspection such as pension fund regulations, the combating of fraud, compliance with legal quotas for apprentices and persons with disabilities, the campaign against child labour and forced labour, supervision of port areas, supervision of rural work, and so on.

It is the SRTEs' responsibility to send to the central body, in due time and in the format specified in the relevant regulations, the quantitative and qualitative evaluation on the implementation of the work plan. Likewise, managers at the technical level have the responsibility of observing the provisions and monitoring the performance of the labour inspectors who are under them.

Labour inspection is based on previously planned activities in order to meet: national monitoring projects that all the SRTEs are mandated to implement; strategic projects that are to be implemented by groups of the SRTEs selected by SIT; and locals projects, to be implemented in specific sectors and economic activities which are selected by the SRTE based on a list presented by SIT. The SRTE's are also responsible for including in their planning enforcement, actions in response to complaints from workers and demands of the Labour Prosecutions Office that arise throughout the year. Complaints involving immediate risk to the safety, health or to the remuneration of workers are immediately addressed.

Labour inspection in Brazil also has a preventive nature. Labour inspectors give guidance, provide information and technical advice to workers and employers subject to labour inspection, according to certain criteria including administrative opportunity and convenience, previous investigation and analysis of situations that could generate occupational diseases and accidents, necessary preventive measures that must be taken, notification of those subjects undergoing inspections so they are better able to fulfil their obligations, correct irregularities and adopt measures that will eliminate risks to health and safety of employees within their facilities or working practices.

The existence of a specific service with orientation on health and safety at work is regulated by Chapter V of the Code of Labour Law (CLL). This is necessary in every establishment with 20 or more workers, in order to prevent work accidents and occupational diseases. This service is known, under the Ministry of Labour and Employment provisions, as a committee called the Internal Commission for Accident Prevention (CIPA), which includes representatives from both the employer and workers, in every establishment of a company (CLL, Articles 162-165). The members in charge of employer representation and their substitutes are designated by the entrepreneur. The employer has the right to choose the chairman from the representatives who has a mandate

of one year. On the other hand, the workers' representatives and their substitutes are elected in a secret ballot in each plant where there is a Commission. Workers are only entitled to have a vice-president and enjoy job security similar to that of a trade union's director. The term of this representation is also for one year; a representative can be re-elected only once and job security is extended for another year, after this term. The representatives act as advisers within the enterprise, promoting specific training programmes for workers and testing the workplace and work conditions.

A way to make the Internal Commission for Accident Preventions effective is by an educational programme, both inside and outside the undertaking. The training programme deals with the use of protective devices against accidents and the work-related circumstances that can cause a disease. Everything that could contribute to employee fatigue must be prevented. The Commission usually proposes programmes for the detection of any hazards that could endanger health and safety, educate workers to prevent them, detect jobs, which are not suitable for human beings, consider the causes and try to eliminate them.

If an accident results in the injury or death of a worker, the Commission is entitled to investigate the fact and its causes, to inspect the place and devices and to propose the actions considered necessary to prevent another similar occurrence. Instructions are issued in order to give information to all workers at the plant level and are transmitted to other establishments.

The Commission meets once a month. Minutes are taken and approved at the next meeting. All other meetings can be held whenever necessary and are mainly due to the occurrence of accidents.

If a worker has a work-related injury or illness, the employer issues a Notification of Accident at Work (Comunicação de Acidente do Trabalho, CAT) that is registered in the state pension fund by the next business day. The notice must indicate whether there was a leave of absence from the workplace. If that is the case, the employer is responsible for financing up to 15 days of the worker's remuneration, while the pension fund is responsible for incurring the expenses after that period depending on expert medical evaluation. There is a database available that provides current information regarding occupational diseases and accidents throughout the country. The database is populated with data present in the Notification of Accident at Work. It is important to note, however, that it is limited, since it only provides information on formal employees, which constitute only half of the economically active population of Brazil.

In the process of preparing the annual inspection work plan, permanent dialogue with other social actors is given priority, especially the Labour Prosecutions Office and the Commission for Cooperation with the Labour Inspection (CCIT), which operates under the SRTEs. The CCIT's aim is to strengthen the participation of union representatives in the process of discussion, formulation and monitoring of the annual work plan, including the evaluation of the results arising from it. This Commission assesses the main problems concerning breaches of legislation in its respective SRTE territory, indicating the violations that occur more frequently in order to prioritize certain activities.

BULGARIA

In late 2008, the Bulgarian government approved the first National Programme for Health and Safety. The programme aims to implement the National Health and Safety at Work Strategy 2008–2013, which focuses on improving the quality of prevention policies and control towards risk preventive health and safety. It targets an 8 per cent reduction in

workplace accidents. The new framework relies on the shared responsibility of all stakeholders and wider social partners' involvement.

In December 2008, the government undertook a series of legislative initiatives aiming to improve health and safety at work in Bulgaria. Such initiatives included amendments to the Working Conditions Law and Labour Code, a new Law for Labour Inspection, a National Strategy for Health and Safety at Work 2008–2013 and a National Programme for Health and Safety.

The new framework targets better working conditions, improved well-being and quality of work of employees. It is in line with the EC legislation in the field, especially with the EU strategy 2007–2012 on health and safety at work. The national strategy aims to reduce accidents at work by 25 per cent by 2013 while it is expected that the implementation of the Health and Safety Programme will lead to an 8 per cent decrease in the number of workplace accidents. This objective becomes even more necessary as the incidence of occupational accidents and diseases, although diminishing in recent years, is still high. To this end, the regulatory framework envisages measures and outlines the responsibilities of all stakeholders in the following four priority areas:

- a) guaranteeing proper implementation of the occupational safety and health (OSH) legislation;
- b) promoting and implementing sectoral strategies;
- c) managing new occupational risks; and
- d) promoting changes in employee and employer attitudes towards an approach based on health protection.

The new OSH framework is centred on wider social partners' participation. The government considered the social partners' support for the effective implementation of the OSH policy as a valuable resource. The challenge, however, facing both the government and the social partners, is to transform this support into concrete initiatives and shared responsibility. The improvement of social dialogue at national, sectoral and company level and social partners' capacity building are considered important tools in this respect. The social partners also have a major role to play in terms of reaching agreements, motivating a risk preventive culture and practical policy implementation at the workplace. In this context, the following measures are pursued:

- 1. training employers' and workers' representatives in the committees and sectoral or industry councils for health and safety;
- 2. carrying out information and awareness-raising campaigns on risk prevention;
- 3. organising tripartite workshops and conferences;
- 4. publishing and disseminating learning materials in the field of OSH;
- 5. increasing joint control and monitoring of the OSH policy implementation; and
- 6. establishing a new tripartite body – the National Council for Labour Inspection.

Such a framework was drafted with the participation of the social partners and was largely discussed in the National Tripartite Council for Health and Safety at Work and the National Council for Tripartite Cooperation at different stages of its adoption. Despite some criticism, the social partners reached a consensus on the framework and are committed to supporting its effective implementation.

The new OSH policy framework is a result of both the compromise and consensus reached by the government and the social partners. It provides a common platform for addressing health and safety at work with the contribution of the social partners. The successful implementation of the new framework requires shared responsibility, commitment and active participation. This can ensure workplace health and safety and higher productivity conducive to the growth of company competitiveness and the improvement of workers' quality of life.

CANADA

In the Canadian legislation, occupational health and safety committees are named differently. For example, the name Joint Health and Safety Committee (JHSC) is meant to reflect its composition; the committee may also be known as the industrial health and safety committee, joint work site health and safety committee, occupational health committee, workplace safety and health committee, or health and safety committee. A JHSC is a forum for bringing the internal responsibility system on OSH issues into practice. The committee consists of labour and management representatives who meet on a regular basis. The advantage of a joint committee is that the in-depth practical knowledge of specific tasks (labour) is brought together with the larger overview of company policies, and procedures (management). Another significant benefit is the enhancement of cooperation among all parts of the work force toward solving health and safety problems. In smaller companies with less than a specified number of employees, a health and safety representative is generally required to consult health and safety legislation applicable to the workplace. Employers are responsible for establishing workplace health and safety committees. Most Canadian health and safety legislations set guidelines for organizing the committee, the structure of the committee, the frequency of meetings, and the roles and responsibilities of committee members. Employers establish terms of reference applicable to the formation, structure and functioning of the committee. Such terms of reference must ensure: 1) compliance with the OSH legislation; 2) effectiveness of the committee in meeting workplace specific needs; and 3) widest possible employee involvement. *Activities* of the JHSC include: a) participating in the development and implementation of programs to protect the employees safety and health; b) dealing with employee complaints and suggestions concerning safety and health; c) ensuring the maintenance and monitoring of injury and work hazard records; d) monitoring and following-up of hazard reports and the recommendation of subsequent action; e) setting up and promoting of programmes to improve employee training and education; f) participating in all safety and health inquiries and investigations; g) consulting with professional and technical experts; h) participating in resolving workplace refusals and work stoppages; i) making recommendations to management for accident prevention and safety programme activities, and l) monitoring the effectiveness of safety programmes and procedures. A JHSC or the appointment of representatives is either mandatory or subject to ministerial decision in all Canadian jurisdictions. Certain types of workplaces may be exempt from this requirement, depending on the size of work force, industry, accident record, or some combination of these factors.

The *sources of legislation* regarding JHSC are provincial and federal [Canada: Canada Labour Code, Part II (R.S.C. 1985, C. L-2), Sections 135 to 137; *British Columbia*: Workers Compensation Act, (R.S.B.C. 1996 as amended) Part 3, Division 4, Sections 125 to 140; *Alberta*: Occupational Health and Safety Act (R.S.A. 1980, c. O-2 as amended), Section 31, and Occupational Health and Safety Code (October 2003) Part 13 Joint Work Site Health and Safety Committee, Sections 196 to 207; *Saskatchewan*: Occupational Health and Safety Act, 1993 (S.S. 1993, c. O-1.1) Part III Sections 15 to 22 (Called: Occupational Health Committee); *Manitoba*: Workplace Safety and Health Act (R.S.M. 1987, c. W210) Section 40 (Called: Workplace safety and health committees); *Ontario*: Occupational Health and Safety Act (R.S.O. 1990, c. O.1), Section 9(2); *Quebec (English language legislation)*: Act respecting Occupational Health and Safety (R.S.Q., c. S-2.1) Chapter IV, Sections 68 to 86, and the Regulation respecting health and safety committees (R.R.Q. 1981, c. S-2.1, r. 6.1, O.C. 2025-83) (called: Health and Safety Committees); *New Brunswick*: Occupational Health and Safety Act (A.N.B. 1983, c. O-

0.2), Sections 14 to 18; *Nova Scotia*: Occupational Health and Safety Act (S.N.S. 1996, c. 7), Sections 29 to 32; *Prince Edward Island*: Occupational Health and Safety Act (R.S.P.E.I. 2004, c. 42), Section 25; *Newfoundland*: Occupational Health and Safety Act (R.S.N. 1990, c. O-3) Sections 37 to 40 (called: Health and Safety Committees); *Yukon Territory*: Occupational Health and Safety Act (R.S.Y. 1986, c. 123), Section 12 & 13; *Northwest Territories*: Safety Act (R.S.N.W.T. 1988, c. S-1), Section 7 (Called: Joint Work Site Health and Safety Committee); *Nunavut*: Safety Act (R.S.N.W.T. 1988, c. S-1), Section 7 (Called: Joint Work Site Health and Safety Committee)].

CHILE

Legal Framework: The Labour Code governs specific labour and employment issues, including:

- Conditions of employment and work, including employment contracts, the enforcement of wage, hour, and benefit laws, personnel management and employment termination and dismissal;
- Trade union affairs;
- Collective bargaining and the right to strike, mediation, and arbitration;
- Occupational safety and health;
- Equal opportunity and non-discrimination;
- Social security, including medical care, maternity, old-age, disability, survivor benefits, workman's compensation, and unemployment; and
- Employment policy and training and job placement.

Labour Administration: The Ministry of Labour and Social Welfare is divided into two units, the Bureau of Labour and the Bureau of Social Welfare. It operates twelve regional offices throughout the country. The Bureau of Social Welfare comprises the Pensions and Pension Fund Administration, the Social Security Superintendent and the Secured Lending Agency. The Pension Fund Administration assists people with the necessary paperwork to obtain pensions and monitors private companies that provide pensions. The Social Security Superintendent oversees the provision of unemployment benefits by private companies, and the Secured Lending Agency provides secured loans to self-employed workers and family enterprises.

The Labour Bureau, in turn, is made up of the Labour Directorate and the National Worker Training and Employment Service. The latter service subsidizes companies that provide training to their employees, gives training scholarships and manages a computerized job bank. The Labour Directorate has five major departments that cover union organizations, collective bargaining, labour inspection and legal and administrative matters. Their staff informs workers and employers of the provisions of labour law through education and outreach programmes and provides technical support to trade unions and employers' organizations. The Labour Directorate is responsible for enforcing and monitoring compliance with labour legislation. Their staff carries out labour inspections at enterprises, makes determinations about whether various practices violate the Labour Code and determines fines or punitive actions where relevant. The Directorate is also responsible for certifying and enforcing collective agreements and conducting conciliation and mediation. In addition, it collects most labour statistics for the country. It has offices in all 13 regions.

The Directorate's Labour Inspectorate oversees the enforcement of labour laws, administrative procedures and sanctions. The procedures address sanctions in general terms, beginning with the administration of fines that can be recovered through the labour court. If an employer corrects an infraction within 15 days of having been notified of a penalty, the amount of the fine is reduced by 50 per cent. If a business is penalized for the same infraction in a subsequent inspection, it will be fined a greater penalty but, based on the commitment to correct the infraction; it still has recourse to appeal for a 50 per cent reduction of the applicable penalty. The Labour Code does not state specific fines for infractions, rather sanctions are assigned to a certain number of units, and each unit has a monetary value.

Labour inspectors are responsible for inspecting enterprises with respect to trade union and industrial relations issues, child labour, occupational safety and health, wages, hours worked, discrimination and benefits.

Occupational Safety and Health: Various ministerial agencies, mainly from labour and health, have legal responsibilities for the regulation of working conditions and standards in Chile. The 1927 Labour Code, the 1968 OSH Act (Ley 16744) and accompanying regulations constitute the most comprehensive body of OSH legislation. Both are issued by the Ministry of Labour. Article 184 of Chile's Labour Code stipulates that the employer is obliged to take all measures necessary to effectively protect the lives and health of workers, maintain adequate safety and health conditions and provide the necessary tools to prevent occupational accidents and diseases. Decree No. 40 (1969) established the "Right to Know" principle, which states that employers must inform workers about any risks affiliated with their jobs, preventive measures and correct work methods addressing known hazards. The Labour Code permits workers to immediately cease work in situations of imminent danger and a firm's operation can be suspended for up to 10 days for recurrences. The 1938 Health Code, with Regulation 594, provides environmental and biological standards regarding allowable concentrations of chemical, physical, biological and organizational hazards in workplaces. These are issued by the Ministry of Health. The Agriculture and Livestock Service (SAG) of the Ministry of Agriculture oversees the production, importation, distribution, sale and application of agricultural pesticides; the Ministry of Health is responsible for monitoring the use of pesticides; and the Ministry of Health's Department of Programs for the Environment provides Occupational Health Units to monitor health and safety conditions of workers at risk of pesticide exposure.

Labour inspectors, health inspectors, agricultural experts (for pesticide issues) and mining inspectors are in charge of the enforcement of OSH regulations. In total, there are about 1,500 professionals. Employers leave their legal responsibilities to insurance companies (private mutuels or the state Instituto Normalización Previsional (INP) that develop different occupational safety and health activities in the insured enterprises. In 1990, with the return of democracy in Chile after 16 years of military dictatorship, some workers' organizations gradually became active in the training of workers and labour leaders in OSH matters. The Miners Union (Confederación Trabajadores del Cobre, FTC), Confederación Minera (Confemin), the Metal Workers Union (Constramet), Seasonal Agricultural Women Workers (Anamuri), the Teachers Union and Health Workers Union (FENATS) started training programmes for their members in health and safety committees. These committees were established by OSH Act 16,744 in workplaces with more than 25 workers.

Chile has ratified several ILO Conventions. Those with greater impact in OSH are Convention Nos. 115 (Radiation Protection, 1960), 139 (Occupational Cancer, 1974), 156 (Worker's Families, 1981), 161 (Occupational Health Services, 1985), 162 (Asbestos, 1986), 184 (Safety and Health in Agriculture, 2001) and 194 (List of Occupational Diseases, 2002).

Organization: Occupational health services follow two approaches. The first approach is generally the provision of services by a company itself, usually in the form of hiring a part time physician, a registered nurse and full time nurse aid who take care of first aid procedures and common illnesses. In the second approach, an OSH service is run by the institution (usually a mutual) in charge of OSH problems according to Act 16 744. The mutual detects and surveys cases of occupational exposure or simple accidents that do not require hospital treatment. Professionals working in these services have training in OSH. Since 1970, Postgraduate professional training in OSH in Chile has followed diverse routes. In that year, programmes started in collaborations between the School of Public Health of University of Chile and the Institute of Work Hygiene and Air Pollution (IHTCA) of the Ministry of Health. The Institute was closed down in the mid 1970s and the training activities were later taken over by the Department of Occupational Health of the Institute of Public Health. Until 1999, a comprehensive model was maintained whereby professionals from biomedical and environmental sciences (engineers, nurses, psychologists and physicians) were trained together in a 1,000-hour programme leading to a degree in Public Health and Occupational Health. Parallel to that, a 200-hour programme to train safety experts from engineering sciences was developed by the State Technical University (Universidad Técnica), (now Santiago University) and it contributed to training of union leaders in OSH. There are now many postgraduate programmes in Occupational Health with participation from different universities and mutuals. Indeed, since 1994, ergonomic programmes have become more prominent with the establishment of the Biological Sciences Centre Programme at the University of Concepción (in collaboration with training agencies).

CHINA

China established the State Administration of Work Safety (SAWS) in 2001. In 2002, China promulgated two important acts of legislation: the Law of the People's Republic of China on Work Safety (29 June 2002) and the Law of the People's Republic of China on Occupational Diseases Prevention and Control (Order No. 60 of the President of the People's Republic of China, 27 October 2002). Recently, China has adopted the principles of safe development and of applying a scientific perspective to people-oriented development. In line with the ILO Convention on the Promotional Framework for Occupational Safety and Health, 2006 (No. 187), China has begun the implementation of the National Work Safety Programme (2006-2010) and the National Programme for Occupational Diseases Prevention and Control (2009-2015).

In order to strengthen the uniform leadership and management of Work Safety (WS) nationwide and to promote the steady improvement of WS conditions, the State Council Work Safety Committee (WSC) was established, headed by a Vice-Premier with members composed of the heads and deputies of the State Council's Ministries and Agencies as well as mass organizations such as the All China Federation of Trade Unions (ACFTU), the Communist Youth League and the All-China Women's Federation, etc. The WSC Secretariat is located at the SAWS Headquarters.

Entrusted by the State Council, SAWS is responsible for overall supervision, administration, direction and coordination of WS (and, since 2008, Workplace Health inspection) across the country. It also exercises the supervision and inspection of WS administration by other relevant national authorities and local (provincial, municipal and district/county) governments in accordance with the "Notice of the State Council on the Promulgation of Regulations on the main Functions, Organizational Structure and Staffing of SAWS", issued in July 2008. SAWS is responsible for enforcing the laws on WS and Working Health (WH) (occupational diseases prevention and control) in workplaces, while the Ministry of Health, for the time being, continues to oversee the law on occupational diseases.

While China has strengthened its capacity for OSH inspection, its remarkable growth in recent years has set into motion far-reaching socio-economic changes - the rapid transfer of the labour force from agricultural to non-agricultural work, diversifying forms of employment, the migration of high-hazard industries from urban and coastal to rural and inland areas - that pose serious challenges to OSH inspectorates. Under-staffing, especially at grassroots levels and poor coordination amongst the various inspection organs are two of several serious issues facing OSH inspection.

Legal framework: The main laws, regulations and rules relevant to OSH inspection are:

- Law on Safety in Mines (1992)
- Fire Prevention Law (1998)
- Provisions on Coal Mines Safety Supervision (2000)
- Law on Work Safety (2002)
- Law on Prevention and Control of Occupational Diseases (2002)
- Regulations on the Safety Administration of Dangerous Chemicals (2002)
- Regulation on Work-Related Injury Insurances (2004)
- Law on Administrative Supervision (2004)
- Administrative Regulations on Work Safety of Construction Projects (2004)
- Regulations on Reporting, Investigation and Handling of Work Accidents (2007)
- Administrative Punishment Measures for Violation of Work Safety (2007)
- Regulations of Duties of Internal Bodies and Staff in SAWS (2008)
- “Interim” Rules on Administration of Occupational Health in Workplaces (2009)

Role of SAWS: SAWS administers altogether more than 50 laws, including major OSH legislation such as the WS Law, Occupational Disease Prevention and Control Law, WS regulations issued by the State Council, for example those on hazardous chemicals. The ministries, e.g. the Ministry of Construction, or Ministry of Agriculture supervise more than 30 laws and regulations also dealing with OSH. Thus, a total of over 80 different statutes of differing legal “quality”, dealing with OSH are in force: (besides the above-mentioned two statutes) the Labour Law (1994); Law on Safety in Mines; Coal Law; Electricity Law; Fire Prevention Law; Law on Road Traffic Safety; Law on Emergency Response and 27 administrative regulations (e.g. Regulations on WS Licensing; Hazardous Chemical Safety Management; Reporting, Investigation and Treatment of WS Accidents; Safety Management of Large-scale Group Activities), among others.

Over 80 “Department Rules” also exist: 50 by SAWS; five by the (former) State Economy & Trade Committee; over 30 by the Ministries of Supervision, Construction and Agriculture (amongst others). Four laws are presently being amended including the Law on Safety in Mines: the Coal Law. Four administrative regulations are also being amended: including the Regulations on Hazardous Chemical Safety Management and the Regulations on Safety Inspection of Coal Mines.

In addition, almost 1,000 compulsory national (“GB”) and more than 3,000 sectoral (e.g. ministry-level) safety standards have to be applied by employing units and supervised by SAWS or line ministry inspectors. SAWS itself has issued more than 100 compulsory technical standards on safety issues in mines, the chemical industry, fireworks production, etc. It also issues technical Codes of Practice. Finally, the jurisdiction of the Supreme People’s Court on OSH issues also has to be taken into consideration. Under the process of “accelerated local legislation”, some 30 jurisdictions, provinces, municipalities and districts have issued rules and regulations at the local level, among which 29, including Beijing, have established regulations or rules on OSH or its supervision.

Safety standards include national standards (GB) and industrial standards. Safety standards include basic standards, management standards, technical standards, methodology standards and products standards. The WS Standards (AQ) cover safety standards in mines, hazardous chemicals, fireworks, PPE, dust explosion protection, painting, etc. There are nearly 1,000 such national standards on safety (e.g. Safety Regulations for Blasting, Safety Code for Gas of Industrial Enterprises, etc...) and over 3,000 industrial standards (e.g. Safety Regulations for Steel-making, Standards for Gas Drainage, etc...) and 41 OSH-relevant laws and administrative regulations issued by the National People’s Congress and the State Council and also, in principle, to be supervised by SAWS.

The State Administration of Work Safety (SAWS) is responsible for work safety inspection within all production and operation units in China and, more recently, also for work health inspection (though this has not yet been implemented in all regional/local jurisdictions). SAWS is a special body under a minister reporting directly to the State Council. It is responsible for overall supervision and administration on WS (and Health) nationwide, carries out general supervision and administration, directs, coordinates, supervises and inspects, evaluates and reports on performance concerning the WS control index, oversees the investigation and punishment of accidents and the implementation of an accountability system. The Office of the State Council WS Committee is situated in SAWS HQ. Similar arrangements apply to various levels of local governments’ WS Committees.

Composition of SAWS: SAWS is composed of ten departments (each headed by a Director-General):

1. General Office (International Cooperation Department, Finance Department) :

Responsible for drafting work rules and procedures within the organization; correspondence, information, confidentiality performance, public complaints and others; work related to system reforms and organizational staffing and management; finance, expenditure, state assets management, auditing within the organization and its affiliated organizations; international exchange and cooperation on OSH and foreign affairs administration; general coordination work for the General Office of the State Council’s WS Committee.

2. Department of Policies, Laws and Regulations:

Responsible for the drafting of WS laws and regulations; drafting general WS rules, procedures and standards, and those specific for industrial, mining, commercial and trade sectors; major WS policy-making; release of national WS information; WS enforcement supervision, administrative review and administrative litigations; WS publicity; review on the legality of internal procedural documents.

3. Department of Planning, Science and Technology:

Responsible for the drafting of WS and R&D plans; coordination of major scientific-technical research and promotion; WS information development; work related to the management of fixed assets investment projects; supervision and management of WS social (i.e. Trade Union) supervision agents; WS appraisal; labour protection appliances and safety labels; work related to the general coordination on the simultaneity of WS facilities and the main buildings in the design, construction and delivery of construction and technological renovation projects; work related to the National WS Expert Panel.

4. WS Emergency Rescue Office (& Department of Statistics):

Responsible for rules, procedures and standards of WS emergency rescue, information and statistics; the development of WS emergency rescue systems; the design and implementation of WS emergency rescue plans; coordination of emergency rescue work; design of a national WS administration evaluation index; general management of national WS and health information and statistics; accident alert and information processing; analysis of WS conditions and prediction of very serious accident incidence, release of pre-warning information.

5. First Safety Administration Department (Offshore Oil Drilling Safety Office):

Responsible for the supervision and inspection of the implementation of WS (&H) laws and regulations for mining (coal mining excluded), oil (refining, chemical and oil pipelines excluded) enterprises and their OSH conditions, the safety of equipment and facilities; the organization of review on the design and delivery of safety facilities in major construction projects; the management of WS permissions for mining enterprises; the supervision of the adoption of relevant safety standards; the overseeing of the closure of “less qualified” mines; general supervision and management of offshore oil drilling safety; investigation/punishment of major accidents and emergency rescue work.

6. Second Safety Administration Department:

Responsible for the direction, coordination and supervision of the administration of WS in those sectors with their own safety administration authorities; participation in the investigation and emergency rescue of very serious accidents; the direction and coordination of special inspections and rectifications in WS with relevant authorities.

7. Third Safety Administration Department:

Responsible for the supervision and inspection of WS(&H) conditions of chemical (including petro-chemical), medical, hazardous chemical, fireworks and firecrackers manufacturing enterprises; the management of permits for WS and hazardous chemicals production; investigating and penalising “less qualified” enterprises in WS; general administration of WS(&H) related to hazardous chemicals production; the compilation of the Hazardous Chemicals Index and registration of domestic hazardous chemicals; supervising the production and business management of non-medical toxic chemicals; organising the review of the design and delivery of safety facilities in major construction projects, supervising WS standardization work, participating in the investigation, punishment and emergency rescue of very serious accidents.

8. Fourth Safety Administration Department:

Responsible for the supervision and inspection on the implementation of WS (&H) laws and regulations by enterprises in metallurgic, non-ferrous, construction materials,

machinery, light industry, textile, tobacco, commercial and trade sectors, their WS(&H) conditions, safety of equipment and facilities; organizing the review on the design and delivery of safety facilities in major construction projects; participating in the investigation, punishment and emergency rescue of very serious accidents.

9. Occupational Health Administration Department:

Responsible for the supervision and inspection of Work Health (WH) in industrial, mining, commercial and trade enterprises (excluding coal mining); drafting rules and standards on WH (if not still within the competence of the Ministry of Health); investigation and punishment of WH accidents and illegal practices; WH permits; organizing and supervising WH training; organizing the report of work hazards; participating in the emergency rescue of WH accidents.

10. Personnel Department (State WS Supervision Office):

Responsible for personnel management, labour and rewards attribution work within the organization and its affiliated organizations; management of examinations and registration of certified safety engineers; supervision of safety training of industrial, mining, commercial and trade enterprises; daily administrative work of the State WS(&H) Supervision Office. State OSH supervisors are responsible for the coordination of, and participation in the investigation and punishment of very serious accidents.

SAWS's functions: SAWS' main functions are: to develop WS policies and plans, draft laws and regulations on WS, direct and coordinate national WS programmes, analyse and forecast national WS trends, release national WS information, coordinate and address prominent WS issues, among others. It is responsible for carrying out work safety and health (OSH) inspection in all workplaces, except for the sectors governed by line ministries such as construction, communications, railways, transport and traffic safety, or agriculture. Under the overall responsibility of SAWS, there are two vice-ministerial levels of State agencies: the State Administration of Coal Mine Safety and the National Emergency Rescue Command

SAWS's activities: The main activities of SAWS include:

- Drafting regulations on Work Safety;
- Managing WS(&H) inspection across the country, in particular, organizing WS(&H) inspection in industrial and business sectors;
- Conducting inspection in non-coal mining enterprises and enterprises manufacturing dangerous chemicals and fireworks;
- Managing occupational hygiene inspection in industrial and business sectors;
- Developing, disseminating and implementing WS rules, standards, procedures;
- Organizing WS investigations under the supervision of the State Council;
- Organizing, directing and coordinating rescue efforts after “occupational safety incidents” (in fact accidents);
- Managing WS in non-coal mines;

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- Monitoring and inspecting new, converted or extended engineering projects that fall under the jurisdiction of SAWS;
 - Organizing and directing the certification and training of inspection staff (with the exception of coal mining inspectors and specialized equipment inspectors);
 - Directing and coordinating product testing, WS inspection and management, and the training and certification process of safety engineers;
 - Directing, coordinating, and monitoring the administration of WS across China;
 - Organizing the development of safety technology;
 - Organizing international cooperation and exchange on WS; and
 - Fulfilling general duties of the State Council WS Committee.

Occupational hygiene/health inspection: The two terms, Occupational hygiene/health (OH) inspection are synonymous in Chinese, but what is meant corresponds broadly to international definitions of occupational hygiene inspection. These areas were, until recently, under the responsibility of the Ministry of Health. By decision of the State Council, SAWS established an OH Department in 2008. Under “Interim Rules on the Administration of OH in Workplaces”, issued in 2009, SAWS’ duties in OH inspection were determined and now cover a wide range.

Local governments above the level of district/county are responsible for the implementation and administration of WS and OH inspection, (Art. 9, LWS). At district/county levels, inspectors usually inspect both safety and health regulations. At the municipal level, joint inspection teams are the exception (e.g. in Shuzhou, Zhe Jiang Province). At times, teams intervene separately and not necessarily in a closely coordinated manner.

Thus, while the OH inspection function has been formally transferred to SAWS, changes have not yet been implemented at all provincial, municipal and district/county levels in the country. OH teams under provincial WS bureau, usually with a staff of 6 to 8, had, by June 2010, been established in all but 2 provinces. In these latter jurisdictions, OH inspection work remains under the provincial health departments. (The Ministry of Health continues to operate sanitation inspections responsible for, e.g. public hygiene supervision in occupational, radiation, environmental and school areas. It is also responsible for the sanitary inspection of public areas, potable water and responsible for monitoring the spread of infectious diseases).

Coal mine inspection: In accordance with the “Notice of the State Council on the Promulgation of Regulations on the Main Functions, Organizational Structure and Staffing of the State Coal Mine Safety Administration” (CMSA) by the General Office of the State Council No.101 [2008], the CMSA has been established (at the vice ministerial-level), as a State Bureau under the leadership of SAWS. As of September, 2009, 26 provinces had established Coal Mine Safety Inspection Departments. There are 73 Coal Mine Safety Inspection Bureaux with some 2,800 inspectors.

The CMSA is responsible for:

- Coal mine WS policies, participating in the draft of laws and regulations concerning coalmine safety as well as relevant rules, procedures and safety standards, industrial regulations and standards of the coal sector, make coalmine safety plan.
- Coal mine safety nationwide, the supervision of coalmine safety administration of local government; the supervision of the local government in their implementation of coal mine WS laws, regulations and standards, closure of coal mines, coal mine safety inspection and enforcement, specific rectification on coal mine safety, addressing and reviewing accident threats and the exercise of accident accountability system. To make recommendations and suggestions to local government and relevant departments.
- WS permissions for coal mines and the implementation of the coal mine safety permission system; the management and supervision of the examination and award of permits related to coalmine operation and the supervision of the relevant safety training.
- The supervision of work health in coal mines, work health permits, supervising the work health conditions of coalmines, investigating and punishing coal mine work health accidents and other illegal practices.
- Supervision, on the WS in coal mines, the supervision of the implementation of safety laws and regulations, WS conditions, safety of equipments and facilities, and the dealing with illegal practices or the imposition of administrative penalties on the sites.
- Release of national coal mine WS information, the statistics and analysis of national coal mine work health and safety accidents, the organization of or participation in the investigation and punishment of coal mine WS accidents and the supervision of the enforcement of accident investigation and punishment.
- Review and approval on the safety of major coal mine construction projects, the organization, design, review and delivery of safety facilities in coal mine construction projects and the investigation and punishment of less qualified coal mines in WS.
- Coordination of emergency rescue work for coal mine accidents.
- Coal mine research and the organization of safety checks of coal mine equipment, materials, and instruments.
- Direct the general safety management of coal mine enterprises supervise the appraisal of coal mine productive capacity and the closure of coal mines with relevant authorities and make review comments on coal mine technological renovation and gas usage projects.
- Perform other tasks assigned by the State Council and SAWS.

The State Administration of Coal Mine Safety has five departments (DG level):

1. General Office:

Responsible for the drafting of work rules and procedures within the organization; management of official documents, administrative information, confidentiality; coordinating personnel, finance and foreign affairs within the organization.

2. Safety Administration Department:

To supervise local government in their implementation of coal mine WS laws, regulations and standards, investigate and punish less qualified coal mines in WS conditions; organize the design, review and delivery of safety facilities in coal mine construction projects, responsible for the WS permission for coal mines; review and approve the safety of major coal mine construction projects; supervise the closure of coal mines and coal mine safety administration of local government.

3. Accident Investigation Department:

Organize the investigation and punishment of WS and health accidents in coal mines; draft work health enforcement rules and standards in coal mines; supervise the work health conditions in coal mines; coordinate or participate in the emergency rescue of coal mine accidents; supervise the law enforcement in coal mine WS; carry out administrative review; supervise the statistics and analysis of coal mine accidents, work health hazards and report; release coal mine WS information; perform day-to-day work of the State Coal Mine Safety Supervision Office.

4. Department of Science, Technology and Equipment:

Participation in the draft of coal mine safety administration laws and regulations; drafting of coal mine WS plans, rules, procedures and standards; supervision of the drafting of industrial rules and standards in the coal industry; organization of coal mine WS research and results promotion; supervision of the safety of coal mine equipments, materials and instruments and review of the technological renovation and gas utilisation projects in major State-owned coal mines.

5. Department of Industrial Safety Administration:

Supervision of the safety management and standardization in coal production enterprises; supervision of the establishment and implementation of safety threats checkups, report and treatment systems; supervision of local coal industry authorities in their appraisal of coal mine productive capacity; supervision of the WS in central coal enterprises and coal mine services enterprises; and the supervision of the review and approval of coal mine-related permission and relevant safety training.

The role of the State Work Safety Emergency Rescue Commanding Centre: In order to integrate emergency rescue resources across the country and enhance the State's ability to deal with major and very serious accidents, the State Work Safety Emergency Rescue Commanding Centre was set up in Beijing in 2006.

The Centre performs the administrative functions of supervising and managing national emergency rescue in cases of WS accidents and sees to the coordination and command of WS accidents and disaster emergency rescue work according to the national plans of WS accidents emergency rescue.

The main functions of the Centre include: participating in the draft and amendment of national laws and regulations concerning WS emergency rescue; making and managing national plans of WS emergency rescue; coordinating the emergency rescue work for very serious WS accidents, and mobilising rescue resources in cases of accidents.

The State Council WS Committee

In order to strengthen the uniform leadership of WS nationwide, promote the steady improvement of WS conditions, protect the safety of State assets and people's lives, the State Council WS Committee was established with approval of the State Council.

The Chairman of the WSC is one of the Vice Premiers of the State Council; Vice Chairmen include a State Councillor, the Minister of SAWS and the Deputy Secretary General of the State Council. Members consist of the heads or deputies of the State Council's ministries and agencies, other public organizations and the Army.

Under the leadership of the State Council, the WSC is responsible for research, management, leadership and coordination of WS nationwide, especially in regards to:

- Making major guidelines and policies for WS nationwide;
- Analysing national WS conditions and addressing prominent problems related to WS;
- Coordinating with Army headquarters and Armed Police headquarters to mobilize military forces for emergency rescue in case of very serious WS accidents;
- Dealing with any other WS-related tasks assigned by the State Council.

The General Office (GO) is the Secretariat of the Committee, located in SAWS. The Head of the Office is the Minister of SAWS, and his deputy is the Vice Minister. The main functions of the GO are to: make suggestions on major guidelines, policies and measures concerning WS; supervise the WS administration of government departments under the State Council and the provincial governments; organize major State Council inspection campaigns on WS; participate in the research on industrial policies, funding and R&D by relevant departments that involve WS issues; organize the investigation and punishment of major accidents; coordinate the emergency rescue work for very serious accidents; coordinate national WS law enforcement; organize WSC sessions and activities, inspect the implementation of WSC decisions; and any other tasks assigned by the WSC.

CYPRUS

Since 2003, legislation on health and safety at work in Cyprus has been harmonized with EU directives, while the social partners have shown signs of a new willingness to contribute to its effective implementation. The question of health and safety at work was arguably neglected in Cyprus to a great degree. Since 2000 in particular, changes have been effected which are aimed at organising existing institutions on a more rational basis.

From an institutional point of view, the most important institutional developments related to health and safety at work have been:

- a) the creation of the Pancyprrian Safety and Health Council;
- b) the establishment of the Cyprus Safety and Health Association;
- c) the introduction at the workplace of safety officers and safety committees.

The Pancyprrian Safety and Health Council is a tripartite body established by Law 89 of 1996 on health and safety at work. The Council advises the Minister of Labour and Social Insurance on policy-making in the field of occupational safety and health. Although, the Council has the potential to be particularly useful, in practice it is widely regarded as

having underperformed, over the last few years in particular, and as having failed effectively to achieve the purpose for which it was set up. This view is shared by the Ministry of Labour and Social Insurance, which is seeking to upgrade and strengthen the institution and has entered into a dialogue with the social partners on the issue.

The Cyprus Safety and Health Association (CySHA) was established in 1991. Its primary objective is an 'active contribution and participation in efforts to protect and promote health and safety at work and prevent risks concerning the public in general'. The CySHA has organized important ground-breaking conferences, mapped out policy and opened up new horizons in matters of safety and health. With the adoption of new legislation on occupational safety and health - and specifically in accordance with the provisions of Regulation 6 on management of safety and health issues at work (Regulations 173/2002) regarding protection and prevention services - the CySHA is studying the emerging need to introduce a register of people shown to have the necessary know-how and skills to function in the field of occupational safety and health. The CySHA set the criteria for acquiring the title of 'competent person in occupational safety and health' (CPOSH). The CySHA is represented on the Pancyprian Safety and Health Council. It also publishes the journal *Safety and Health* twice a year.

Law 89 of 1996 introduced the institution of safety officer (SO) in Cyprus. On the basis of the provisions of this law and the relevant Regulations on safety committees (Regulatory Administrative Act 134/1997), employers in certain areas of economic activity in the private and public sector, which employ more than 200 employees in accordance with an Order issued by the Minister of Labour and Social Insurance, are obliged to appoint full-time SOs. People appointed as SOs must be approved by the Minister of Labour and Social Insurance. In 1996, when the new Law on Safety and Health at Work was introduced, the 1988 Law on Safety in the Workplace was abolished and replaced. There are 38 SOs currently registered with the Department of Labour Inspection at the Ministry of Labour, working for 33 different employers.

In 1997, Regulations on workplace safety committees (SCs) were issued under the 1996 law, and at the same time regulations dating from 1988 and 1993 were abolished. Initially limited to specific industries, a process has started - in line with almost unanimous decision of the Pancyprian Safety and Health Council addressed to the Minister of Labour - of extending the institution of SCs to all sectors of economic activity. To this end, the number of SCs is expected to increase, since the services sector in particular has the greatest number of employees per undertaking.

Although the legislative framework is seen as being particularly helpful, the institution of SCs is believed to have slackened off. Contributing to this, according to commentators, has been unwillingness among employers along with a failure of trade union organizations to promote and support the institution. Judging from the state of implementation of the relevant legislation, critics argue that neither SOs nor SCs have been successful. To a large extent, this is said to be due to a lack of workplace health and safety culture. These developments have contributed to an increase in accidents at work.

On the legislative level, the harmonization - which began in January 2003 - of practically all the laws and regulations on health and safety at work with European Union directives and their implementation is considered to be a particularly important development. The provisions of the new legislation on occupational safety and health, and in particular the regulations passed in the last six years, seek to allow workers to function in the area of occupational safety and health according to the letter and the spirit of the EU legislation.

Harmonization is being achieved through the Safety and Health at Work Law, as amended between 1996 and 2003. On the basis of this law, 23 Regulations have also been passed with regard to various individual issues, such as:

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- a) the minimum requirements for safety and health at work with visual display screen equipment Regulations (455/2001);
 - b) the minimum requirements for safety and health at work of workers with fixed-duration employment or temporary employment Regulations (184/2002);
 - c) the Maternity Protection Regulations (255/2002).

There is no doubt that until quite recently questions of safety and health at work was not given the requisite attention, either on the institutional level or in practice. The lack of a culture, inadequate knowledge of health and safety matters, the relatively meagre legislative framework before 2000 and the fact that its implementation was almost exclusively limited to industry, along with a lack of effective control mechanisms, led to a number of problems, the most important being an increase in occupational accidents. The new specialized legislation, fully harmonized with the European acquity, in conjunction with the emerging willingness of the social partners to contribute to its effective implementation, are now laying the foundations on which workplace health and safety conditions can be significantly improved.

CZECH REPUBLIC

Legislation in labour inspection and supervision of health and safety at work: A uniform system of the state professional supervision of health and safety at work was introduced in 1968 by the Act on State Professional Supervision No. 174/1968 Coll., which established the supervision in the Czech Republic by the Czech Office of Occupational Safety (ČUBP) and safety at work inspectorates (IBP). ČUBP was based in Prague and, as an office with the statute of a central agency, it established, through the Decree No. 18/1969 Coll., nine inspectorates in total, based (with a single exception) in regional capitals.

Main tasks of the safety at work inspectorates were:

- performance of supervision (inspections);
- evaluation of design documents for selected construction projects;
- application of requirements for safety at work when putting construction projects into operation, - investigation of occupational injuries;
- investigation of operating accidents of technical equipment;
- issuance of authorizations and certificates for activities performed on specified technical equipment (equipment with an increased risk for the operators and surrounding environment-pressure, lifting, electric and gas equipment).

In the 1990s the last mentioned function was handed over to an independent state organization, which was and still is the Institute of Technical Inspection Prague (ITI Prague).

Apart from the activities stated in the Act, the inspectorates also provided advice to the employees and employers. The conditions fundamentally changed by the adoption of the Act No. 251/2005 Coll. on labour inspection, which came into effect on 1 July 2005. The act introduced several major changes into the previous practice of the inspectorates and the central office, particularly:

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- Abolition of the Czech Office of Labour Inspection and establishment of the State Labour Inspection Office based in Opava (hereinafter the Office);
 - Abolition of safety at work inspectorates (Czech acronym IBP) and development of regional labour inspectorates (Czech acronym OIP);
 - Expanding of the inspection powers with comprehensive inspection of observation of obligations resulting from labour law regulations;
 - Major increase of the upper limit for sanctions, from 500 000.- CZK to 2 000 000.- CZK;
 - Accurate definition of facts of the case for transgressions and administrative offences which may be sanctioned with fines.

Sphere of competence of the Office and the inspectorates: The Office and the inspectorates deal with the compliance of laws and regulations resulting from:

- a) legal regulations, which establish rights and obligations in labour law relations for employees, respective trade union body or council of employees or representative for occupational safety and health protection, including legal regulations on remuneration to employees, refund of wage or salary and refund of expenses to the employees, with the exception of legal regulations on employment and legal regulations on protection of employees in case of the employer's insolvency;
- b) legal regulations establishing working hours and time for rest;
- c) legal regulations to ensure safety at work;
- d) legal regulations to ensure safe operation of technical equipment posing a risk to life and health and legal regulations on safe operation of specified technical equipment;
- e) legal regulations on employment of women, underage employees, employees taking care of children and employees, who have proved that they primarily themselves take care of another physical person in the long-term, who is under a special legal regulation viewed as a person dependent on assistance of other physical persons in level II (medium serious dependency), in level III (serious dependency) or level IV (total dependency);
- f) legal regulations regulating performance of artistic, cultural, sporting and promotional activities by children.

State professional supervision over safety at work: In 1968, the state professional supervision over safety at work was regulated by means of Act no. 174/1968 Coll., and it was ensured through occupational safety inspectorates.

Certain tasks relating to dedicated technical equipment were entrusted to the newly founded organization of state professional supervision – the Institute of Technical Inspection Prague (hereinafter “ITI Prague”). With the exception of specific activities of ITI Prague, the supervision over safety at work was excluded from Act no. 174/1968 Coll. in 2005 by means of Act no. 251/2005 Coll. on Labour Inspection, and it is currently ensured by the State Labour Inspection Office and regional labour inspectorates.

Organization of the state professional supervision – (ITI Prague) – remains for the area of dedicated technical equipment, i.e. equipment with a higher risk to health and safety of individuals / property, subject to the supervision pursuant State Professional

Supervision Act (SPS). It concerns technical pressure, lifting, electric, and gas equipment. According to the degree of dangerousness, the dedicated technical equipment is divided into classes or groups, and a method is set for verifying professional qualification/competency of organizations, entrepreneurs and individuals relating to activities carried out on/with the use of the equipment.

Labour inspection authorities and organization of the state professional supervisions: The labour inspection authorities in the Czech Republic are:

- The State Labour Inspection Office in Opava;
- Regional labour inspectorates.

The central public administration authority, which governs the system of the State Labour Inspection Office, is the Ministry of Labour and Social Affairs of the Czech Republic.

The State Labour Inspection Office is headed by an Inspector General, who is appointed by the Minister of Labour and Social Affairs. The regional labour inspectorates are managed by the State Labour Inspection Office. The regional labour inspectorates are headed by head inspectors, who are – upon discussion with the Inspector General – also appointed by the Minister of Labour and Social Affairs.

The State Labour Inspection Office (SLIO) has 546 employees in total.

Overall, there are 327 inspectors in the area of labour inspection in the Czech Republic, of which 203 inspectors act in the area of health and safety at work and 124 inspectors act in the area of labour relations and working conditions (PVP).

The ITI Prague is responsible for the organization of the state professional supervision over the safety of dedicated equipment in the Czech Republic. The institute has its regional branches.

Education and training of employees of the SLIO system: The inspectors continuously upgrade their knowledge in expert courses and trainings organized by SLIO, the Brno Institute for Occupational Health and Safety Education, the Prague State Administration Institute or by other agencies.

One of the fundamental conditions for valid regulations to be fulfilled correctly in practice is the high expertise of the employers and employees that are supposed to perform the tasks in the prevention of risks.

Fundamental changes in the securing of the expertise of persons authorized by an employer for the fulfilment of tasks in the prevention of risks was brought by Law No. 309/2006 Coll. (Work Safety Act), of January 1, 2007 and stipulates that an employer employing:

- 25 employees at most can secure the tasks in the prevention of risks by themselves, if they have the necessary knowledge for this;
- 26 to 500 employees can secure the task in the prevention of risks by themselves, if they are professionally qualified for this, or by one or more professionally qualified persons;
- more than 500 employees always secure the tasks in the prevention of risks by one or more professionally qualified persons.

In accordance with this law, professional qualification is proven by the successful passing of an examination in front of an experts' commission at an accredited facility. Accreditation for the performance of tasks in the prevention of risks is granted by the Ministry of Labour and Social Affairs.

Candidates for the acquisition of professional qualification that do not have the necessary knowledge can upgrade their education in courses organized by accredited training organizations. Accreditation for these purposes is granted by the Ministry of Education, Youth and Sports.

A condition for the acquisition of professional qualification is school education and practice in the extent pursuant to legal regulations.

The issue of the acquisition of professional qualification for the performance of the tasks of a construction site occupational health and safety coordinator is regulated in a similar manner pursuant to the same Law No. 309/2006 Coll.

The validity of the acquired professional qualification is five years, after which it must be renewed by successfully passing a new examination.

DENMARK

The Danish occupational health service system developed throughout a period of 25 years as a multidisciplinary preventive advisory system with obligations to enterprises and strong worker participation has been reformed in 2005.

The Danish work environment regulation is based on principles of participation of the workers. The participation is organized in the enterprises in a safety organization according to principles pointed out in the legislation. The tasks of the safety organization are designed so that its activities (of the safety organization) do not affect the responsibility of the management:

- a) control and assessment of the work environment situation in the plant;
- b) advise to improvements carried out by the management decisions.

The safety organization is build up from the so called safety groups in every department of the enterprise and a central safety committee for the entire plant. The safety group consists of the supervisor of the department and a safety representative elected by and among the employees. The two members of the group collaborate on the practical maintenance of the work environment and in carrying out solutions.

The safety committee is composed of a chairperson representing the employer and two representatives elected by the supervisors and two elected by the safety representatives. The task of the committee is to manage the work environment activities in the enterprise.

The OSH legislation states some contributions to promote a good function of the co-operation in the safety organization:

- a) rules of how to organize the safety organization with safety groups and safety committee;
- b) a rank of tasks: workplace assessment according to the EU directives, participation in the planning of technology in work-organization, analyses of hazards
- c) qualifications: the members of the safety groups are obligated to follow a 37-hour education and the work environment councils have to develop and offer optional supplemental education;
- d) for the members of the safety organization, the work environment activities will always be the secondary task, so an easy access to support is necessary from safety managers and work environment councils.

The system is based on obligations for the enterprises in specified lines of trade. Enterprises with an OSH-certification have no longer OSH-obligations from January 2005 and all the others with OSH-obligations have been inspected by the labour-inspection until 2009 and therefore become free of OSH-obligation when they become inspected. However, until 2011 all enterprises in Denmark are inspected by the labour inspection whether they are OSH-obligated or not.

As a result of the visit, the labour inspection can demand the enterprise to use an OSH inspector to solve specified types of OSH-problems. This demand can be related to advisory for a period of one or two years to develop the internal OSH-activities in the company or related to specific problems, which have to be solved.

The organization and function of the OSH-system: The Danish OSH-system is designed to be the primary support system for the safety organization. It is designed for prevention of work environment problems and health promotion through technical, ergonomic, medical and psychological support to the safety organization. It is not designed for individual health treatment of the employees.

That is why OSH is based on these principles:

- a) All enterprises in specific industrial lines have to participate in OSH activities;
- b) An OSH-unit is financed and is property of the affiliated enterprises by annual fees, and their membership includes a right to some OSH consultant services without extra fees
- c) An OSH-unit is managed by a board consisting of an equal number of employers' representatives and workers' representatives.
- d) Enterprises have the freedom to plan how to use their OSH funds- in a dialogue with the OSH-unit. There are only a very few rules in legislation that oblige specific OSH-consultant activities such as health examinations and exposure control;
- e) The authorities keep control with the quality of the OSH-units and their consultant services.

The OSH consultant services have to be:

- a) Holistic and multidisciplinary;
- b) Have a high level of prevention;
- c) Have to support the safety organization and development of the enterprises internal work environment capacity.

In the legislation, it is stated that the safety organization has to participate in the cooperation between the enterprise and its OSH committee.

Several areas of co-operation are pointed out as areas in which it is compulsory to involve the safety organization:

- a) Choice of OSH-form (in-plant OSH, local OSH-centre or line of trade OSH);
- b) Election of representatives for the employees in the OSH-board;
- c) It is mandatory to involve the safety organization in the debate of the basic agreement between the enterprise and the OSH (how the co-operation between the enterprise and the OSH shall be practically organized);
- d) Design of the specific OSH-consultant jobs and evaluation of them afterwards (Did the work environment improve and did the enterprise learn to handle its work environment problems?);

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- e) Continuous dialogue and information between the safety organization and the OSH committee.

If the OSH-personnel spot an acute - but not realized - danger in the plant, they have to inform the safety organization, the exposed worker and the enterprise (the relevant supervisor).

The Danish OSH system is part of the work environment regulation system, and not of the national health care system.

In the country there is also the Association of Preventive and Health Services in Denmark (Arbejdsmiljørådgiverne). The latter is the co-operation body of the occupational prevention and health-service units. It co-operates with the Danish legal authorities, the labour market organizations and the work environmental research- and education institutions in Denmark as well as in the Nordic countries and Europe.

The Association's main tasks are:

- a) To promote dialogue between the OSH-system and other parts of the Danish work environment system: the legal authorities (e. g. labour inspection) and councils driven by the social partners;
- b) To develop and maintain the education of the OSH-consultants;
- c) To define the frame of the development and improvement of the methods of OSH-activities;
- d) To organize any other activity of common interest for all the OSH-units (e.g. IT-systems, databases).

The Association is member of The European Network of Safety and Health Practitioner Organizations.

EUROPE

EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK: The European Agency for Safety and Health at Work seated in Bilbao (Spain) aims to make Europe's workplaces safer, healthier and more productive. The Agency has a tripartite composition (representatives from governments, employers' and workers' organizations). The Agency's principal safety and health information network is made up of a "Focal Point" in each EU Member State, and the EFTA countries and in the Candidate countries (CC's) to the European Union. A Focal Point is normally the competent national authority for safety and health at work, and is nominated by each government as the Agency's official representative in the country concerned. The Focal Points play a key role within the Agency. They are responsible for the organization and co-ordination of the national networks and are involved in the preparation and implementation of the Agency's Work Programme. Like the other elements of the Agency structure, the national networks are tripartite and include governmental representatives together with workers' and employers' organizations. The role of the Focal Points is to provide information and feedback to Agency initiatives and products.

As part of the community tools in the field of safety and health at work, the Agency remains a key player within the European Union strategy. In particular, the Commission has called upon the Agency to carry out the followings actions:

- a) ensure that its activities raise awareness and promote and disseminate best practice, focus to a greater degree on high-risk sectors and SMEs;
- b) draw up, through its European Risk Observatory, a report examining the specific challenges in terms of health and safety posed by the more extensive integration of women, immigrant workers and younger and older workers into the labour market. It will help to pinpoint and monitor trends and new risks and identify measures which are essential; review the extent to which health and safety aspects have been incorporated into Member States' vocational and occupational training policies. On the basis of this information and the opinion of the Advisory Committee on Safety, Hygiene and Health Protection at Work, the Commission will consider whether or not to present a proposal for a recommendation;
- c) collect and disseminate information intended to support the development of occupational health promotion campaigns, in combination with the strategy and Community public health programmes;
- d) develop sectoral awareness-raising campaigns targeted in particular at SMEs, and to promote the management of health and safety at work in enterprises through the exchange of experience and good practices aimed at specific sectors;
- e) encourage national health and safety research institutes to set joint priorities, exchange results and include occupational health and safety requirements in research programmes;

The Risk Observatory of the European Agency should enhance risk anticipation to include risks associated with new technologies, biological hazards, complex human-machine interfaces and the impact of demographic trends.

EUROPEAN UNION STRATEGY: OSH policy, in the EU, is not only a matter of laws and regulations. They need to be applied at the workplace level, with a view to achieving measurable improvements of the working conditions and a reduction of occupational accidents and diseases. In this context, it is necessary to combine them with a variety of other instruments, such as social dialogue, good practices, awareness raising, corporate social responsibility, economic incentives and mainstreaming. At EU-level, this holistic approach towards OSH has been adopted in the form of Community strategies on health and safety at work. The current Community strategy aims to achieve a 25 per cent cut in accidents at work across the EU by the end of 2012. To achieve this goal it calls for action by players at all levels – European, national, local and workplaces. A key concept and fundamental pillar for reaching the objectives of this Community strategy is the development and implementation of coherent national strategies in the EU Member States. The shift towards new and information led strategies is a global one. For example, the ILO adopted in 2006 its Promotional Framework for Occupational Safety and Health; the WHO embraced a Global Action Plan on Worker’s Health 2008 – 2017. Also, many countries outside the EU have developed OSH strategies to provide a clearer focus on the overall direction and to set the OSH priorities in their countries. An essential step in the development of a national OSH strategy and programme is the preparation of a national OSH profile. Today, several countries have already developed such profiles, which provide an inventory of all the tools and resources available in the country to implement and manage OSH.

As mentioned above, the main challenge of the current strategy, which has effect until 2012, is to reduce the total incidence rate of accidents by 25 per 100,000 workers in the EU-27. To achieve this goal, the Commission has proposed the following:

- a) guarantee the proper implementation of EU legislation;
- b) support SMEs in the implementation of the legislation in force;
- c) adapt the legal framework to changes in the workplace and simplify it, particularly in view of SMEs;
- d) promote the development and implementation of national strategies;
- e) encourage changes in the behaviour of workers and encourage their employers to adopt health-focused approaches ;
- f) finalize the methods for identifying and evaluating new potential risks;
- g) improve the tracking of progress; and
- h) promote health and safety at international level.

Results from the latest reports show that many workers believe that their jobs negatively impact their health and safety. Some categories of workers are still overexposed to occupational risks including young workers, workers with job insecurity, older workers, and migrant workers. Also, certain types of companies are more vulnerable to hazards than others. For example, SMEs often have limited resources for installing complex systems of worker protection, and some are just more susceptible to the negative impact of health and safety problems. Another challenge comes from the fact that some occupations are dangerous, providing a substantial increase in risk of injury. The presence of these continuing challenges underlines the need for persistent work to improve health and safety throughout the EU.

In the EU, workers are injured in accidents every five seconds. Furthermore, one dies every two hours. Overall, this equals 7.6 million accidents at work and 4,900 fatalities

every year. In addition, a significant amount of these injuries result in three days of absence from work. Not only is health and safety at work important to the individual, but also it is important to the business. The cost of accidents at work and occupational illnesses ranges from about 3 to 4 per cent of Gross National Product. In addition to individual businesses, national economies feel the detrimental impact of these statistics. In this context, the role of the European Agency for Safety and Health at Work (EU OSHA) is a key player within the framework of this strategy.

The Commission has called upon the Agency to carry out the actions mentioned above.

FINLAND

Occupational, Safety and Health are not only seen as part of the primary health care system, but also as part of the workplace health and safety system. Occupational health is an integral part of the government policy to develop work life, promote health, and secure adequate, effective social and health services for everyone. The Ministry of Social Affairs and Health formulates the strategy and runs the occupational health action programme until 2015. It also supervises the occupational health service and safety systems. All important issues concerning legislation and the development of OSH are discussed in the tripartite Advisory Board on OSH at the Ministry, which comprises social partners, the government, the providers of OSH and the Finnish Institute of Occupational Health (FIOH).

The Occupational Health Care Act: The Occupational Health Care Act (1383/2001) aims at promoting cooperation between the employer, the employees and the occupational health service provider in order to: 1) prevent work-related illnesses and accidents; 2) raise the level of health and safety of work and the work environment; 3) maintain and improve the health, work ability and functional capacity of employees at different stages of their work careers; and 4) promote the functioning of the work community. This obliges employers to organize and pay for preventive services for all workers regardless of the size, industrial sector or form of the enterprise or organization. It covers both private and public sectors. Organization of curative services is voluntary, but 93 per cent of workers eligible for curative services have access to them. OSH is voluntary for self-employed persons and entrepreneurs, such as farmers. The employer can acquire OSH services from municipal health centres or private medical centres, the services may be integrated into the enterprise, or enterprises can jointly organize their OSH. In 2007, one third of OSH units were municipal, one third in plant or joint clinics of the employers, and 40 per cent were private OSH units. Private OSH increased its share by 11 per cent in a relatively short time, between 2004 and 2007. Approximately half of Finland's employees receive health services from private clinics, one third from municipal health centres and the rest from employers' self-organized services. 60 per cent of the enterprises, mostly smaller ones, are served by municipal health centres, 36 per cent by private OSH centres, and the remaining 4 per cent organize services themselves.

The number of OSH units has been gradually decreasing over the past ten years, and total 663 at the end of 2007. These units serve 1.87 million workers. The coverage of OSH was highest among salaried employees (87 per cent). Sixty-three per cent of entrepreneurs in agriculture, and 37 per cent of other self-employed persons and entrepreneurs organized OSH. The financing for reimbursements is collected mainly from employers, as a deduction from the payroll for the Sickness Insurance Fund. In the same year, the total costs of occupational health services were 459 million Euros, and reimbursement costs were 218 million Euros; the average yearly costs per employee was 257 Euros, and reimbursement costs 122 Euros.

The OSH unit works in workplaces to identify hazards and strains at work, assess health risks associated with these, and to prioritize actions together with employers and workers in order to minimize their adverse effects. The focus is on the planning, implementation and follow-up of actions to improve work, the work environment, and work communities in organizations. At the individual level, the focus is on maintaining employees' health and work ability by considering both work-related and public health concerns in health check-ups, and when administering medical care. OSH services provide

rehabilitation advice, refer employees for further treatment or rehabilitation as needed, and help them to return back to work. All actions in OSH are based on conclusive scientific and/or practical evidence. These principles are expressed in the law, applied in the Good Occupational Health Practice Guide, and implemented in OSH processes. Continuous quality improvement is required. According to the latest SSI statistics from 2007, some 5 million medical visits were made to OSH and one million visits for medical check-ups. OSH teams used 285,000 hours for risk assessments, and 260,000 hours for counselling and advisory services.

OSH structure: The core team in Finnish OSH consists of an occupational health physician and an occupational health nurse. In many units, a physiotherapist and a psychologist also belong to this team. Other experts, who complement the team when needed, are ergonomists, occupational hygienists, construction engineers, agricultural advisors, opticians, dieticians, speech therapists and physical fitness trainers. In 2007, the total number of posts in OSH was 7,300: 2,369 physicians, 2,355 public health nurses, 751 physiotherapists, 316 psychologists, and 799 auxiliary staff. Half of the units had a certified occupational physician. Ninety per cent of the core team members had completed the 11 study point post graduate training, which is required when working regularly in OSH.

Despite the economic crisis, the focus of the Finnish government policy remains the same: to extend the working career of the working population, maintain the good health and work ability of the population and to offer adequate social and health services. OSH plays an important role in the implementation of this policy.

There is a consensus among stakeholders to keep OSH viable. This is reflected in legislation and regulations, strong institutional support, and in the work of employers, employees and OSH professionals. As OSH in Finland provides comprehensive prevention, promotion, and curative services, it is in an excellent position to encourage the employer and employees to discuss safety and health issues, and to define corrective actions. This is particularly important in small and medium-sized companies which have fewer resources and are seldom visited by safety inspectors. Workplaces can benefit from OSH multidisciplinary expertise. Moreover, OSH allows control of the work environment, work community and personal factors in maintaining and improving health, well-being and the work ability of workers. It also follows the public health approach, which is becoming as important as the control of hazards at work.

The strengths of OSH in Finland are health promotion at both individual and workplace level, the recognition of lowered work capacity, rapid diagnosis, treatment, and rehabilitation. Rapid, easy access to service improves the quality of life and maintains the earning potential of a worker. It saves the costs of companies and society at large. Special emphasis has therefore been placed on improving the early detection of lowered work ability. From the health system's point of view, building seamless service chains between primary health care, specialist health services, and rehabilitation is important – this is the focus of the present health and social services reform. A centralized national electronic system of keeping health records and following the patients' contacts in health services is under construction in the SSI and will be available in 2015.

The coverage of OSH is high among salaried employees. Self-employed entrepreneurs have had access to comprehensive OSH, including both preventive and curative services, from the beginning of 2006. Since then, many have joined OSH, but the coverage is still low among micro companies and self-employed entrepreneurs. The goal is to extend the coverage to all working people (actively employed and unemployed) in Finland. Special research and development projects for small and medium-sized enterprises are in progress at FIOH.

New ways to organize OHS have been initiated in order to improve services particularly in small municipalities and areas in which it is difficult to attract qualified OSH professionals. A regional OSH model, a public enterprise model, and a joint venture model of public and private OSH are some of the recent developments. It is still too early to draw conclusions on their effectiveness, but studies are underway. However, it already seems that a bigger unit size would be more feasible. For example, multidisciplinary is now being realized in OSH units serving more than 4,000 people. Adjustments have been made to make the compensation system meet the demands of new OSH organization models.

Competent OHS personnel are necessary in order to provide quality services, and the current situation is satisfactory. However, the number of specialized occupational health physicians is still insufficient, and core competences and minimum training requirements have now been set for all OSH professionals. Postgraduate training in OSH has been going on for many years at FIOH, universities and polytechnics for public health nurses, physiotherapists, psychologists, and other OHS specialists. Four-year specialization studies are required to become an occupational health physician and increased number of specialization posts and educators in the universities and FIOH has led to the number of graduates doubling. Multidisciplinary has been strengthened already by offering joint courses for occupational health physicians, nurses, physiotherapists and psychologists for several years. A virtual university for occupational health has also been running since 2005.

The content and practices of OSH need to be researched and developed continuously. The second edition of the Good Occupational Health Practice Guide was published at the beginning of 2006. Evidence-based OSH practice guides are available on several topics, such as work-related upper extremity disorders, occupational asthma, and depression. FIOH will continue to co-ordinate the Cochrane Occupational Health Field, and produce systematic reviews. At the OSH unit level, FIOH has developed a self-assessment tool called the 'Quality Key', which is currently in use in many OSH units.

Regular surveys of OSH activities, working conditions and activities related to the maintenance of work ability, combined with the OSH statistics collected by SSI will form a sound basis for the formulation of health policies and strategies in the future. In addition, FIOH and other national research institutes complement statistics and survey data with the results of targeted research and action-oriented development projects. A firm legal base, long traditions in negotiating occupational health and safety matters between social partners, together with the existing reimbursement system have enabled systematic continuing development of OSH in Finland.

FRANCE

In France, occupational risk prevention is the responsibility of the Direction Générale du Travail (DGT) and of the Direction de la Sécurité Sociale (DSS).

Role of DGT: The DGT is in charge of the national public policy for prevention at the workplace: it prepares, develops and implements regulations in this field.

The Higher Council for the Prevention of Occupational Risks (CSPRP – Conseil supérieur de la prévention des risques professionnels) assists the Ministry of Labour as a consultative body. It groups the representatives of State authorities, workers and employers, and professionals. It can propose all measures for prevention at the workplace, and is consulted for all bills or draft regulations related to occupational risk prevention.

In the field, the Regional and "Departmental" Labour, Employment and Vocational Training Directorates (DRTEFPs – Directions régionales du Travail, de l'Emploi et de la Formation professionnelle and DDTEFPs - Directions départementales du Travail, de l'Emploi et de la Formation professionnelle), and Labour Medical Inspectorate relay to the DGT. The French Labour Code states that the regional medical inspectors "must take permanent action to protect the physical and mental health of workers at the workplace and contribute to the health monitoring for the benefit of the workers".

Control and supervision missions, information and consulting, the enforcement of legislation and regulations related to working conditions and health and safety at the workplace, are mainly carried out by the Labour Inspectorate.

The role of DSS: The role of the Social Security Directorate (DSS - Direction de la Sécurité sociale) is to set the rating rules and conditions for workers' compensation for occupational accidents and diseases. It contributes, liaising with the Ministry of Labour, to elaborating the prevention policy. It is supported at national level by the National Health Insurance Fund for Salaried Employees (CNAMTS - Caisse nationale de l'assurance maladie des travailleurs salariés). It defines the means and measures to promote occupational risk prevention in firms under the General Social Security Scheme. In terms of occupational risk prevention, the powers of the CNAMTS are transferred to the Occupational Accident and Disease Commission (CATMP – Commission des accidents du travail et des maladies professionnelles), a joint committee made of workers' and employers' representatives.

The National Technical Committees (CTNs - Comités techniques nationaux) assist the CATMP in its mission; they are grouped by profession or group of professions. They comprise worker and employer representatives, study risks specific to their activities and make technical recommendations per economic sector.

While the ministry in charge of labour and its branches take action essentially through regulations, the CNAMTS triggers actions focused on practical recommendations, financial incentives, supervision, technical assistance and consulting for companies to implement appropriate prevention measures, or to promote training and information on health and safety at work.

Sixteen Regional Health Insurance Funds (CRAMs - Caisses régionales d'assurance maladie) and four General Social Security Funds (CGSSes - Caisses générales de Sécurité sociale) relay the CNAMTS. They adapt the CNAMTS guidelines to regional realities. Besides supervising, the CRAM and CGSS agents support and guide firms on technical means to be implemented to prevent occupational accidents and diseases.

It is important to note that, in the same way that the CTNs assist the CATMP, the Regional Technical Committees (CTRs - Comités techniques régionaux), grouped by profession or group of professions, assist the CRAMs and CGSSes in occupational risk prevention.

The National Research and Safety Institute (INRS - Institut national de recherche et de sécurité) for the Prevention of Occupational Accidents and Diseases works for employees and companies under the General Social Security Scheme, according to directives set by the CNAMTS. It provides technical assistance: studies and research, training in prevention, technical and documentary assistance, information (periodicals, posters, brochures, audiovisuals and web sites).

Other specialized agencies: Other technical assistance organizations contribute to this national prevention action:

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- a) The *National Agency for the Improvement of Working Conditions* (ANACT - Agence pour l'amélioration des conditions de travail). It is supervised by the ministry in charge of labour. Its mission is to contribute to the development of research to improve working conditions, collect and disseminate information in this field, and help companies to assess and prevent occupational risks.
 - b) *Occupational Risk Prevention Organization for the Building and Civil Engineering Industries* (OPPBTP - Organisme professionnel de prévention du bâtiment et des travaux publics). It is supervised by the ministry in charge of labour. It contributes to prevention in all building and civil engineering firms.
 - c) *Eurogip*, a public interest grouping created by the CNAMTS and INRS, complements this system: it coordinates, develops and promotes activities at European level, particularly in the field of standardisation.
 - d) The *Institute for Radiological Protection and Nuclear Safety* (IRSN - Institut de radioprotection et de sûreté nucléaire) is a public establishment of an industrial and commercial nature (EPIC), under the joint authority of the ministries of Defence, the Environment, Industry, Research and Health. The IRSN carries out research and expertise in the field of risks related to ionising radiation, natural or used in the industrial or medical environment.
 - e) The *Health Monitoring Institute* (InVS - Institut de veille sanitaire) is to constantly monitor the population's health and its evolution: epidemiological surveillance and investigations, analysis and exploitation of knowledge on health-related risks, expertise. It has a Health-Work division.
 - f) All the described organizations collaborate largely and all have a role to play in occupational risk prevention in France.

Role of social partners: The social partners assist the State authorities, via the Higher Council for the Prevention of Occupational Risks (CSPRP). They manage the occupational accidents and diseases sector via the Occupational Accident and Disease Commission (CATMP - Commission des accidents du travail et des maladies professionnelles). They constitute the INRS Board of Directors.

The professionals (employers, workers, federations or professional unions) are associated to the elaboration of rules and measures they are implied in: they are part of the CSPRP, National Technical Committees (CTNs), and Regional Technical Committees (CTRs).

At the enterprise level, the manager is the main prevention partner. He/she should guarantee the health and safety of workers by implementing appropriate measures (depending on the risks assessed by him or her). Regulations consider the manager as responsible for this. To do so, he or she should be assisted by all technical competencies and seek all the required advice.

Other partners assist the manager in prevention decision-making:

- a) the Health, Safety and Working Conditions Committee (CHSCT - Comité d'hygiène, de sécurité et des conditions de travail): authority or forum for managers and workers to discuss health and safety at work issues;
- b) staff delegates (in firms where there is no CHSCT);
- c) staff;

d) occupational physicians in the occupational health services.

In some firms, the manager may assign a person specifically in charge of safety and health at work matters. The title and function of this health and safety specialist vary with the firm's safety engineers, safety coordinators, among others.

The CHSCT is particularly in charge of analysing risks to which the employees are exposed and proposing to the employer the measures deemed necessary. It is chaired by the manager or his/her representative and is made up of staff delegates. The occupational physician attends meetings in an advisory capacity. The labour inspector and CRAM occupational risk prevention departments' agents are also invited to attend.

Occupational physicians support and advice the manager and employees in implementing risk prevention measures, with two essential missions: medical surveillance of employees (with regular visits) and working conditions monitoring (by studying workstations and conditions of exposure to risks).

GERMANY

Germany's long-standing tradition of occupational safety and health is reflected in the country's mature, firmly established institutions and structures. The key players in Germany's dual OSH system are the government and statutory accident insurers. Statutory health insurance organizations and a wide range of other agencies, standards bodies and technical surveillance also play a role along with other bodies. The federal government – or more accurately the Federal Ministry of Labour – has legislative powers and is supported by an authority that is answerable to the Federal Ministry for OSH. Whilst only the federal government has the power to introduce legislation, the individual federal states are responsible for checking that government regulations are being implemented. Employers have a duty to provide their employees with statutory accident insurance cover. This has the purpose of preventing, organizing and funding of medical, occupational and social rehabilitation for victims of occupational accidents and diseases, as well as providing compensation through pension payments to beneficiaries. Statutory accident insurers also act in a legislative and monitoring capacity, run their own training and research institutions, and have enjoyed considerable success, particularly with respect to sector-specific prevention. While statutory accident insurance is funded solely from employers' contributions, the key policy decisions are reached by way of joint self-management (equal voting rights for employers and the representatives of insured parties). Statutory accident insurance underwriters must work closely together with the statutory health insurance provider in sharing information on working conditions and occupational diseases. Statutory health insurance providers have a similar legislative duty to devise comprehensive measures aimed at promoting health within companies. In areas that are not governed by laws and ordinances, standards bodies continue to play a major role, as do technical inspection agencies, particularly those responsible for dangerous plants and installations.

A number of players are involved in-company OSH, which is based on and legitimized by legislation. Generally, all OSH provisions are aimed at employers, and it is they who are responsible for the safety and health of their employees in the workplace. Employers may delegate some of this responsibility to supervisors, but ultimately, they bear the overall responsibility. Also, employers have been required by law since the mid-1970s to take advice on OSH-related matters from company doctors and occupational safety officers. The requirements of company doctors and occupational safety officers, their job descriptions, and their duty to cooperate with various other parties are also laid down by law. Furthermore, employers must appoint safety delegates with responsibility for monitoring OSH in their company unit or department, and supporting employers in fulfilling their OSH obligations. Company workforces elect a works council every four years. The works council is responsible for dealing with all company-related problems. Depending on its size, one or more work council members may be responsible for OSH, i.e., making sure that OSH regulations are observed and putting forward proposals on how to improve OSH. They even have a direct right of co-determination in some areas. Naturally, employees also form part of the in-company OSH system.

The role of tasks and responsibilities: The German Confederation of Trade Unions (DGB) and its affiliates operate at various levels of both the in-company and external OSH system, participating in a wide range of different committees and advisory bodies set up by the Ministry of Labour. The main emphasis here is on establishing a comprehensive body of technical regulations. The unions are also represented on the Advisory Council of the Federal Institute for Occupational Safety and Health (FIOSH), helping to plan work

programmes and design research programmes. Such cooperation is generally governed by ordinances, while cooperation with the respective OSH authorities in the federal states usually runs along informal lines. Almost all federal states have working groups that include representatives from the relevant federal state agencies, and deal primarily with issues specific to that state. Well over 1,000 union affiliates are involved in the self-governing bodies that form part of the statutory accident insurance system. The practice-oriented OSH committees comprise active, experienced members of works councils. The Boards of the individual accident insurers are likewise made up of committed, full-time union officials, whereas the bodies within the umbrella organizations also include Executive Board members from individual unions and designated social policy specialists. The same applies to the bodies set up for statutory health insurance.

At company level, unions are mostly involved in informing and training union members and, to some extent, those work council members with OSH responsibilities. The same applies to safety delegates, who are very often also union members. At institutional level, cooperation is nurtured between professional associations of company doctors and of OSH specialists, who often have common interests and engage in positive cooperation.

The Health and Safety at Work Act (1996): The main core provisions of the Health and Safety at Work Act (ArbSchG) are:

- a) For the first time ever, Germany has a uniform legal basis applying to all areas of activity and all groups of workers, including therefore public sector workers;
- b) For the first time ever in the German occupational safety and health legislation, all employers have the same high level of obligations. So, Article 3.1 of the Health and Safety at Work Act requires 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”;
- c) The benchmark is now a modern understanding of occupational safety and health, namely one involving measures to prevent industrial accidents and occupational health risks, including socially acceptable work organization;
- d) Occupational safety and health must be integrated into companies’ decision-making processes, and this must be done systematically on the basis of risk assessments, the planning, implementation and evaluation of measures. Assessment must take account of the kind of activity involved, and any plans must consider and create appropriate linkages between all relevant company-related factors, specifically technology, work organization, other working conditions, social relations and the influence of the environment on the workplace;
- e) There is a general duty on all employers to seek advice. The range of duties of company doctors and occupational safety officers was expanded with respect to the duty to support employers in performing risk assessments;
- f) When they have specific grounds of complaint, workers now have a right of appeal to the competent authority where measures taken and resources provided by the employer are insufficient to guarantee safety and health protection at work, and the employer fails to take remedial action following such complaints;
- g) Government inspectors and employers’ liability funds must work together on enforcement.

Social Code (SGB): The new section VII of the Social Code (SGB) on preventive legislation is the biggest advance in authority for statutory accident insurance since Bismarck's social legislation. Article 14 states: "(1) Accident insurers must take any appropriate measures to prevent industrial accidents, occupational diseases and work-related health risks and ensure that effective first aid is available. At the same time, they should investigate the causes of work related hazards to life and health. (2) Accident insurers shall work together with health insurance funds to prevent work-related health risks."

Further passages of section VII of the Social Code contain provisions that flesh out these fundamentally new rules, in particular with regard to prevention:

- The scope of accident prevention regulations is expanded to the prevention of all work-related health risks. In performing their new, more extensive range of duties, accident insurance funds must monitor companies and provide advice to employers and the insured workers alike;
- The powers and duties of supervisors are expanded in the same way;
- Accident insurers and the *Länder* occupational safety and health authorities have a duty to work closely together in supervising companies and encourage exchanges of experience;
- Insured workers must comply with all measures to prevent industrial accidents, occupational diseases and work-related health risks that they are able to, and follow any instructions to that effect issued by the employer;
- Safety delegates should go beyond their traditional duties and also call the employer's attention to accident risks and health hazards to which workers are exposed;
- Accident insurers must ensure that the necessary basic and advanced training is provided;
- Either through their own research or participation in research by others, they should help to clarify the causal link between incidences of illness and unhealthy work-related factors.

The new occupational safety and health legislation and its underlying modern concept of occupational safety and health protection also affect all areas and levels of workforce representation. The new legal bases have provided works councils and staff councils with a firmer footing on which to monitor and enforce occupational safety and health measures. In many respects, the scope of workforce representation has extended to include such things as taking up workers' individual health related complaints, integrating occupational safety and health into broader company life and management concepts, cooperating with occupational safety and health authorities and institutions, as well as accident insurers, and helping individual workers to look after their own health concerns within the company. This means that workforce representatives must have more extensive support from their trade unions, especially in the form of training, advice and their integration into company, multi-company or regional networks.

Trends in OSH policies: The situation in Germany has changed dramatically over the last few years. The social policy of the welfare state that has existed up to now is being deflected against the backdrop of economic difficulties and chronic mass unemployment. Overall, there is a gradual turning away from the principle of solidarity and equality, and the focus is shifting increasingly towards the so-called "personal responsibility" of the

individual, social justice is being redefined as equal opportunity in competition, and there is a loss of social solidarity. Occupational safety and health protection is seen as a cost burden that undermines competitiveness. The pressure on occupational safety and health protection is growing enormously with moves to promote deregulation.

The debate is still going on in the country and the social partners are placing any effort in the promotion of the ILO Conventions, especially Convention No. 81 (labour inspection) and Convention No. 155 (health and safety and the work environment), and to support the ILO's drive to establish a worldwide culture of occupational safety and health.

INDIA

The Constitution of India contains specific provisions on occupational safety and health of workers. *The Directorate General of Mines Safety (DGMS)* and the *Directorate General of Factory Advice Service and Labour Institutes (DGFASLI)*, the two administrative units of Ministry of Labour and Employment strive to achieve the principles enshrined in the Constitution of India in the area of occupational safety and health in mines, factories and ports.

The Directorate General, Factory Advice Service & Labour Institutes (DGFASLI): *The Directorate General, Factory Advice Service & Labour Institutes (DGFASLI)*, Mumbai, which is an attached office of the Ministry of Labour and Employment, functions as a technical arm of the Ministry. It assists the Central Government in formulation and review of policy and legislation on occupational safety and health in factories and ports; maintains a liaison with Factory Inspectorates of States and Union Territories in regard to the implementation and enforcement of provisions of the Factories Act, 1948; renders advice on technical matters; enforces the Dock Workers (Safety Health & Welfare) Act, 1986; undertakes research in industrial safety, occupational health, industrial hygiene and industrial psychology etc.; and provides training, mainly, in the field of industrial safety and health including one year Diploma Course in Industrial Safety, three-months' Post Graduate Certificate Course in Industrial Health (Associate Fellow of Industrial Health (AFIH), six weeks' course in Industrial Hygiene Techniques and One month's Specialized Certificate Course in Safety and Health for Supervisory Personnel working in Hazardous Process Industries.

The DGFASLI comprises of the headquarters; five Labour Institutes and Inspectorates Dock Safety in 11 Major Ports. The Headquarters in Mumbai has three divisions/cells, namely, Factory Advice Service, Dock Safety, and Awards.

The Central Labour Institute (CLI): *The Central Labour Institute (CLI)* in Mumbai started working from 1959. The Institute was shifted to the present premises at Sion, Mumbai in February 1966 and all the disciplines functioning at different locations under the Chief Advisor of Factories were brought under one roof. The Institute has grown and assumed the status of a major National Resource Centre with the following division: - *Industrial (Safety, Hygiene, Medicine, Physiology, Psychology, Ergonomics)*; - *Environmental Engineering*; - *Staff Training*; - *Small Scale Industries*, - *Productivity*; - *Major Accident Hazards Control*; - *Management Information Services*; - *Safety and Health Communication*; - *Construction Safety*.

The different divisions at the Institute undertake activities, such as, carrying out studies and surveys, organizing training programmes, seminars and workshops, rendering services, such as, technical advice, safety audits, testing and issuance of performance reports for personal protective equipment, delivering talks, among others.

The Regional Labour Institutes (RLIs): *The Regional Labour Institutes (RLIs)* located in Kolkata, Chennai and Kanpur are serving the respective regions of the country. Each of these institutes have the following divisions/sections: - *Industrial Safety*; - *Industrial Hygiene*; - *Industrial Medicine*; - *Staff Training and Productivity*; - *Communication*; - *Major Accident Hazards Control*; - *Computer Centre*.

The Regional Labour Institute has been created in Faridabad. It serves the Northern states/UTs viz. Delhi, Punjab, Haryana, J & K, and Himachal Pradesh, in more effective and direct manner as these are being presently looked after by the Regional Labour Institute, Kanpur, which is having a large number of states to extend its services.

The Inspectorates of Dock Safety are established at 11 major ports of India viz. Kolkata, Mumbai, Chennai, Visakhapatnam, Paradip, Kandla, Mormugao, Tuticorin, Cochin, New Mangalore and Jawaharlal Nehru Port. The Inspectorate of Dock Safety at Ennore Port was also set up. The Major Accident Hazards Control Advisory Division at the Central Labour Institute, Mumbai advises State Governments and MAH units on control of Major Accident Hazards, preparation of emergency plans, safety audit, risk assessment etc.

Management Information Services: The CLI is equipped with microfiches and international software such as CCINFO discs, CIS bibliographic database, NIOSH Registry of Toxic Effects of Chemical Substances and information on Chemicals of Environmental and Health Concern (CESARS). It also has WHAZAN and EPACHEM software. Microfiche reader Services are provided through a well-equipped library having over 25,000 books and technical journals. NICNET connectivity through e-Mail service has been established in CLI. Also, Indian Occupational Safety & Health Network (INDOSHNET) is established by the Ministry of Labour and Employment, Government of India with DGFASLI as nodal agency and CIS Centre as the Network facilitator.

DGFASLI Web site: DGFASLI web site was launched in January 2001. The web site www.dgfasli.nic.in is a source of information on various safety and health related matters, such as database on abstract on OS&H studies, reports, information on advisory services rendered by DGFASLI in the area of testing of respiratory and non-respiratory personal protective equipment, flame proof equipment approval, material safety data sheets and National Referral Diagnostic Centre, etc. The INDOSHNEWS newsletters of DGFASLI are also available on the web site. The training programmes calendar for all the labour institutes, announcement on National Safety Awards & Vishwakarma Rashtriya Puraskar awards, AFIH course, Diploma Course in Industrial Safety along with the application forms are available on the web site. The web site enables users to access other useful web sites related to safety and health and get the national directory of organization profile of agencies engaged in the field of safety and health. The web site also contains the Factories Act, 1948, the Model Rules framed there-under and also the Dock Workers (Safety, Health and Welfare) Act, 1986 etc. Statistics of Factories, Docks, List of Chief Inspectors of Factories, and List of Dock Safety Officers are also available.

Safety and Health Communication: For the purpose of updating the Industrial Safety, Health and Welfare Centre of the Central Labour Institute, as well as to provide art support for the production of video films, publicity material, such as banners, safety posters, and technical literature, etc., the CLI has an Art Studio equipped with the necessary facilities.

Industrial Safety, Health & Welfare Centre: Industrial Safety, Health and Welfare Centre of the Central Labour Institute and the Regional Labour Institutes promote the hazard communication through display of panels, models, charts, graphs, write-ups etc. which is visited by workers, executives from industry and delegates from other countries.

Testing of Personal Protective Equipment: The testing laboratories for respiratory and non-respiratory personal protective equipment at the Central Labour Institute, Mumbai undertakes performance tests of canisters, masks, helmets, safety shoes, safety goggles, safety belts, welding glasses among others.

Approval of Flame proof Electrical Equipment: As per the BIS standard IS: 2148-1981, DGFASLI is the approving agency for Flame Proof Electrical Enclosures for their use in hazardous atmosphere.

Representation on BIS Committees: Officers of DGFASLI represented on several BIS Committees/Sub-committees dealing with Safety and Health comments on draft standards. The DGFASLI on behalf of the Ministry of Labour and Employment has been implementing the *Vishwakarma Rashtriya Puraskar (VRP)* since 1985 (earlier known as Shram Vir National Awards) and the *National Safety Awards* scheme since 1965. These schemes were modified in 1970 and again in 1977. The schemes presently in operation are as hereunder:

- *Vishwakarma Rashtriya Puraskar:* It is designed to give recognition at the national level to outstanding suggestions resulting in (a) higher productivity; (b) improvement in working conditions; (c) savings in foreign exchange (import substitute as well as quality and safety of products); (d) improvement in overall efficiency of the establishments. It covers workers employed in factories and docks. Applications for the awards under this Scheme are invited every year and these are forwarded by the management on behalf of the workers. Prizes are grouped in three classes i.e. Class (A) = 3, Cash Award of Rs.50,000/- each, Class (B) = 5, Cash Award of Rs.25,000/- each and Class(C) = 10, Cash Award of Rs.10,000/- each;
- *National Safety Awards:* National Safety Awards are given in recognition of good safety performance on the part of the industrial establishments covered under the Factories Act, 1948, the employers covered under the Dock Worker (Safety, Health and Welfare) Act, 1986 and the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. Shields and Citation Certificates are awarded to Winners and Runners-Up. Schemes I to VI are meant for factories and construction sites and Schemes VII and VIII are for Ports.

The Directorate General of Mines Safety (DGMS): Under the Constitution of India, safety, welfare and health of workers employed in mines are the concern of Central Government (Entry 55 - Union List - Article 246). The Mines Act, 1952 and the Rules and Regulations framed there-under regulate the objective. These are administered by the Directorate General of Mines Safety (DGMS) under the Union Ministry of Labour and Employment. Apart from administering the Mines Act and Subordinate Legislations there-under, DGMS also administers other similar legislations. These are as follows:

- *The Mines Act, 1952* (Coal Mines Regulations, 1957; Metalliferous Mines Regulations, 1961; Oil Mines Regulations, 1984; Mines Rules, 1955; Mines Vocational Training Rules, 1966; Mines Rescue Rules, 1985; Mines Crèche Rules, 1966; Coal Mines Pit Head Bath Rules, 1959);
- *The Indian Electricity Act, 1910* (Indian Electricity Rules, 1966);
- *Allied Legislation* (Factories Act, 1948: Chapters III & IV Manufacture; Storage & Import of Hazardous Chemicals Rules, 1989 under Environmental Protection Act, 1986; Land Acquisition (Mines) Act, 1885; The Coal Mines (Conservation & Development) Act, 1974.

Organization set-up: The Directorate General of Mines Safety (DGMS) is a subordinate office under the Ministry of Labour and Employment with its Headquarters at Dhanbad (Jharkhand) and is headed by the Director-General of Mines Safety. At HQ, the Director is assisted by specialist staff-officers of Mining, Electrical and Mechanical Engineering, Occupational Health, Statistics, Law, Survey, Administration and Accounts disciplines.

The Head Quarters has a Technical Library and S&T Laboratory as a back-up support to the organization. Field organization has a two-tier network. The entire country is divided into six zones, each under the charge of a Deputy Director General. There are three to four regional offices under each local office. Each region is under the charge of the Director of Mines Safety. There are in all 21 regional offices. Five sub-regional offices have also been set up in important areas of concentrated mining activities away from regional offices. Each of these is under the charge of a Deputy Director. Besides having inspection officers of mining in each zone, there are officers of Electrical and Mechanical Engineering and Occupational Health disciplines.

Circulars: DGMS issues circulars to the mining industry on occupational safety and health matters, which may have wide implications.

Competency test: To ensure that only competent persons are appointed as mine managers, surveyors, overman, foreman etc. the DGMS, on behalf of the Board of Mining Examinations constituted under the Coal Mines Regulation, 1957 and the Metalliferous Mines Regulations, 1961, conducts examinations and issues certificates of competency.

Approval of mines safety equipment: Approval is granted by Chief Inspector of Mines (also designated as Director General of Mines Safety) to various equipment for use in mines to fulfil the statutory obligation enshrined under different provisions of Coal Mines Regulation, 1984, Metalliferous Mines Regulations, 1961, Oil Mines Regulations, 1984, Mines Rescue Rules, 1985 and Indian Electricity Rules, 1956. The procedure of approval includes scrutiny of the applications mainly to find out the quality control system adopted by the manufacturers and their capacity to manufacture equipment material etc. which will be capable of working safely under the hostile environment of the mines and remain operative under prolonged use under adverse conditions. The equipments also need to conform to the relevant Indian Standards and in case there is no Indian Standard, the standards of the country of origin (ISO/EN/DIN etc.). The application should also include test certificates from approved laboratory as per the relevant standard. After the documents are scrutinized and found in order, field trial approval is granted to check the pit worthiness of the equipment in various mines. After the equipment are successfully field-tried, performance report from the concerned mine management is obtained. If the above reports are found satisfactory, regular approval is granted for a specific period.

Major Programmes: Two major areas are included:

11. Occupational Safety

- a) Monitoring of implementation of the Technical Standards on Support System in Board and Pillar workings;
- b) Review of standards on stability of multi- seam workings;
- c) Review of standards on detection, control, protective measures against fire and revision of standards/guidelines;
- d) Assessment of hazards associated with mine mechanization and standardization of monitoring techniques and control measures;
- e) Standardization of prototype test(s) for testing power supports and hydraulic / friction props;
- f) Standardization of Ultrasonic Testing Techniques and formulation of Acceptance and Rejection Norms;
- g) Testing of fire resistance hydraulic oils.

Occupational Hygiene and Health

- a) Standardization of techniques for monitoring and control of occupational hazards from noise, air borne dust, mine gases and poor illumination;
- b) Review of standards of medical examinations;
- c) Review of standardization of procedures for surveillance of occupational diseases already established.

Human Resources Development: The Mines Safety & Health Academy comprises Institutes at Dhanbad and Nagpur for imparting structured training to the inspecting officers of DGMS so as to update and upgrade their technical and professional competence and improve their effectiveness in regulatory, enforcement, advisory and promotional roles. The facilities created are utilized for disseminating latest information on mine safety principles and practices amongst the key safety personnel of the mining industry and inspectors.

Development of Mine Safety Information System (DMSIS): This system is designed to render statistical support to DGMS for effective administration of the Mines Act, 1952. As per this Act and different rules and regulations framed therein, it is mandatory for the management of every mine coming under the purview of Mines Act to submit information regarding various facets of mining operation such as average daily employment, production, usage of machinery and explosives, etc. in the mines in certain specified formats in the form of annual and quarterly or monthly returns. Based on the information received, tables on employment, production, mechanization, use of explosives, index of labour earnings, etc. are generated. In addition, information regarding accidents in mines and brief description of findings of enquiry in respect of each and every fatal accident that occurred during the reference year form a part of the annual publication entitled “Statistics of Mines in India - Vol. I & Vol. II”. Volume I pertains to information relating to coal mines and volume II to Metalliferous and Oil mines in India. A “*Monthly Review of Accidents*” is also brought out to reflect the trend in accidents. In addition to the above, a “Monthly Activity Report” covering all major activities including important developments/ achievements of the organization is published.

The National Safety Council (NSC): The National Safety Council (NSC), set up by the Ministry of Labour and Employment, Government of India on 4th March, 1966 is an autonomous, national level institution with a tripartite Board of Governors. Its mission is to develop a national movement on Safety, Health and Environment towards preventing and mitigating loss of life, human suffering and economic losses. It is an institution of international reputation having an all India network with more than 6,200 members comprising Corporate Members (industrial establishments, employers’ organizations, professional bodies / institutions and trade union organizations), individual Members and Life Members with 14 Chapters and 31 Action Centres across the country. The activities of NSC include conducting training, national and international conferences; HSE audits, emergency preparedness and other consultancy services; issuing technical publications and periodicals (Quarterly Industrial Safety Chronicle and Bi-monthly Newsletter); production and distribution of safety promotional material; spearheading national level campaigns National Safety Day/Week, Fire Service Week, World Environment Day, ILO-World Day, etc.; operating NSCI Safety Awards Scheme and special projects in emerging key areas of national concern. At the international level, NSC has developed close collaboration with ILO, UNEP, World Bank, EPA (USA), ADPC (Bangkok), WEC, JISHA (Japan), NSC (USA) and the member organizations of APOSHO (Asia Pacific Occupational Safety and Health Organization) of which NSC is a founder member.

The National APELL (Awareness and Preparedness for Emergencies at Local Level) Centre (NAC): The National APELL (Awareness and Preparedness for

Emergencies at Local Level) Centre (NAC) has been established since April 2002 in the NSC Headquarters under the MoU with the Division of Technology, Industry & Economics (DTIE) of UNEP, Paris. It is the first APELL Centre in the world. It has the technical support and information from UNEP and other international sources and the Ministry of Environment & Forests, Government of India and the stakeholders. NAC is dedicated primarily to strengthen chemical emergency preparedness and response in India through the use of the internationally accepted APELL process. It is a Resource Centre to provide objective and quality information, advice and training. Also, it is a focal point for networking and promoting effective partnership among authorities, industry and community. Its actions are particularly focused at the local level.

INDONESIA

The main Indonesian law on OSH is the Work Safety Act (Law No.1, 1970). This law covers all workplaces and emphasizes primary prevention. The Health Act (Law No. 23, 1992) dedicates its Article 23 for occupational health stating that occupational health is carried out so that all workers can work in good health without endangering themselves or their community, and to gain optimal work productivity along with the labour protection programme.

Occupational safety and health management system: Indonesia has adopted a law on OSH management system (OSH-MS) at large or high-risk enterprises. Regulation (No. PER.05/MEN/1996 on Occupational Safety and Health Management System) stipulates that “Any company employing 100 employees or more, or containing harmful potential issued due to process characteristic or production material which may cause occupational accidents such as explosion, fire, contamination and occupational disease is obligated to implement an OSH-MS. An agency, called PT Sucofindo, is authorized by the Directorate of OSH Standards of the Ministry of Manpower and Transmigration (DEPNAKER) for auditing and certifying the companies for OSH-MS. An institution, called Patra Nirbaya, has been approved by the Department of Mining and Energy to carry out similar activities in oil companies. The Manpower Act (Law No. 13, 2003) refers to OSH-MS (Articles 86 and 87). According to the Act “every worker has the right to receive protection against safety and health hazards, protection against immorality and indecency, and treatment that shows respect to human dignity and religious values; every enterprise must apply an OSH-MS, to be integrated into the enterprise’s general management system”.

OSH committees: All companies hiring more than 50 workers must have an OSH committee and register it at the local DEPNAKER office.

Employees’ social security scheme (JAMSOSTEK): Based on the Employees’ Social Security Act in 1992 (Law No.3, 1992), the Government established a public limited liability company, employees’ social security scheme (JAMSOSTEK). The Act covers the benefits related to (i) employment accidents, (ii) old age, (iii) death, and (iv) health care. The compulsory coverage applies to employers hiring 10 employees or more, or paying a monthly wage payroll of 1 million Rupiahs or more. Workers injured at work are entitled to benefits covering (i) the cost of transportation, (ii) the cost of medical examination, treatment, and/or hospital care, (iii) the cost of rehabilitation, and (iv) cash payments consisting of disability or death allowances. Compensation of employment injuries is considered as the employers’ responsibility and therefore employment injury schemes are normally financed by employers. In general, there are three methods of setting the contribution rates: (i) uniform rate which is applicable to all enterprises regardless of the past experience or industry; (ii) differential rates according to risks or industry but independent of the actual experience of the individual establishment; (iii) merit or experience rating where the rate is fixed or adjusted individually for each establishment on the basis of the accident record and safety conditions in the individual workplace.

The Department of Manpower and Transmigration (DEPNAKER): According to the Work Safety Act (Law No.1, 1970), the Department of Manpower and Transmigration (DEPNAKER) is responsible for setting-up the national OSH policy to ensure the universal and smooth implementation in Indonesia. For sectoral and technical implementation, the DEPNAKER may decentralize its monitoring function broadly. Directorate General of OSH Standards undertakes general monitoring of OSH regulations while labour inspectors and OSH experts, appointed by DEPNAKER, undertake direct monitoring. OSH regulations are also included in laws such as the Health Act, as well as regulations related to mining, nuclear power, oil and gas, industry etc under the jurisdiction of such Government agencies as the Department of Health, the Department of Mining and Energy which is responsible for mining inspection, and the Department of Industry.

Directorate General of OSH Standards (PNKK): The OSH inspection has been decentralized and the responsibility has been transferred to the provincial Governments since 1984. At the Directorate General of Labour Inspection of DEPNAKER, about 1,400 inspectors are involved in the labour inspection nationwide. About 400 of labour inspectors are qualified for OSH inspection, under the jurisdiction of the Directorate General of OSH Standards (PNKK) The PNKK Directorate is composed of four sub-directorates: (i) Mechanics, steam engines and pressure vessels; (ii) Occupational and Environmental Health; (iii) OSH institutions and expertise; (iv) Building construction, electrical installations, and fire hazards. Besides the workplace inspection, PNKK investigates accidents, conducts training courses and seminars, and promotes OSH implementation. Furthermore, they examine and certify the heavy or hazardous machinery operators. As a result of a reorganization of DEPNAKER in 2003, the Directorate General of OSH Standards was divided into two Directorates, namely, the Directorate of Occupational Safety Standards and the Directorate of Occupational Health Standards.

Occupational Health Centre of the Department of Health: Occupational health services are the mandate of the Occupational Health Centre, under the General Secretariat of the Department of Health. The Centre is divided into (i) Occupational Health Services Section, (ii) Occupational and Environmental Health Section, and (iii) Administrative Unit. The Centre has set up a Strategic Plan of the Occupational Health Programme to carry out nation-wide efforts. OSH is one of the programmes in achieving Healthy Indonesia Vision 2010 – the current policy of the Department of Health. The Healthy Indonesia Vision 2010 was established to encourage national health development, increasing evenly distributed and accessible health services for individuals, families, and communities.

The Centre for Development of Occupational Safety and Health (HIPERKES): The Centre for Development of Occupational Safety and Health (HIPERKES) was established in 1964. It was formerly called the National Institute of Occupational Health and Safety. The Centre is the research arm of DEPNAKER under the Directorate General of Manpower Planning and Developments. The HIPERKES carries out the following functions: (i) factory services to identify hazards, exposure measurement and assessment, design and hazard control, monitoring and evaluation; (ii) training and education for managers, safety and health committees, workers and trade unions, medical doctors at the enterprises, and nurses; (iii) OSH research on various subject areas; (iv) pre-placement and periodical medical examination; and (v) consultation on environmental impact assessment of industrial discharges. One of the important duties of the HIPERKES is to make recommendations for OSH standards and assist in the standard development process. The HIPERKES has industrial hygiene and environmental laboratories as well as an occupational health laboratory for measuring physical fitness and identification of occupational diseases.

National Tripartite Occupational Safety and Health Council (DK3N): The National OSH Council (DK3N) was set up by DEPNAKER in 1982 as a tripartite body to provide recommendations and advice to the Government at the national level. Members of this

Council comprise of all key OSH organizations, including the employers' and workers' representatives. Its tasks are to collect and analyse OSH data at the national and provincial level, assist DEPNAKER in supervising the provincial OSH councils, undertake research activities as well as organize training and education programmes. The DK3N is an active member of the Asian Pacific Occupational Safety and Health Organization (APOSHO) and cooperates closely with Japan Industrial Safety and Health Association (JISHA), Japan International Centre for Occupational Safety and Health (JICOSH), and the US National Safety Council. Among others, the DK3N has made the following recommendations: (i) amend the Work Safety Act (Law No.1, 1970) to better respond to the challenges of the globalization and change its name from Work Safety Act into "Occupational Safety and Health Act"; (ii) designate 12 January as the national OSH day; and (iii) revise the labour law and for numerous ministerial regulations concerning chemicals, occupational diseases, national OSH campaigns, OSH-MS, among others.

IRELAND

The Health and Safety Authority (HSA) is the national body in Ireland with responsibility for occupational health and safety. Its role is to secure health and safety at the workplace. It is a state-sponsored body, established under the Safety, Health and Welfare at Work Act, 2005 and reports to the Minister for Enterprise, Trade and Employment.

In addition to the 2005 Act, there is also the Chemicals Act 2008 which gives further effect to EU chemicals-related legislation such as REACH, Detergents Export/Import regulations.

Regulations relevant to the area of occupational health include those set out in the General Application Regulations 2006 on Manual Handling, Display Screen Equipment, Noise, Vibration, Sensitive Work Groups and so on. Other substantial regulations include the Biological Agents, Asbestos, Chemical Agents and Carcinogens.

The Authority consults widely with employers, workers and their respective organizations. To help develop sound policies and good workplace practices, the Authority works with various Advisory Committees and Task Forces etc. which focus on specific occupations and hazards.

The HSA has overall responsibility for the administration and enforcement of health and safety at work. The HSA monitors compliance with legislation at the workplace and can take enforcement action (up to and including prosecutions).

The role of the Authority is:

- to reduce the risk of ill health to workers by a preventative approach. This means ensuring that employers identify existing and future risks and potential risks to health;
- to implement actions to control these risks and continuously improve their health management systems;
- to undertake and support targeted promotion of health for employers and workers that focus on those issues which contribute to good workplace health;
- to gather, analyse and apply the best available data, both national and international, and to conduct and access appropriate research.

The HSA represents the national centre for information and advice on all aspects of workplace health and safety. The Authority promotes education, training and research in the field of health and safety.

Occupational safety and health policy at national level is determined by a twelve-member, tripartite Board, with nominees from the social partners and other interest organizations concerned with safety and health in the workplace. The appointment of the Board of the Authority is a function of the Minister for Labour, Enterprise, Trade and Employment under the Safety, Health and Welfare at Work Act, 2005.

It operates from eight offices across Ireland: the Dublin headquarters and offices in Kilkenny, Athlone, Cork, Galway, Limerick, Sligo and Waterford.

OSH Inspectors' powers: Inspectors of the Health and Safety Authority are granted a number of powers under Section 64 of the Safety, Health and Welfare at Work Act, 2005.

Inspectors can use some or all of the following powers during the course of inspection. They include:

- The right of entry into any place where the Inspector believes the place is being used as a place of work or used for the keeping of articles or substances. However an inspector cannot enter a dwelling place without the consent of the owner or under the terms of a warrant issued by a District Court.
- In relation to any inspection an inspector may search and examine the place of work or any process or procedure carried out there and examine any records, articles or substances that are kept there and can require that the place or part of the place or anything in that place is left undisturbed until any examination, search and investigation is concluded.
- An inspector can also require persons at the place of work to produce any records the inspector may require and also provide information to the inspector relating to any entries made in those records. An inspector can also take copies of any records in paper or electronic format and require reasonable assistance to access any records held on a computer system or can take the original records for further examination, investigation, inspection or an inquiry for as long as is reasonably necessary.
- The inspector can also require persons at the workplace to provide information required relating to an inspection, investigation, inquiry or examination and can also require that assistance and facilities to enable the inspector to exercise his/her powers are provided. The information that may be required extends to any article, substance, work activity, installation or procedure and a person can be summoned by written notice at a specified time and place to give such information or produce records required by the Inspector.
- An inspector can also require that any article is operated or set in motion or any procedure is carried out in their presence.
- An inspector may question any person that they consider may be able to provide information relating to any search, inspection, investigation, examination, or inquiry and require that person to answer the questions and sign a declaration of the truth of the answers.
- Inspectors can take measurements, photographs, video recordings or any other recordings they consider necessary including the use of monitoring equipment and

atmospheric sampling. They can also arrange for any testing, examination or analysis to be carried out at the place of work, or any other place they specify, of any substance or article at the place of work and they can also require that any articles or substances or samples of them are supplied without charge.

- Inspectors can require any article or substance at the place of work that they consider to be or have been a risk to safety or health to be dismantled or subjected to any process or test. They can also remove and retain any article or substance required for examination, or to ensure it is not tampered with or to ensure it is available for use as evidence in any proceedings.
- An inspector can require a person they consider may have committed an offence to provide their name and address to him/her.

ITALY

Legislative framework: According to Law No. 172 of 2009, the Italian OSH system is organized around the National Health Service (ASL). The Ministry of Health is the central body of the ASLs and its main tasks consist on the national planning and co-ordination of all matters regarding public health. The National Institute of Occupational Safety and Health (ISPESL), which depends on the Ministry of Health, is one of the technical-scientific bodies of the ASL and it operates on all occupational safety and health matters. The ISPESL is organized at the local level with 36 departments. Due to the process of decentralization 19 Regions and two Autonomous Provinces have the task of regional planning and co-ordination on labour inspection services, including OSH issues. All activities concerning prevention, monitoring, inspection and safety and health at work fall under the competence of the local ASL, through their departments of prevention, that were established in each Region.

The role of the Ministry of Labour and specialized agencies: The Ministry of Labour and Social Security plans and co-ordinates the national labour and employment policies and strategies. Labour inspectorates are present at the local level all over the country.

The Italian Institute of Social Medicine (IIMS) is an advisory body, under the Ministry of Labour, devoted to study and research regarding social diseases and prevention tools. A Permanent Advisory Committee for Accidents Prevention and Occupational Hygiene, headed by the Minister of Labour, monitors the application of the legislation, as well as its updating, and deals with OSH specialists.

The National Institute of Insurance against Accidents at Work (INAIL) operates under the vigilance of the Ministry of Labour, managing the mandatory insurance funds against occupational accidents and pathologies. The INAIL has regional and local offices all over the country. Based on the notifications received, INAIL publishes data on accidents at work and occupational diseases in a national database.

The INAIL data are subdivided into several sections: data on women, data on disabled and weekly accidents. The data includes statistics useful for prevention purposes, allowing the identification of the most risky activities, and of the geographical areas where accidents happen more often. Moreover, accidents severity rates are estimated, as well as the most frequent ways in which accidents and professional diseases occur in industry and agriculture. The data is subdivided into the following subject areas: “insured companies”, “reported events”, “indemnified events”, “risk”, and “monthly data”. Data are available for accidents at work and for occupational diseases. They are broken down by region, industry branch, type of consequence among others.

With regard to the coverage of the preventive occupational safety and health services, it should be noted that all workers employed are protected during working activities in all economic sectors, both public and private.

Organization of the inspection services: The organization of the inspection services relating to safety and health at work has been recently subject to significant modifications as a result of the adoption of the Lgs. D. No. 81/2008 as emended by Lgs. D. No. 106 of 2009. The needs to give a new form to the organization of safety and health inspection services, has arisen from both public opinion and trade unions.

To this end, public authorities have set up bodies operating at central level. One is the Committee for the Orientation and Assessment of the Policies and the Central Coordination of the Supervising Activities on Safety and Health at Work (hereinafter, CSH), composed of the Minister of Labour (chairperson), three representatives of the Labour Ministry, a representative of Ministry of Transport, a representative of the Ministry of the Interior and of five representatives of Regions. According to Article 5 of Lgs.D. n. 81/2008, the CSH's main task is to set up public policies and actions aimed to improve the conditions of safety and health of all categories of workers, as well as to fix the objectives and the planning of monitoring activities by the determination of the priority sectors of intervention.

The advisory Commission for Safety and Health at Work examines issues relating to the interpretation and the application of safety and health legislation. It expresses advice on the yearly plans relating to monitoring activities set up by the CSH, determines the promotional activities aimed to improve awareness and knowledge on the safety and health issues among employers, workers, students, etc..., frames the standardized proceedings for evaluation of the risks to the safety and health at the workplace (Article 6 Lgs. D. No 81/2008).

At local level, art. 7 of Lgs. D. assigns to Regional Committees the function to grant the coordination with objectives and planning set up at central level as regards the inspection services' activities entrusted with the monitoring on safety and health at workplace.

In order to supply bodies entrusted with both the planning of monitoring activities and the assessment of the accident and industrial diseases prevention activity, the Ministry of Labour has set up an information network, called National Informative System for Prevention at Workplaces. This network gives to the bodies concerned the necessary support through a unified data-base containing information coming from the activities of all institutions and authorities (including the Police) involved (Article 8 Lgs D. No. 81/2008).

Compliance with OSH legislation: As regards safety and health, art. 13, par. 1 of Lgs.D. No. 81/2008 assigns the general competence in supervising the compliance with legal provisions relating to this area to officials working under the authority of the ASL. They are specialized technical inspectors having a more extensive jurisdiction than the general labour inspectors. They have an exclusive competence in the chemical industry, for example. Within the ASL administration, in addition to technical labour inspectors there are also doctors, nurses and administrative staff. The ASL inspectors, in addition to health and safety at workplace, are involved in hygiene and public health, food hygiene and veterinary. Concerning health and safety at the workplace, they are responsible for monitoring the compliance with legislation and also have a role in prevention of accidents. Regarding the enforcement of standards, due to their quality of "judicial police officers" they have the right to enter the enterprise day and night. They are responsible for identifying breaches in law and may notify warnings, and impose administrative sanctions (fines). In practice, they have powers and procedures identical to those applied by the technical labour inspector. ASL labour inspectors carry out investigations on accidents and

occupational diseases, and also on those that may be requested by the judiciary. Furthermore, the ASLs play an important role in the prevention of occupational hazards. Some inspectors provide a role of information and advice enterprises. They are also in charge of organizing information training session for workers on health and safety issues. Each region defines its own priorities. Usually there are six priority areas for action: metallurgy, construction, noise exposure, chemical agents (wood and rubber), transport and agriculture. Due to their technical background, public prosecutors often delegate ASL inspectors to carry out inquiries in the case of serious work accident causing death of workers or grievous injuries.

However, within each Provincial Labour Directorate an office for technical monitoring is set up, under the control of which technical labour inspectors operate. In the field of health and safety, they share responsibility with the Ministry of Health, especially with the regional administration from which the local health agencies (ASL) depend on. The labour technical inspector, in conjunction with ASL, is responsible for matters relating to health and safety at the workplace, especially regarding child labour and pregnant women workers. In addition, the technical labour inspector tests and verifies the elevators, hoists, mobile equipment, lifting motors and suspension bridges. On specific initiative of the Ministry of Labour, they carry out investigations and research on specific technical issues. However, their jurisdiction is limited to a number of relatively small areas and sometimes joint inspection visits with ASL inspectors are carried out due to the prerogatives of the ASL mandate. Since 1997, the technical labour inspectors are responsible for work on construction sites, galleries and worksites where the use of explosives and compression chambers are used (Ministerial Decree No 412/97).

Although technical labour inspectors work under the authority of the Ministry of Labour, they have different background and qualifications from those empowered to supervise the application of legal provisions related to the other areas included in the concept of working conditions. In most cases they are engineers. The point is that labour Ministry technical inspector staff is not sufficient to cover and meet all needs related to the monitoring of safety and health working conditions.

Ordinary labour inspectors (have competences on all labour law issues) often operate in alliance with technical and/or ASL's officials not only within targeted campaigns. But out of these cases, if ordinary labour inspectors, during their visits at workplaces, find situations excluded from their remit, which pose a threat to workers, they are required to inform the competent body/authority in order to allow them to initiate prosecution proceedings.

Distribution of competencies: Ultimately, Article 13 of Lgs. D. No. 81/2008 has provided for clearer separation of the competences between all bodies and institutions involved in the enforcement of the safety and health legislation. For example, Article 13 assigns to Fire Brigades the task to carry out the preventive controls when a new industrial or commercial establishment is set up, especially as regards measures aimed to fire prevention. On the other hand, the safety and health controls in some sectors are entrusted to officers coming under other authorities. This is the case of mining activities placed under the Authority of the Ministry for production, health spa and mineral waters which come under Regional Government. Furthermore, in the workplaces of military forces, police and fire brigades, the monitoring and the enforcement of safety and health legal provisions are entrusted exclusively to the internal health services and technical offices set up within the same bodies and institutions.

JAPAN

The most important Japanese law in the area of occupational safety and health is the Industrial Safety and Health Law (ISHL) of 1972. This law, amended in 1996, provides administrative structures for occupational safety and health management at the plant level, regulates certain work practices, processes, substances, and introduces medical and environmental monitoring. In addition to this Act there are also other relevant Occupational Health and Safety regulations, such as:

- The Mines Act of 1905 and the Factories Act of 1911;
- The Employees' Health Insurance Act of 1922, and subsequent health insurance legislation for specific groups of workers;
- Day Labourers' Health Insurance Law of 1935;
- Seamen's Insurance Law of 1939;
- The National Health Insurance Law of 1938;
- The Labour Standards Law of 1947;
- The Workmen's Accident Compensation Insurance Law of 1947;
- The Pneumoconiosis Law of 1960;
- The Inhabitants' Health Insurance Law of 1961;
- The Industrial Injury Prevention Organization Law of 1964;
- The Industrial Homework Law of 1970;
- The Working Environment Law of 1975.

Standard Setting: Most hazard regulations are issued as ordinances by the Ministry of Labour (MOL). Fifteen such ordinances have been issued since 1972 including crane operation, organic solvents, dust, lead, ionizing radiation, and inspection authority. More common than ordinances are "technical recommendations", implemented through administrative guidance rather than legal compulsion. The Japanese Industrial Standards, promulgated by the Ministry of International Trade and Industry, specify structural and safety features for certain kinds of equipment. In this regard, it should be noted that the Japan Association of Industrial Health, an academic organization, has set recommended Permissible Exposure Limits (*kyoyo nodo*) on over 100 toxicants and other hazards.

The workplace environmental standards in Japan's ordinances and technical recommendations are determined by a professional group, composed of scientists, labour and management personnel. This group recommends a standard, which is then promulgated by the Ministry.

Research and Educational Organizations: Key research institutes in Japan include governmental organizations, such as the National Institute of Industrial Health. The

Institute of Science of Labour, a major private research organization, established in 1921, trains Japanese specialists in OSH matters. Japan also established the University of Occupational and Environmental Health, a specialized medical school, to produce industrial (and other) physicians, as well as occupational health nurses and medical and environmental technicians. The University receives funds mainly from the MOL but also from private industry through a foundation.

Educational activities in occupational health and safety are provided by various organizations. The Japan Industrial Safety and Health Association, a semi-governmental body, oversees accident prevention associations in forestry, mining, construction and transportation. These prevention associations, which include workers' representatives, provide information, support research, conduct surveys, and carry out educational programs.

Enforcement System: The main enforcement system is located in the Labour Standards Bureau, one of seven major bureaux in MOL. Decisions of the Labour Standards Bureau are implemented locally by 47 prefectural Labour Standards Offices and 348 local Labour Standards Inspection Offices. The major categories of personnel are industrial safety officers and industrial health officers (several hundred of each) and labour standards inspectors (several thousand), all concentrated at the local level.

These individuals are usually college-educated, and have received one or more years of specialized training. In some cases, they have backgrounds in law or industrial hygiene.

Inspections occur according to an annual plan designed at each Labour Standards Inspection Office (LSIO), concentrating on the most hazardous industries in each jurisdiction (as determined by accident reports). Inspections are also triggered by major accidents, by workers' compensation payments, and by worker's complaints. If a violation is found, which happens in about 50 per cent of inspections, the employer is requested to correct it and to notify the LSIO when this is done. For a serious violation, a new inspection is conducted to confirm the corrective action. The inspections usually do not pose a significant challenge to management. Most inspectors do not attempt to surprise management. The focus of an inspection is often on wages, working hours and working conditions, since the LSIOs enforce all MOL regulations, not only those pertaining to occupational health. Inspectors have formal police power and may stop dangerous processes or impose criminal penalties on violators.

Workers' Compensation: The main compensation system in Japan is centrally administered by a division of the MOL Labour Standards Bureau, pursuant to the Workmen's Accident Compensation Insurance Law of 1947. Other compensation laws for government employees, local government employees, and seamen are administered by other agencies. Over one and a half of Japanese workers are covered by the MOL system.

The Japanese government acts as the insurer, although large companies may self-insure or may use commercial carriers for extra protection. A worker suffering from an occupational injury or disease may seek reimbursement through either the national health insurance scheme (as a non-occupational injury or illness) or through workers' compensation.

Regulations under the Labour Standards Law list the officially recognized occupational diseases and specify the job and the disorder necessary for certification.

For diseases or jobs not specified in these regulations, the onus is on the worker to prove occupational etiology.

Claims are decided locally by the Labour Standards Bureau director, after consulting an advisory committee of two management representatives, two workers' representatives,

and a health professional. A worker who loses may appeal to the Compensation Insurance Council in Tokyo, or may initiate a civil lawsuit.

Occupational Injuries and Diseases (Data Sources): Japan has four major sources of data on occupational illness and mortality. Three of them are from the Ministry of Labour (MOL): reports of occupational accidents or illnesses that result in over four days' absence from work; records of compensation awards; and records of workers' medical examinations. The last source is the work of academic researchers, which often produces valuable data on occupational health and safety.

MOL requires that any occupational accident or illness resulting in over four days' absence from work be reported to the local Labour Standards Inspection Office. Finally, MOL compiles records of workers' compensation awards, and publishes them annually.

KAZAKHSTAN

The State labour inspectorate in Kazakhstan looks both at labour relations issues (legal inspection) and at occupational safety and health (labour protection). In 1993, the newly independent Kazakhstan created a vertical structure for the state inspectorate. Since 2001, regional offices of the Ministry of Labour and Social Protection were created in order to enforce the legislation on labour inspection and labour protection. In Kazakhstan, the labour inspection units in the regions are a part of the territorial bodies called the Departments of the Ministry of Labour and Social Protection. Each of the 14 regions has a regional inspectorate, as do the cities of Almaty and Astana. In July 2001, the Republic of Kazakhstan ratified the Labour Inspection Convention, 1947 (No. 81) and the Labour Inspection (Agriculture) Convention, 1969 (No. 129).

The sanitary inspectorate: The State sanitary and epidemiological inspectorate (*SanEpidNadzor*) under the Ministry of Health performs sanitary inspections of enterprises. The service is concerned with the population's health, including working life. The service has 16 regional inspectorates and over 230 sanitary-epidemiological centres in the communities and cities. Additionally, big enterprises can have sanitary departments and sanitary doctors. The sanitary inspectorate focuses more on small and medium enterprises. The sanitary service drafts regulations on public health, occupational health, ecological issues, chemical threshold limit values (TLVs), etc., which are also utilized by the labour inspection. The sanitary norms on occupational health relate to advance review of industrial facilities, informing new employers, provision of personal protection equipment, inspection of sanitary facilities, initial and regular medical examinations, etc. Advance inspection of building sites include their location and design as well as compliance with sanitary and welfare requirements. The objective of the sanitary inspection is the improvement of labour conditions at the workplace and the implementation of preventive medical measures to reduce the number of occupational diseases. The inspectorate's duty is to perform medical examinations (surveillance) in order to identify the symptoms of occupational diseases.

The ILO conducted a labour inspection audit of the Kazakh inspectorate in December 2004. The audit report was discussed at a tripartite seminar in Taraz in October 2004, with Chief Labour Inspectors from Central Asia participating to share knowledge. The ILO's recommendations in the report were approved not only by the Ministry, but also by the Prime Minister. The Premier pointed out that Kazakhstan has to have independent government inspectors, and its inspectorate needs to have the resources and rights defined in ILO Convention No. 81. Equally, the national OSH system, including social partnership and dialogue in the form of safety committees, needs to be reshaped.

Social inspectors: The concept of social (community) inspectors stems from the Soviet system, where the trade unions carried the whole responsibility for enforcing safety legislation. Official safety inspectors with full inspection and sanction powers were employed by the national trade unions. The trade unions in the individual enterprises elected/appointed social inspectors (unpaid voluntary workers) to supplement this coverage. Some social inspectors see their role as identical to that of government inspectors, but without the power to impose sanctions. Others see themselves as worker-elected safety representatives in the "European" sense (an elected worker representing the workforce in the social dialogue with the employer aimed at the improvement of working conditions). The tasks and practical duties of a social inspector may be explained as follows: a) the social inspector has free access to workplaces where there is a trade union;

b) he/she has the right to make recommendations to the management of the enterprise; c) he/she can note infringements in the journal of the enterprise; d) if the recommendations are ignored, they can be forwarded to the government inspector, who has the right to apply sanctions; e) in the case of an accident, the social (trade union) inspector has to take part in the investigation. The presently unclear concept and duties of the social inspector should preferably be converted into those of a workers' safety representative as defined in ILO Convention No. 155 (especially Arts 19 and 20) and Recommendation No. 164 (especially Art. 12). The mandatory creation of safety committees in enterprises of a certain size would enhance and streamline the social dialogue in OSH matters.

KOREA

Occupational health and safety law was enacted in 1981, and a major revision followed in 1989. The Ministry of Labour is in charge of OSH issues. There are about 1,200 labour inspectors, 340 of whom are OSH inspectors. Because more than 1.5 million enterprises are covered by the insurance programme, each inspector covers an average of 4000-5000 enterprises.

Korea has ratified Convention No. 81 (Labour Inspection), Convention No. 155 (Occupational Safety and Health Convention), Convention No. 162 (Asbestos Convention), Convention No. 170 (Chemicals Convention), Convention No. 187 (Promotional framework for the Occupational Safety and Health Convention).

Since 1988, there is a tripartite body dealing with labour issues, including occupational health and safety.

The 1988 law states that occupational health services, including annual health examinations and work environment measurements, should be provided at each enterprise. In addition, a process of rationalization of health and safety programmes followed, including the frequency and content of services, and the qualifications of providers.

Up to now, Health and Safety programmes have been promoted as a management duty only in some big enterprises. There are separate training and certificate programs for occupational medicine, hygiene, and nursing respectively. The respective boards of certification or academic associations were established around early 1990's, and at present there are about 500 occupational health physicians, 100 industrial hygienists, and 100 occupational health nurses certified by the Government.

Labour inspectors can impose fines only based on infringement of codes, not on the basis of malicious neglect of employers' duty. Still the inspectors' judgments on the intention of employers are subject to vicarious whims and a code based approach is being preferred.

Korea Occupational Safety & Health Agency (KOSHA): The late 1980's, KOSHA Law was approved. After the KOSHA Act of 1986, the labour department of Korea, which is the competent organization of KOSHA, moved to the next step that set up the plan for establishing KOSHA. Since 1987, KOSHA has been taking responsibility in occupational safety and health.

KOSHA's goals involve promoting the safety and health of workers, encouraging efficient business to prevent industrial accidents, and to motivate business joining them, contributing to the improvement of economic development. In particular, KOSHA offers professional knowledge and experts to establish technical systems of occupational accident prevention; it advocates for providing safe and clean environments for workers and

contributes to enlighten Korean society about safety; it seeks to reduce the rate of industrial accidents.

The office organization and staff of KOSHA: KOSHA headquarters consists of nine departments and 19 teams, an education centre, a research centre, and 20 branch offices in the country where over 1,300 OSH experts work.

From the beginning, KOSHA played a significant role in preventing occupational hazards, accidents, and diseases from worksites. It focuses on activities such as safety diagnoses, guiding new technologies, and education for workers concerned with safety and health.

LEBANON

Labour inspection in Lebanon is mainly regulated by Decree No. 3273 of 2000. According to Article 1 of Decree No. 3273, the labour inspection system covers all the item of the Labour Code. It ensures the supervision of compliance with regulations regarding conditions of employment and protection of workers, including OSH.

OSH issues: The Occupational Safety and Health issues are mainly regulated in the following legislative texts:

- Decree No. 136 of 1983, the work related injuries and emergencies. This decree stipulates the employers' responsibilities in cases of occupational injuries and corresponding compensation and workers' entitlements. Decree No. 136 also stipulates the sanctions in case of violations;
- Decree No. 11802 of 2004, Regulation of OSH in the enterprises which includes the OSH requirements and precautions required by the employers in their workplaces;
- Decree No. 11958 of 2004, Safety and Protection in Construction;
- Decree No. 4568 of 1960, Health care in the Enterprises;
- Decree No. 14229 of 2005, Occupational Diseases' List;
- Decree No. 129/2 of 17 February 2001 relating to OSH labour inspection in private establishments.

The Ministry of Labour includes two main authorities in its structure: the Authority of Labour Force and the Authority of Labour Relations, which have the Department of Labour Inspection, Prevention and Safety; the Department of Labour Relations and Trade Unions; the Department of Investigations and Labour Disputes.

OSH is under the responsibility of the Department of Labour Inspection, Prevention and Safety. At a decentralized level, the labour inspection department is attached to the "governorates" at the regional level, where the different ministries are represented. As to safety and health, according to the government, there is collaboration at the regional level, as all the different ministries are represented in the "governorates".

The OSH services at the regional level (which is based in the capital of Beirut), are provided by the following Departments of Labour, in the other seven provinces: the Department of Labour of the North, of the South, of the Lebanon Mount, of Baka'a, Ba'albak, of Nabatieh, and of Akkar.

The Department of Labour Inspection, Prevention and Safety (DLIPS): The DLIPS, which has eleven labour and OSH inspectors, is considered to be the central authority of labour inspection in the country. It is located within the Ministry of Labour. It is also in charge of labour inspection activities within the capital of Beirut.

There are 96 labour inspectors in the Ministry of Labour of whom 72 are general labour inspectors who are in charge of inspecting conditions and terms of work. In particular there are 24 OSH inspectors. Inspectors are classified as follows:

- 26 generic (administrative) labour inspectors: Grade III.
- 46 assistant labour inspectors: Grade IV.
- 12 health inspectors (Physicians): Grade III
- 12 safety inspectors (Engineers): Grade III

The status of labour inspector is governed by Decree applying to all public officials (Decree No. 112 of 12 June 1959). They have an education in the national school of administration. Moreover, technical labour inspectors for engineering have a university degree in engineering and medical labour inspectors have a university degree in medicine.

The labour inspectors are civil servants and are recruited according to the civil service system. As a minimum, the candidates must have the following qualifications in order to be recruited as labour inspectors:

- For general labour inspectors: Degree in Law, or equivalent, “Grade III”;
- For health inspectors: Degree in Medicine and membership in the Lebanese Medical Association, “Grade III”;
- For safety inspectors: Degree in Engineering, and membership in the Lebanese Engineers Association, “Grade III”;
- For assistant inspectors: Intermediate Diploma, Grade IV.

Human Resources: Once the new labour inspectors are recruited, they acquire full authority as labour inspectors. They are issued inspectors’ IDs and they can immediately start conducting inspection visits. They usually undergo training for a few days, mostly related to the obligations and responsibilities of civil servants in general, communication skills with the workers and employers and knowledge of labour legislation. The practical training for the newly recruited inspectors is usually gained by accompanying, and observing senior inspectors during the field visits.

The assistant labour inspectors should always be accompanied by senior labour inspectors while conducting inspection visits.

Salaries and allowances: The monthly salaries of the labour inspectors start with 1,060,000 LL (707 US\$) for the administrative inspectors who are law graduates and who are in charge of inspecting the conditions and terms of work. The OSH inspectors earn 1,196,000 (797 US\$). Senior inspectors may receive up to 1,450,000 LL (967 US\$) per month and this is in addition to the transportation allowance of about 67 US\$ per month.

Labour inspection function and visits: Each inspector is assigned a geographical area which he is required to cover for a period of 6 months. The geographical area is changed every 6 months on a rotation basis. This is done randomly, for all inspectors, by the central authority.

Inspection visits are carried out according to an annual labour inspection programme. Monthly reports have to be prepared.

The labour inspectors prepare their inspection plans on weekly, monthly and yearly bases.

Areas or sectors of work may be distributed randomly among the inspectors. The practice followed for conducting inspection visits is that no labour inspector may leave his or her office for inspection without having a “written mission order” from his direct supervisor. The mission orders are usually issued for one visit, for one enterprise, but in some cases such orders may be issued for a day or a full week, for unspecified number of inspections in a certain sector or a certain area, and without specifying the targeted enterprises.

Each inspector is required to submit their reports to the direct supervisor or director and a new mission order may not be obtained before submitting the report of the previous mission. Each regional labour office is required to prepare monthly and annual reports about its activities including labour inspections and submit it to the central authority.

There are two types of inspection visits: a) Periodic inspections b) Urgent inspections (mainly complaint-based).

When administrative labour inspectors, who inspect conditions of work, come across safety and health violations which are out of their responsibilities, they will be required to report the matter to the director who authorizes an OSH inspector to check the situation and take proper corrective measures. The same in cases where OSH inspectors come across labour violations out of their mandate. The functions carried out by the labour inspectors on a daily basis include the following:

- Conducting routine and follow-up inspection visits to ensure the compliance of the enterprises in the private sector with the labour legislation;
- Visiting the applicant enterprises to investigate the applications submitted to the MoL for employing foreign workers. Such investigations are required for granting new work permits but not for renewing them;
- Dealing with individual labour disputes and complaints submitted to the regional labour offices;
- Investigating the collective labour disputes referred to them by the Department of Investigation and Labour Disputes;
- Providing the employers and workers with information and guidance on compliance and labour related issues;
- Supervision of the elections of the Trade Unions;
- Inspecting the foreign domestic workers recruitment agencies.

Those functions are mainly performed by Grade III labour inspectors only.

The OSH inspectors have the following functions:

1. Conducting inspection visits to ensure compliance with OSH provisions;
2. Examining the powered machines to ensure their compatibility with the OSH requirements and conditions, which it is required by law for first-time licensing. Such inspections are not required for the renewal of the licenses of those machines;
3. Investigation of work related accidents;

4. Advising and guiding the employers and workers on safety and health matters.

The inspectors, both administrative and OSH, use a standard check list, which is a one-page form with half of it for general information about the inspected enterprise and the other half for listing the data of employed foreign workers. As required by the labour law, small areas are provided for on the form for information on the additional services and benefits available to the workers, for the findings in the enterprise and the outcome of the inspection visit.

In cases where the inspectors find violations in the enterprises being inspected, the following measures may be taken:

- A warning letter may be issued for the removal of the violation within the specified notice period;
- If the employer fails to remove the violation within the notice period, a penalty is issued and a fine is imposed after which a settlement may be requested by the employer within 15 days of the date of inspection. Any settlement should include the rectification of the violations and the payment at the Department of Labour of the minimum fine specified by the law, which is 250,000 LL (about 167 US\$). If no settlement is requested, the matter will be referred to the court, where the maximum fine, which is 2,500,000 LL (about 1667 US\$), is usually imposed.

When carrying out inspections, labour inspectors may issue warnings giving a period of notice for remedying defects. However, it seems that they may not immediately impose executory measures or alterations to installations or plants themselves; they have to go through the competent “authority” within the Ministry of Labour.

It should also be checked if the Ministry of Labour can order immediate suspension of the economic activity of an undertaking going beyond ten days. According to Articles 107 and 108 of the Labour Code, this is not the case. The interested party has to launch an urgency procedure with the appropriate and competent court if it wants to obtain an immediate executory action.

Settlements are not accepted by the Ministry in case of certain violations, such as hindering the inspection activities and illegal employment of foreign workers.

According to Article 4 of Decree No. 11802, Regulation of OSH in the Enterprises, the use of new mechanically powered machines is subject to the approval of MoL, according to a report prepared by an engineer labour inspector. So industrial enterprises may not be licensed without such an approval, which is required only for the first time such enterprises are established and not required for the renewal of those licenses.

Occupational injuries and diseases: Article 24 of Decree No. 136 pertaining to work related injuries and emergencies stipulates:

“[e]mployers, or their representatives, shall report all work-related injuries, within three days of their occurrence to the Labour Arbitration Council in their area, including a medical report of the details of the case and its expected outcome”.

According to Article 6 of this decree, employers shall report all accidents to the Ministry of Labour within 24 hours of their occurrence and shall submit to it biannual accident reports. Article 36 of the same decree requires the employers to notify the Ministry of occupational diseases as soon as possible.

The section of emergencies at work and occupational diseases of the Social Security Law stipulates that the central authority shall keep records of occupational injuries and

diseases of the insured, but this section is still not in force and needs to be activated. For this reason, such services do not yet include any insurance against work-related diseases and injuries, but Article 12 of Decree No. 136 stipulates that employers shall have contracts with insurance companies to cover the costs of the medical treatment and the compensation for work injuries of their workers.

MEXICO

Article 123 of the Constitution requires each employer to ensure occupational safety and health (OSH) in the workplace and to educate and train workers. All employers are required to observe regulations on hygiene and health, to adopt measures for the prevention of accidents, and to ensure the greatest possible guarantee for the health and safety of workers. Title IX of the Federal Labour Law (LFT, Ley Federal del Trabajo) implements the constitutional provisions of Article 123 with respect to OSH. It addresses issues such as the employer's liability, compensation for death and injuries, and prevention of occupational injuries and illnesses. It also contains a list of occupational diseases and tables prescribing degrees of permanent incapacity. Furthermore, Mexico has ratified several ILO Conventions pertinent to OSH issues. The most important ones are Convention No. 150 on Labour Administration, Convention No. 155 on Occupational Safety and Health, Convention No. 161 on Occupational Health Services and Convention No. 170 on Chemicals.

Occupational Safety and Health Legislation and Regulations: Mexican labour law related to occupational safety and health (OSH) is detailed and comprehensive and the regulations have been updated in recent years. The legislation contains many cross-references (including to international conventions) which are expected to reinforce one another. Its holistic approach clearly aims at protecting workers and, to a large degree, places the responsibility of achieving this goal on employers with supervision by labour authorities. In content, Mexico's workplace safety and health law is entirely federal. The obligations and rules related to OSH in Mexico contained in various laws and regulations are enforced by different government departments and agencies. The main laws are the LFT and the Ley del Seguro Social (Social Security Law – LSS). The Código Fiscal (Federal Fiscal Code), the Ley Federal de Procedimiento Administrativo (Federal Law on Administrative Procedure) for sectors under federal jurisdiction and their equivalents at the state level for industries under state jurisdictions, and the Ley de Amparo, play roles in the sanction and review/appeal process. The LFT places upon employers duties to ensure workplace safety and health, maintain compliance verification systems, and provide workers with training and information about risks; and it provides the labour authorities “with responsibility to issue regulations, to establish tripartite advisory commissions, to study problems and recommend solutions, to facilitate operation of enterprise joint committees, and to conduct inspections and ensure compliance”. The LSS “provides a system of financial protection, including workers' compensation benefits, administered by the Mexican Institute of Social Security” (IMSS – Instituto Mexicano del Seguro Social). The Federal Regulation for Occupational Safety and Sanitation and the Environment (RFSHMA – Reglamento federal de seguridad, higiene y medio ambiente de trabajo), promulgated in 1997, “details employer and employee duties, sets out various safety and health rules, and enacts several new or special initiatives [such as the] promotion of private “verification units”.

Under the authority of the Federal Measures and Standards Act (LFMN – Ley federal sobre metrología y normalización), technical standards on particular hazards and particular types of work are issued as Official Mexican Standards (NOM – Normas oficiales mexicanas). The LFMN promotes transparency and effectiveness in the elaboration and observance of NOMs. Its field of application includes the certification, verification and inspection of products, processes, methods, installations, services or activities to ensure they are in conformity with NOMs. Key agencies are the Secretaría del Trabajo y Previsión Social (STPS), the IMSS, and the National Advisory Commission on OSH

(CCNSHT – Comisión consultiva nacional de seguridad e higiene en el trabajo). Each state has its own State Commission on OSH (CCESHT). The purpose of these commissions is to study and propose adoption of prevention measures, and to review draft standards. They are presided over by the Governors of the State and are made up of representatives from the STPS, the IMSS, employer organizations and trade unions (Article 512.B of the LFT). IMSS administers the chief worker compensation programme and coordinates with STPS in carrying out prevention programs. The STPS drafts technical safety and health standards, performs inspections, sets penalties, promotes operation of joint OSH committees, maintains hazard statistics, promotes research, and disseminates information. The Internal Regulation of the Department of Labour and Social Welfare (RISTPS – Reglamento interior de la STPS) lays out the internal procedures to be followed by STPS in carrying out its responsibilities. Its General Directorate for Federal Labour Inspection (DGIFT – Dirección general de inspección federal del trabajo) is responsible for workplace inspections, while the promotion of OSH is the responsibility of the General Directorate for Workplace Safety and Health (DGSHT – Dirección general de seguridad e higiene en el trabajo).

Prevention of Occupational Injuries and Illnesses: Article 512 of the LFT states that the regulations under the Law are intended to prevent “employment injuries and to ensure that the work is performed under conditions guaranteeing the workers’ safety and life”. Under Article 132, an employer has the obligation to prevent job-related harm to the worker. Article 133 also requires employers to ensure that tools, equipment and working material are of good quality and in good condition. Moreover, they are required to distribute and post in conspicuous places where work is performed, pertinent provisions of the health and safety rules and instructions. Article 504 of the LFT requires employers to report to the appropriate JC, JCA or Inspectorate of Labour, any accidents which may occur within the 72 hours immediately following their occurrence. On the other hand, workers have an obligation, under Article 134, to observe the prevention and health measures prescribed by the employer or ordered by the competent authorities. Employers are also to provide appropriate training to workers. Article 153 lists the kind of training that employers must offer, including, among others, training intended to help prevent work accidents. Furthermore, clauses relative to an employer’s obligation to provide job training to workers must be included in collective contracts. Within 15 days following the conclusion of a collective contract, employers must present the plans and programs for training that the parties have agreed to establish to STPS for its approval. An employer who does not submit such plans and programs or does not implement them is liable to be fined in accordance with the LFT.

Article 132 of the LFT requires employers to keep proper medications and therapeutic materials in the workplace. Article 504 of the LFT requires each employer of more than 300 workers to establish a sick bay with the necessary medical and auxiliary competent personnel under the supervision of a medical practitioner trained in surgery. Under Article 487, a worker who suffers a work-related injury is entitled to medical attention and hospitalization, if necessary. Even in a situation where the employer is exempt from any liabilities for reasons provided under Article 488, the employer is still bound to provide first aid and to ensure the worker’s transport to a medical center or to his home.

NOMs establish conditions of health, safety and hygiene that must be observed in workplaces. Articles 52 and 56 of the LFMN require that installations and activities be in conformity with established NOMs. Employers must maintain systems of quality control compatible with the applicable standards. “NOMs on workplace safety and health fall into three major categories: (1) safety standards [...]; (2) health standards, addressing chronic or acute risks from factors like noise, light, temperature, poor air quality, toxins, [and] carcinogens [...]; and (3) structural standards, addressing institutions and procedures such as medical care, joint committees, information management, and hazard reporting”.

The following standards relate to OSH issues pertinent to Public Communication CAN 2003-1:

- NOM-001-STPS-1994 establishes OSH conditions in workplace areas;
- NOM-004-STPS-1999 establishes protection systems and safety devices on machinery and equipment;
- NOM-005-STPS-1998 establishes conditions for the handling of toxic substances in workplaces;
- NOM-010-STPS-1999 establishes maximum permissible levels of exposure to chemical substances and requires employers to maintain up-to-date records of concentration levels of chemical substances and show them to the competent authorities. Employers are also responsible for informing and training workers, and for posting appropriate safety notices in visible locations;
- NOM-011-STPS-2001 establishes maximum permissible levels of noise and exposure times per day;
- NOM-015-STPS-2001 establishes preventive measures to protect workers from high thermal conditions as well as the determination of the fatigue index and exposure limits;
- NOM-017-STPS-2001 establishes the requirements for the selection and use of personal protective equipment. It imposes on employers the obligation to conduct appropriate risks analyses and to provide them to labour authorities on request;
- NOM-018-STPS-2000 establishes a system for the identification and communication of risks related to chemical substances;
- NOM-019-STPS-1993 establishes guidelines for the composition and operation of OSH committees that must be set up in all enterprises or establishments, in accordance with the LFT; and
- NOM-116-STPS-1994 establishes the characteristics and minimum requirements that must be met by air purifying respirators against harmful particles present in the work environment.

The RFSHMAT also contains a series of employer obligations and responsibilities related specifically to these workplaces conditions. Article 17 obliges employers to: keep contaminants within permissible limits in the workplace environment; develop and circulate safety data sheets for dangerous materials and chemical substances; provide workers with adequate protective equipment; and provide medical examinations to workers exposed to contaminating chemical substances. Employers are also required to adopt measures to prevent accidents occurring while using machinery and equipment as well as occupational illnesses resulting from exposure to chemical agents, and to inform and train workers about OSH risks and prevention measures. Articles 99 and 100 of the RFSHMAT stipulate that in workplaces where conditions or contaminants may affect the health of workers, adequate ventilation must be in place. Article 101 relates to the selection of personal protective equipment. Articles 103 to 107 state that employers must provide, at the worksite, sinks, toilets, showers, change rooms and lockers, a clean place for the consumption of food as well as potable water. Sanitary facilities for the use of workers must always be kept in hygienic conditions and be available for use. Employers must establish a programme for the tidiness and the cleanliness of the premises. Housekeeping of the plant must be done at least once after every work shift. Violations of the RFSHMAT

are subject to fines based on the general minimum daily wage in effect in the economic area where the workplace is located, fines that are doubled if violations have not been corrected within the allotted time. More pertinent to the allegations about the cafeteria at Matamoros Garment, Article 8 states that all areas of the workplace must be kept clean and, more specifically, floors must have a system preventing stagnation of fluids. Finally, Article 132 of the LFT requires that employers behave towards the workers with proper consideration and abstain from ill treatment. This would relate to the allegations of verbal and physical abuse.

Enforcement Procedures: “Compliance policy [in Mexico] features three approaches: government inspection; private sector verification units which may inspect and report on compliance; and joint committees charged with monitoring compliance, assisting inspectors, and improving risk prevention”.

ILO Convention No. 150 stipulates that the competent bodies within the labour administration system must give notice of deficiencies in working conditions, propose corrective measures, and “make technical advice available”. The Convention also specifies that labour administration staff must be suitably qualified and independent of improper external influences as well as possess the necessary means to perform their duties. ILO Convention No. 155 requires that an adequate and appropriate system of inspection accompanied by adequate penalties for violations, and measures to provide guidance to employers and workers should be established in order to ensure compliance with a country’s national policy on OSH. Articles 511 and 540 to 548 of the LFT stipulate the functions, duties, obligations and liabilities of labour inspectors. They have a compliance monitoring, reporting, and information disseminating role. That is, they must ensure compliance with labour standards, including those concerning OSH, through periodic inspections of workplaces and of relevant company documents. They must report any violations of labour standards and require that corrective measures be put in place. Finally, they are responsible for informing workers and management about relevant OSH laws and regulations. In performing these duties, labour inspectors are obligated to conduct periodic inspections of employer premises, to conduct special inspections when asked by their superiors or whenever a complaint is received regarding the non-observance of labour standards, and to file a report after each inspection, a copy of which must be provided to the interested parties. They also have an obligation to report to the proper authorities any failure to observe or violations of the labour norms in an establishment or enterprise. Labour inspectors are subject to liability (up to dismissal) if they commit prohibited actions such as failing to carry out periodic or special inspections, including false information in their reports, and accepting direct or indirect bribes. Article 512.D of the LFT stipulates that whenever corrective measures ordered by labour inspectors are not implemented by an employer, the STPS will impose a fine. Fines are increased if the measures are not implemented before the end of a specified deadline. If problems persist, the STPS, taking into account the gravity of the risk and the extent of the required modifications, may order a partial or complete closure of the workplace until the violation has been eliminated. JCAs can hear workplace disputes involving OSH and worker compensation payments, and the federal courts hear enforcement appeals and constitutional challenges (amparo).

Inspection Procedures: The General Regulation for Inspection and Penalties for Violations of Labour Legislation (RGIASVLL – Reglamento general para la inspección y aplicación de sanciones por violaciones a la legislación laboral), which came into effect in August 1998, establishes rules of workplace inspections and the imposition of penalties. The RGIASVLL governs inspections and penalties regarding workplace safety and health throughout Mexico, whether enforcement lies with federal or state authorities. The RGIASVLL outlines the obligations of inspectors, which include: monitoring the application of labour provisions; issuing and monitoring compliance orders; proposing complete or partial workplace closure; and forwarding appropriate reports to the public

prosecutor, where appropriate. In addition to ensuring basic regulatory compliance, inspectors are responsible to monitor legally required workplace permits along with employee ability certificates, and ensuring that OSH committees are established in each workplace and function properly. They are also charged with providing workers and employers with safety and health advice. Workplaces are subject to three types of regular inspection. Initial inspections occur when a workplace opens, expand or are modified. Periodic inspections are normally performed once a year. The frequency of periodic inspections can vary depending on the results of previous inspections and taking into account the industrial sector, the nature of the activities, the degree of risk, the number of workers, and the geographic location. Verification inspections are performed to monitor compliance with OSH-related measures or orders previously issued by labour authorities. Articles 17-20, 23 and 26 of the RGIASVLL establish guidelines on how to conduct an inspection. For instance, the inspector must provide the employer with a written inspection order specifying the kind of inspection to be conducted and the list of documents to be presented to the inspector. Notice must be given at least 24 hours in advance along with a statement of employer rights and obligations. However, the practice has usually been to give such notice at least three days in advance. Representatives of both employer and employees should be present. Employees have the right to be present and speak freely during inspections. Complete collaboration from the employer, the workers and the OSH committee, as well as access to facilities and documents must be provided. The inspector is authorized to interview workers and the employer (or its representatives) separately to avoid the possible influence of one party on the other, if necessary. If, during an OSH-related inspection, an inspector finds deficiencies that involve an imminent danger to the safety of the workplace or its workers or their health, the inspector must order corrective measures to be implemented immediately and, if necessary, recommend the partial or complete closure of the workplace to the competent STPS authorities. Following each inspection, inspectors must submit reports and have them signed by the various parties. Employees are entitled to obtain copies of inspection results. Inspections and inspection policy are handled by the DGIFT, a special STPS bureau. It is also responsible for the training and certification of inspectors. Inspectors must abide by specified standards of diligence and integrity, on risk of penalty. Specifically, they cannot inspect workplaces in which they have a financial or personal interest, whether direct or indirect, nor receive gifts or donations from employers, workers or their representatives. Article 26 of the RGIASVLL stipulates that the work of inspectors will be supervised by competent labour authorities through verification visits of inspected workplaces and verification of facts noted in inspection reports. Randomly selected inspection reports will also be verified by an internal control unit. Penalty recommendations are forwarded from inspection authorities to another special STPS bureau, the General Division of Legal Affairs (DGAJ – Dirección general de asuntos jurídicos). The DGAS sets penalties, even where the inspection authority is non federal. Mexico rarely imposes first-violation penalties. Failure to respect the provisions of LFMN can be sanctioned by fines or temporary or permanent closure of the production facility. These fines are higher than those related to violations of RFSHMAT. Penalties normally are imposed only for failure to prevent “imminent dangers or failure to abate problems previously highlighted by inspectors or OSH committees. Sanctions range from fines to partial or full closing of a facility. Size of fines legally turns on gravity of the offense, on intentional or repeated nature of violations, and on company[’s] financial capacity [...]. Administrative fines do not preclude criminal penalties”. “Workplaces are also subject to special inspections, which can be ordered at any time if authorities have knowledge of [possible] violations, accidents, mishaps or imminent dangers, or if they detect irregularities, falsehood or dishonesty in employer acts, reports or documentation”. Under Article 1003 of the LFT, any worker, employer or trade union may report violations of labour norms, including OSH-related violations, to the authorities. “Workers may complain individually or through a union about unsafe work, inaccurate reports, and joint committee failures to identify hazards or secure abatements”. Authorities must review complaints along with incident reports and other information to determine whether special inspections are warranted, depending on the seriousness of the

hazard, the employer's compliance history and the size of the firm. The same obligations and procedures as for the regular inspections apply except that these inspections are unannounced.

Health and Safety Committees: Under Article 509 of the LFT, OSH committees consisting of an equal number of workers' and employer's representatives must be established where it is "found necessary". Joint committees are actually found mainly in workplaces with more than ten workers. Their purposes are to investigate the causes of accidents and diseases, to propose preventive measures and enable compliance therewith. They are also charged with assisting government inspections and preparing reports, performing follow-up inspections, and reporting on abatement failures. Employees have the right to have their OSH committee inform them of the workplace safety and health record. In addition, collective labour agreements may confer additional duties and decision-making power to such committees. Additional relevant norms can be found in the regulations. One of the technical standards established under the LFMN relates to the constitution and functioning of workplace OSH committees. NOM-019-STPS-1993 establishes guidelines for the composition and operation of OSH committees. Article 126 of the RFHSMAT, the federal Regulation on OSH in the workplace, specifies the tasks to be performed by OSH committees, including: investigating OSH accidents and illnesses; monitoring the application of the RFHSMAT provisions and applicable OSH-related standards; reporting any violations; and proposing preventive measures to the employer. Article 125 determines the range of the fine to be imposed if an employer fails to establish an OSH committee within 30 days of the beginning of operations at a plant.

Information Systems and Experience Rating: Other components of the compliance system in Mexico are information systems and experience-related workers' compensation premiums. "Employers must give notice of accidents and work-related illnesses to STPS, to the pertinent inspection authority, to IMSS and to the federal CAB [JCA]". These institutions collect data from employers. "IMSS analyzes statistics and uses them to develop prevention strategies for reducing accidents and illnesses". "Information is [also] used for experience-rating of workers' compensation premiums, for targeting compliance inspections, and for identifying workplaces needing hazard reduction assistance". The premiums paid by employers to IMSS "vary with job risk and with number and seriousness of prior accidents and illnesses. They are adjusted to reward good safety and health performance and to punish poor performance". The rate-setting policy in Mexico "places less emphasis on sector risk classifications [and] more on a particular firm's individual performance". Firms may move among fee categories, depending on risk factors. Emphasis on the employer's record enhances performance incentives, but may encourage firms not to report accidents and illnesses, particularly minor ones.

NORWAY

The Labour Inspection Authority (*Arbeidstilsynet*) has the authority to implement the health and safety legislation in the country. It represents the public watchdog in work environment matters.

OSH legislation: The Norwegian legislation on environmental health and safety (Act No. 4 of 1977, respecting workers' protection and the working environment, amended in 1995; and Act of 2005, No. 62, relating to working environment, working hours and employment protection, etc., as subsequently amended) is in accordance with that of the European Union. The specific Norwegian legislation for OSH derives partly from work environment legislation and partly from health legislation. This means that two ministries are involved in the OSH at present – the Ministry of Labour and Social Inclusion and the Ministry of Health and Welfare. Under the OSH Regulation, the employer is responsible for having an OSH in place and assessing the competencies of the OSH personnel. The Regulation also describes the types of services the employer should require of the OSH and specifies that the OSH should mainly take preventive actions, focusing on certain areas such as (i) the assessment of workplace risk, (ii) the surveillance of the work environment and the health of the workers, (iii) the assessment of work ability, rehabilitation, and workplace adjustment, (iv) the education and training of staff, and (v) the prevention and follow-up of work-related disorders. A separate Regulation specifies which trades and industries are obliged to have an OSH.

OSH services: In Norway today, there are approximately 400 to 500 OSH units, covering an estimated 20,000 enterprises and one million employees. This is equivalent to 50 per cent of the total workforce. The units are widely distributed all over the country. The OSH in Norway is multidisciplinary. According to the OSH Registry the National Institute of Occupational Health (NIOH), they now employ about 2,190 full-time employees. Even though the NIOH maintains the OSH Registry, it is virtually impossible to give exact numbers as the registry is based on voluntary reporting. Many units choose not to be registered, and the NIOH has no strict, official criteria of what is needed in terms of resources and competences in order to be called an OSH unit. A typical OSH unit consists of one each of the following: a physician, a nurse, an ergonomist, and a safety engineer/occupational hygienist. There are specialties within all these areas. Most of the OSH professionals have been through basic training programs, but the amount of training varies a great deal. At present, approximately 30 per cent of the occupational physicians are specialists in occupational medicine, while 25 per cent of the occupational hygienists and approximately 10 to 15 per cent of the occupational nurses and ergonomists are specialists within their own fields. The average cost of an OSH amounts to €150 per employee per year, a total cost of €150 million per year for the one million workers who have access to an OSH. The amount of services purchased by enterprises varies considerably, from less than €50 to more than €1000 per employee per year. The employers cover all the costs of having an OSH. Even though the OSH, according to the legislation, shall have a free and independent professional role in their work, this role is nowadays being challenged by the fact that OSH have to sell their services in a free market characterized by increasing competition between service providers. The lack of public funding may lead to other types of services which are more focused on what is beneficial for the enterprises versus society. Today about half of the OSH volume consists of non-profit-based internal or external services owned by the enterprises. The rest are profit-

based, external services, owned by the OSH employees themselves or private investors. Twenty years ago, only 10 per cent of the OSH was profit-based.

Relationship to public health: Most of the OSH tasks set out in the legislation are of a preventive character. According to the Regulation, the OSH should not be involved in resolving health problems that are not related to the work environment; this is the responsibility of a general practitioner (GP). Nevertheless, many OSH units also provide some services in non-work-related areas, and get involved in lifestyle questions and the improvement of health behavior. However, it may be difficult to differentiate between work- and non-work-related issues, especially when it comes to rehabilitation where the OSH, according to the legislation, should play an important supportive role within the organization. One major challenge therefore, is to improve the cooperation between the OSH and GPs in particular. Major steps to facilitate this relationship are being taken as a part of the national campaign “Inclusive Working Life” which aims to reduce sickness absence, promote early return to work, and prevent early retirement. The campaign relies on the involvement of GPs.

Quality in occupational health services: According to Norwegian law, the employer is responsible for ascertaining the quality of its OSH. There are no other formal public quality regulations for OSH in Norway. In 1998, the Ministry of Local Government and The Labor Inspectorate is responsible for the control of enterprises’ own systematic health, environment, and safety activities. Its inspections are, therefore, directed towards the employers and not the OSH. It may sometimes question the work and quality of the OSH, but its attention is focused on the employer. The Health Inspectorate is formally responsible for the assessment of the employer’s compliance with the health services legislation of the OSH. So far, the Inspectorate has shown a narrow interest in OSH. Therefore, the public assessment of the quality of OSH has been limited and most of the quality issues have been left to OSH themselves.

Market developments: Today OSH in Norway function increasingly on a market basis and, therefore, must “sell” their services to enterprises. This means that OSH activities beneficial to the economy of the enterprise may get more attention than those of benefit to society at large. In light of the Inclusive Working Life campaign, this implies that OSH units may be more engaged in the reduction of sickness absence than preventing early retirement and disability pensioning. The contribution of OSH to public health may, therefore, become limited. Currently, there is a trend toward the building of larger OSH units. Two new OSH “chains” have emerged, the largest covering more than 200,000 workers. Small OSH units are being bought out by larger ones. Some OSH have responded to increasing competition by constructing various types of formal or informal networks. However, the rising competition may result in new types of services not originally intended in the OSH legislation and more beneficial to enterprises than to society.

Many OSH professionals are worried about the future of OSH in Norway due to the current major structural changes and the public authorities’ lack of interest. In a survey of 300 OSH professionals in 2004, the following question was asked: “Will you be working in an OSH five years from now?” The responses were: “yes” (30 per cent), “maybe” (50 per cent), and “probably not” (20 per cent). Many highly skilled OSH professionals have left their jobs during the last five years and there is, at present, a pessimistic feeling about the future perspectives for Norwegian OSH. In a small study of OSH personnel who participated in its two-year advanced training programme between 1995 and 2006, the NIOH found that half of the participants, who completed the training programme before 2000, had left OSH. The reasons given for leaving included: (i) outsourcing, (ii) downsizing or restructuring, (iii) poor economy, (iv) lack of professional challenges, and (v) too much focus on general health surveillance in the OSH.

New rules for occupational health services: In 2007, the Norwegian government introduced an OSH certification system and an expansion of the types of businesses to be covered by an obligatory OSH. In order to be certified, all OSH services must have at least three full-time professionals – or an equivalent number of part-time professionals – and be able to document sufficient competence in occupational medicine, occupational safety and hygiene, ergonomics, the psychosocial/organizational work environment, and systematic health, environment and safety work. Each of the competencies should cover, at least, 30% of a full-time employment. Smaller OSH services may still become certified if they have a cooperation agreement with a larger OSH service. The proposed types of businesses that would be required to have an OSH include hairdressers, the healthcare and education sectors, and industries like fish, farming, waste and recovery, security, clothing, and hydroelectric power supply. The obligatory OSH coverage is estimated to double from the current 600 000 employees to 1.2 million workers. In 2008, the Norwegian government also initiated a major expansion and evaluation of the medical departments at the regional and university hospitals and the NIOH.

OMAN

In Oman, the institutional system of occupational safety and health at work is regulated by several legislative texts, namely:

- The Labour Law, issued by the Royal Decree No. 35/2003;
- The Ministerial Decision No. 145/2004, concerning the formation of the Occupational Safety and Health Committee;
- The Ministerial decision No, 11/2008, concerning the approval of the “Guide to Labour Inspection”;
- The Regulation of Occupational Safety and Health for Establishments Governed by the Labour Law issued by Ministerial decision No. 286/2008.

According to the latter, OSH inspectors have the following rights:

- Entering workplaces without a prior notice during any time during working hours;
- Looking into the scientific and technical characteristics of the substances and compounds in use, including taking, for analysis, samples of any materials or tools used, handled or produced within the enterprise being inspected;
- Asking for medical checkups and laboratory tests for workers to ensure the suitability of work to their health status;
- Conducting any investigations and auditing any documents within the enterprise being inspected to ensure compliance with this regulation;
- Direction of employers concerning the reduction of work related hazards and raising awareness on the prevention of occupational diseases.

The other provisions of this regulation stipulate occupational safety and health preventive measures required in the workplaces, including the following:

- Specifications of personal protective equipment;
- Workers’ replacement and periodic medical checkups;
- Protection of women;
- Protection of disabled persons;
- Precautions against various hazards;
- Tables of threshold limit values of hazardous substances.

Article 4 of this regulation stipulates: “Within the process of monitoring the employers compliance with the provisions of this regulation, inspectors shall have the right to: (1) issue orders to rectify violations within a specified period of time; (2) order

immediate suspension, total or partial, of work, or stopping the operation of a machine, or more, in case of imminent risk and they may seek the assistance of the Royal Oman Police, when needed.

The Department of Occupational Safety and Health: Labour inspection is one of the responsibilities of the Labour Division of the Ministry of Manpower. The Labour Division has four General Directorates (Labour Care, Employment, Planning and Development, Finance and Administration).

At the central level, labour inspection comes under the General Directorate of Labour Care (GDLC), which comprises also the Department of Occupational Safety and Health.

This department ensures a healthy and safe working environment and conditions in all sectors and performs the following main activities:

- **Inspection:** Inspectors of this department conduct regular inspection visits to enterprises in all sectors to ensure that they abide by the safety and health provisions of the Omani Labour Law.
- **Raising awareness:** Raising safety and health awareness among workers and employers and providing them with relevant materials and advocacy is one of the main priorities of this department.
- **Dealing with safety and health related complaints:** Complaints related to safety and health, received from employers or workers, are investigated and relevant inspection visits are undertaken. A proper action to rectify the violations is usually taken, whenever required.
- **Investigation of occupational injuries:** This department is sometimes notified of work related injuries and accidents, within 48 hours of their occurrence, as legally required. Such cases are investigated by occupational safety and health inspectors, who provide employers and workers with recommendations on relevant preventive measures.

The Department of Occupational Safety and Health includes 2 sections:

- The Occupational Health Section.
- The Occupational Safety Section.

More and more OSH inspectors are being recruited. OSH inspectors perform their inspections individually or in teams of two or three inspectors from the same department or including some labour inspectors. Joint inspections are also undertaken within committees involving other concerned ministries and institutions. They conduct about 120 to 150 occupational safety and health inspection visits, in average, every month. General labour inspectors do not inspect safety and health conditions, but if they come across any relevant violations they report them to the director of OSH department who follows up with his inspectors.

Occupational safety and health policies are drawn by the Occupational Health and Safety Committee at the MOM. This committee was established in accordance with the Ministerial decree 145/2004, and was restructured in 2007 through the ministerial decree 368/2007. The committee is chaired by the undersecretary of MOM with representatives from the Ministry of Health, Ministry of Transport and Communication, Ministry of the National Economy, Ministry of Regional Municipalities and Water Resources, Royal Oman Police, Muscat Municipality, Dhofar Municipality, Sultan Qaboos University, Oman

General Federation for Trade Unions, Public Authority for Social Insurance, Oman Chamber of Commerce and Industry, The Joint Committee for Construction Field, The Joint Committee for Oil Field, and Oman Petroleum Development Company. It meets 5 times a year to discuss matters related to occupational safety and health at the national level and has the following responsibilities:

- Formulation of the national occupational health and safety policies and plans;
- Studying and analysing occupational injuries and determination of prevention strategies;
- Raising awareness on occupational health, safety and prevention;
- Enhancing better coordination among concerned institutions;
- Enhancing collaboration with international agencies.

Occupational injuries and diseases: Article 13 of the “Regulation of Occupational Safety and Health for Establishments Governed by the Labour Law” stipulates: “business owners shall notify the concerned section or department in MOM of every serious accident, in writing, within 24 hours of its occurrence and of every proved occupational injury or disease, and shall notify the Public Authority for Social Insurance of occupational injuries of socially insured workers”. The Omani social security system provides full insurance against occupational injuries and maintains records of reported injuries. This system covers the nationals only and does not cover foreign workers.

There are two joint committees at MOM concerned with work injuries, the first is the Occupational Injuries Surveillance Committee, chaired by the Director of the GDLC and has members from the Ministry of Health, the Public Authority for Social Security, the Civil Defence and the DLI. This committee visits enterprises following serious work injuries to investigate them. The second is the Committee on Integration of Occupational Injuries Reporting Systems, chaired by the Director General of Planning and Development at MOM, and has members from the Ministry of Health, the Public Authority for Social Insurance, the Department of Occupational Safety and Health, the Department of Information and Technology and the Department of Statistics of MOM.

The available data show that occupational injuries and diseases are a real burden on the social and healthcare services costing around 4 per cent of the Gross National Product. The reported work injuries were 1,089 in 2006 with a rate of 1.8 injuries per 1000 workers, 1,129 in 2007, with a rate of 1.6 injuries per 1,000 workers, and 1,383 in 2008, with a rate of 1.12 Injuries per 1000 workers. Injuries were mainly in the industrial and construction sectors among the 25 to 34 age group. A survey conducted jointly by the Ministry of Health and the Ministry of Manpower, showed high prevalence of occupational hearing impairment and skin and respiratory tract problems among workers.

PORTUGAL

The Portuguese national labour inspectorate is part of the central State administration, under the authority of the Ministry of Labour and Social Solidarity. The main competences of the inspectorate are:

- To ensure implementation of the rules governing working conditions, health and safety, labour relations, employment and social security;
- To provide employers, workers and their organizations with technical advice and information concerning the most appropriate means of complying with the rules relating to working conditions;
- To propose to the Government suitable measures in cases in which there is inadequate or no regulation.

Authority for Working Conditions (ACT): The *Autoridade para as Condições do Trabalho* (ACT, Authority for Working Conditions) is headed by an Inspector General, assisted by two Deputies and an Executive Coordinator for Health and Safety Policies Implementation. There are 3 Directorates at central level:

- a Directorate for support of all inspection activities;
- a Directorate for Health and Safety policies (including certification of safety technicians, homologation of OSH courses and authorization of external safety service providers);
- a Directorate for human resources, budget and information systems.

Directly depending from the Inspector General, there is a unit for international relations, a unit for internal audits and juridical support and a unit for communication.

The National Inspectorate operates with a network of five regional inspectorates and 31 local services covering all mainland territory. All regional directors are under the supervision of the Inspector General. The archipelagos of Azores and Madeira, because of their special political status have regional inspectorates with no formal connection with the ACT.

The inspectorate has competence for all matters related with working conditions, including labour relations and occupational health and safety, as it happens in other European countries.

For public service administration, though, the inspectorate can only act in what regards health and safety at work.

Labour inspectors competences are regulated by Law 102 of 2000 and by Law 276 of 2007. They perform their duties with technical autonomy and independence, under guidelines and protocols issued by the Inspector General.

Inspections can be carried out in all kinds of enterprises. They can be carried out in Public Service Administration, only for what regards health and safety.

Labour inspectors' powers: Labour inspectors have authority powers such as:

- a) *The improvement notice*, so that any faults regarding health and safety can be remedied within a reasonable time limit. This instrument is used in opposition to the prohibition notice for situations of less serious risks or whenever there is not an imminent danger. Fines can be imposed if the notice is not obeyed by the employer or simultaneously with the improvement notice. Inspectors tend to use this instrument as an alternative to the fine, except if they feel the improvement notice by itself is not enough for deterrence purposes or when the circumstances reveal the employer is not willing to comply voluntarily with the recommended measures. As in other cases, inspectors decide on what to impose on the employer;
- b) *The written warning* is for a minor breach of the law that could be overcome within a reasonable time limit. Failure to comply with the notice can determine the increase of the fine to apply. This is clear to the offender since he is warned through inspection form delivered;
- c) *The prohibition notice*, is the event of immediate or imminent danger for the safety or health of workers. In this case, work cannot be resumed prior to the correction of deficiencies and the written authorization by the labour inspector. Non compliance with the order is sanctioned through criminal procedures;
- d) *The notice of infringement*, is when the administrative sanction procedure is initiated with the aim of imposing a fine and, in some cases, an additional sanction;
- e) *The report to the Public Prosecutor in the Criminal Court*, is done when the facts are classifiable as crime.

Accidents at work: Portugal tends to exhibit higher incidence rates of accidents at work than other EU members. Since 1995, the focal point of the European Agency for Safety and Health at Work, together with the Institute of Development and Inspection at Work Condition, have developed campaigns, the target of which has especially been family type companies, in order to promote the organization of the prevention service of safety, hygiene and health at work, risks assessment and manufacture good practices. There is a steady trend to a decrease of the number of accidents in Portugal, probably also due to the effects of the implementation of the EU Directive on Occupational Safety and Health Services transposed in national legislation in 1991. A strategy has been put in place in risky sectors such as construction, manufacture, agriculture, wholesale and other service activities. This is in line with the EU policy in which agriculture, construction, manufacturing and transport activities have been pointed out as the branches with the highest number of accidents.

Under the coordination role played by ACT, labour inspection has further developed programmes dealing with implementation of minimum standards in OSH areas; development of a notification system of minor accidents; development of a well defined statistical methodology on data collection and treatment, coupled with the creation of a database for official statistics.

ROMANIA

The following health and safety provisions are provided in the country:

- a) in every company with at least 50 employees, it is obligatory to set up a 'health and safety at work committee', made up of an equal number of workers or trade union representatives and employer representatives;
- b) the employer and employees must make a joint effort to transpose management standards in an effort to control stress at work; they must also establish a set of measures aimed at boosting employees' motivation;
- c) it is compulsory to include in collective agreements the practice of regularly informing employees with respect to any changes occurring, or soon to be made, in terms of working conditions;
- d) cases of work relations' malpractice are investigated, and health and safety committees must implement punitive measures, accordingly.

Romania has ratified Convention No. 81 on Labour Inspection in Industry and Convention No. 129 on Labour inspection in Agriculture.

RUSSIA

The basic principles for the modernization of the OSH system, including labour inspection, in Russia (and the CIS -Commonwealth of Independent States- countries) are: a) the approach of the labour inspection and the OSH specialists should be based on prevention, that is, the priority shall be the elimination of hazards and prevention of risks, rather than on compensation in cash or kind for health impairment due to working in poor conditions; b) control and enforcement of OSH legislation is the sole task of government inspectors. The labour inspectors need primarily to take an advisory approach in communicating with the social partners at the enterprises, while maintaining the necessary powers of sanction as a secondary back-up option. In addition, effective implementation of practical improvements in working conditions at enterprises is believed to be achieved through worker-employer cooperation in health and safety committees.

It should be noted that Russian terminology on OSH and labour inspection does not have precise English equivalents, and the responsibilities for inspections are divided up in a particular way. Safe working conditions and accident prevention is the sphere of the State Labour Inspectorate, which also inspects employment conditions. Occupational health and the prevention of occupational diseases are handled by the Sanitary Inspectorate. Machine safety is the task of the Mining Inspectorate (technical inspectorate). However, the terminology in the Russian Federation is changing, due to reorganization. In some CIS countries, the social inspector became the precursor of elected workers' safety and health representative, as defined in the Occupational Safety and Health Convention, 1981 (No. 155) ratified by Russia. In others, the social inspector system has been abolished.

Two Russian ministries were merged into the Ministry of Health and Social Development in 2004. In the ensuing reorganization, the Federal Labour and Employment Service was created, of which the Russian labour inspectorate is part. The Russian

inspectorate is divided into safety and health inspection and legal inspection (conditions of employment). The staff has been reduced by one-third, and now consists of about 3,500 inspectors. It has a federal structure, with the central headquarters providing detailed guidance to the inspectors in the regions. The numbers of inspectors in each region depends on the number of workplaces to be inspected. The national management of the inspectorate, and the work methods and approach of the inspectors, are under review. It is intended to modernize the inspectorate, in consultation with the ILO. The inspectorate will focus on information and promotion, motivation of the employers to understand the economic benefits of safe working conditions and an advisory approach. Simultaneously, some regions of Russia are planning to promote the introduction of the ILO OSH management system in major and medium enterprises. These two developments are mutually supportive.

Russia has ratified Convention No. 81 on Labour Inspection in Industry.

SINGAPORE

OSH challenges: The many challenges in the changing world of work call for increased determination to raise occupational safety and health standards. Singapore has made good progress over the years. This has been possible because of strong political leadership, as well as effective partnership with the unions and employers under a well-established tripartite framework, in addressing both economic and labour issues, including workplace safety and health. The accident frequency rate has fallen over the last two decades. Similarly the occupational disease incidence stands at a relatively low level when compared to other countries in the region. From the OSH perspective, it has been helpful that Singapore is moving towards a knowledge economy, with relatively safer and less polluting industries. Employment in manufacturing has declined relative to other sectors, such as business and financial services, and most of the workforce is now engaged in managerial, professional and technical jobs.

OSH administration: The administration of OSH is an important function of the Ministry of Manpower. Close working relationships established over the years between the Ministry and the employers', workers' and professional organizations, as well as other government agencies, have contributed to the success of OSH programmes and strategies at the national level. Such collaboration ranges from research, standards development and enforcement to surveillance and hazard control; and from training of key personnel and industry development to recognition and incentive schemes. To encourage greater industry ownership, the Ministry of Manpower has, over the years, established Advisory Committees for three specific sectors – shipbuilding and repairing, construction and metalworking. Self-help efforts have resulted in significant improvements in safety and health practices in these sectors. A fourth Advisory Committee for the health care industry was set up in early 2005.

OSH training and recognition schemes: Underpinning the self-regulatory framework is a core strategy that places great emphasis on OSH training, promotion and recognition of effort. Requirements for training are enshrined in the law, and cover key personnel at all levels – OSH professionals, management, supervisors and workers, including foreign workers. Through various promotional activities, recognition schemes and tax incentives, employers are encouraged to achieve standards that are higher than those required by law.

Learning from the world: Participation in the areas of research, advisory services and training has provided Singapore with many opportunities for learning and sharing, regionally and internationally. Training programmes are conducted for labour inspection within the Association of South-East Asian Nations (ASEAN), as well as the ASEAN-OSHNET Project that have helped to facilitate information exchange and sharing of experience. The Ministry's web site provides information resources on training programmes and materials, legislation and policies. A popular feature is the OSH Alert system – a free subscription service that helps update companies and OSH professionals on upcoming events, as well as share learning points from case studies. In addition, the Ministry's online OSH case studies database linked through the WHO Global Web Portal provides good practice models of successful workplace hazards control.

Succeeding through partnership: Over the years, a culture of tripartism and partnership in Singapore have been established in the area of labour relations and on occupational safety and health. A good example is the Workplace Health Promotion (or WHP) Programme. This major collaborative effort represents a well coordinated approach

to workplace health promotion, and has the strong involvement of unions, employers and government. The objective is to improve the health status of working adults by encouraging organizations to implement effective workplace health promotion programmes, addressing key areas from OSH to health practices and work-life balance. Programme strategies include government funding support, recognition of achievements through various national awards – the Annual Safety Performance Award, Occupational Health Best Practices Award, Family Friendly Employer Award and Singapore HEALTH Award, as well as linking workplace health to organizational excellence. A concrete endorsement of the latter principle is the incorporation of “employee health and satisfaction” as one of the criteria in the business excellence framework for the prestigious Singapore Quality Award. Some of these awards have been presented by the President and the Prime Minister, signalling to employers and the importance of workplace health promotion and making workplaces not just safe, but healthy as well. Almost all public sector organizations have implemented such programmes.

New framework for sustainable improvements: Singapore’s transformation over the past 40 years, from an economy heavily dependent on entrepôt trade to one with a significant manufacturing base and strong services sectors, has been accompanied by credible improvements in workplace safety and health. However, in order to raise OSH standards to the next level of achievement and ensure further sustainable improvements, more fundamental changes are required. There is a need to move beyond just prescriptive engineering controls and implementation of safety management systems, to address issues at a more systemic level that must be underpinned by stronger industry ownership and a safety culture. Singapore is proceeding to a fundamental review of the OSH regulatory framework by setting a target of halving occupational fatalities, currently at 4.9 per 100,000 workers, within 10 years, seeking to become one of the safest places in the world to work in. These new initiatives for OSH are in line with the ILO’s principles and activities. The key areas in the new OSH framework in Singapore are:

- a) focus on risk prevention and management, as well as addressing systemic issues. Stakeholders who create risks will be held accountable for managing and reducing these risks. Occupiers, employers, suppliers, manufacturers, designers and persons at work will have the responsibility to identify potential risks and take appropriate actions to mitigate risks at source;
- b) all stakeholders will be brought on board for greater ownership of safety standards and outcomes. The prescriptive nature of the current Factories Act creates a mindset for management and employees simply to follow the “letter of the law” and not address safety aspects outside prescribed legislation. Given the pace of technological change and variable work processes in different industries, legislation will inevitably lag behind safety risks. To promote greater industry ownership, a performance- based approach will be adopted under the new framework, augmented by prescriptive guidance for hazardous sectors and activities;
- c) workplaces with poor safety management will be stimulated to improve through rigorous auditing and tougher sanctions. Currently, safety lapses resulting in mishaps are severely punished, but the penalties for offences in the absence of mishaps are comparatively lower. This encourages the industry to tolerate sub-optimal safety practices until accidents occur.

The new laws impose greater financial disincentives and penalties on workplaces with unsafe systems, before any accident occurs. This will create the right environment in which all businesses find it more cost-effective to improve their safety management systems. These principles have been institutionalized through the legislation enacted in 2006. The new Workplace Safety and Health Act is the legislative backbone of the OSH framework, allocating responsibility to stakeholders and setting out remedial measures (through

remedial orders and stop-work orders) and penalties for non compliance. To implement the Act, a number of Regulations have been passed. Two key subsidiary pieces of legislation central to the new framework and impacting on all stakeholders – the Workplace Safety and Health (Risk Management) Regulations and Workplace Safety and Health (Incident Reporting) Regulations – have been introduced together with the Workplace Safety and Health Act (2006).

A Workplace Safety and Health Advisory Committee (WSHAC) has been established. It promotes industry self-regulation, enabling industry to develop safer ways to achieve business goals. Spearheaded by industry leaders, the Committee advises the Ministry of Manpower in the areas of: a) setting OSH standards and regulations; b) promoting OSH awareness and engaging the industry to raise the level of OSH in the country; c) training key stakeholders to raise competency and capabilities in OSH.

In order to develop sector-specific measures to raise OSH standards, the WSHAC has formed four industry sectoral subcommittees that drive these strategic thrusts in the key industry sectors of healthcare, construction, metalworking, and shipbuilding and ship-repairing, the last three being industries with higher workplace accident rates.

Enhanced labour inspection: To implement the new OSH framework, the Ministry's OSH Division has been restructured. The restructured Division does implement the framework, including new legislation, policies and programmes, adopting a proactive and systemic approach in accident prevention and involving all stakeholders in risk prevention and mitigation. It also works closely with industry to enhance accident prevention and safety management capabilities, as well as develop a stronger safety culture. The Division focuses on the prevention of risks at source, set outcome goals for employers and help companies improve their safety management systems. The Division's six departments and their roles are: a) OSH Inspectorate. The department focuses on reducing risks from safety and health hazards in workplaces through targeted programmed inspections, investigating accidents, taking enforcement action, and providing advice and guidance to industry; b) OSH Specialist Department. The department provides specialist support and guidance in OSH (from occupational hygiene, safety and medicine to risk management and safety management systems) working in collaboration with partners through programmes and activities in the areas of OSH standards, research and best practices; c) OSH Industry Capability Building. The departments support the promotion of OSH best practices and setting competency standards for OSH personnel; d) OSH Information Centre. The department provides information to support strategic planning and policies, as well as for dissemination to industry, and facilitates information sharing and international collaboration in OSH; e) OSH Policy & Legislation Department. The department focuses on developing and reviewing policies and legislation on fundamental and strategic OSH issues; f) OSH Corporate Services Department. The department assists injured workers and dependants of deceased workers to receive fair and expeditious worker's compensation for work-related injuries or deaths. It also processes the registration of factories and pressure vessels and other equipment, as well as the licensing of competent persons. It provides corporate support services to the rest of the division. Providing a safe workplace is a journey of perseverance and vigilance.

Singapore has ratified Convention No. 81 on Labour Inspection in Industry.

SLOVAKIA

The Slovakian government approved a Plan for Occupational Safety and Health for 2008–2012 in February 2008. It is based on the implementation of the European Union

strategy 2007–2012 on health and safety at work, as well as drawing on Conventions of the International Labour Organization, including Convention No. 81 on Labour Inspection in Industry ratified by Slovakia. The plan outlines key priorities and measures, as well as the tasks of the social partners, aiming primarily to reduce the number of occupational accidents by 2012.

Plan for Occupational Safety and Health: The Plan for Occupational Safety and Health for 2008–2012 was approved by Resolution No. 114 of the Slovakian government on 20 February 2008. The plan is based on the Programme Declaration of the Slovakian government, Conventions of the ILO and the European Social Charter.

Putting the objectives defined in the Community strategy into a national context, it is vital to increase employers' commitment to Occupational Safety and Health (OSH) in Slovakia. Thus, it is necessary to secure feasible and effective activities supporting the enforcement of OSH requirements in the workplace. This initiative should primarily help to reduce the number of occupational accidents.

The plan takes into account the current situation regarding OSH and the economic conditions in Slovakia. It provides a set of measures aiming to gradually reduce the number of occupational accidents. In 2006, the indicator value for occupational accidents per 100 employees was 0.68 and the plan forecasts that this figure will decrease by 25 per cent to a value of 0.51 by 2012. It is therefore assumed that, based on having the same number of employees in the economy, the number of occupational accidents will decline from 13,826 cases in 2006 to 10,373 accidents in 2012 – that is, an annual reduction of 4 to 6 per cent.

In order to increase the quality of working conditions and other OSH factors – and achieve a consequent decrease in the number of occupational accidents – employers must implement several efficient measures particularly in economic sectors and activities with a higher occurrence of damage to health in the workplace. From the point of view of occupational accidents, the most dangerous sectors to work in are: mining and quarrying, agriculture, forestry, construction, industrial manufacturing, wood processing and manufacture of wood products, metal production and metal products, manufacture of machinery and transport.

Furthermore, greater attention should be concentrated on specific employee groups who could be extensively exposed to risks, such as young employees, employees without sufficient knowledge and experience, older workers, migrants and people from a different cultural background.

Specific measures: The OSH plan stipulates the following basic priorities and measures for the support of employer activities:

- a) implementation of risk prevention – to support changes in the behaviour of employees and to implement programmes to facilitate employees and employers in socioeconomic terms, in order to increase OSH care and ensure consistent management of existing and potential risks;
- b) consultancy development – to secure the availability of external professional consultancy services. Efficient consultancy on the proper implementation of OSH should be provided by representative employee and employer organizations and state supervision authorities;
- c) information and publicity – through mass media, public information about the benefits of OSH knowledge, creation of a special web site, promotional and information materials, and the organization of seminars;

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- d) education and training – to develop courses initially on safe behaviour in pre-school facilities. Education in all types of schools and the training of teachers in OSH education is envisaged;
 - e) cooperation – to achieve a higher level of active cooperation between the social partners. The national cooperation of social partners at state, sectoral and regional levels should be encouraged, as well as international cooperation mainly through the participation of Slovakian representatives in international institutions;
 - f) activities of institutions – to ensure an effective functioning of the institution coordinating OSH. State inspection and supervision bodies and institutions should create the proper conditions for an effective social dialogue;
 - g) research – to develop plans for effective OSH research. A system of research coordination should be created and research results should be transferred into practice;
 - h) creation of regulations – to secure the ratification of relevant ILO treaties. Draft legal regulations should be developed with the aim of increasing the OSH level in selected areas, identifying potential problems during the enforcement of regulations and proposing relevant measures.

Implementation and monitoring: In the above areas, the OSH plan formulates specific tasks for the representatives of ministries and other central management bodies. The Economic and Social Council (HSR SR, Hospodárska a sociálna rada) has adopted a joint declaration to support the implementation of the plan.

The Coordination Committee for OSH – with the involvement of experts from state authorities, social partners and representatives of educational and research institutions – assesses and evaluates the implementation of the adopted measures. In addition, the Slovakian government regularly checks whether the plan objectives are being fulfilled by means of an annual report prepared by the Ministry of Labour, Social Affairs and Family (MPSVR SR Ministerstvo práce, sociálnych vecí a rodiny Slovenskej republiky).

SOUTH AFRICA

Legislative framework: In South Africa various laws exist that have a direct bearing on the delivery of occupational health services by requiring medical surveillance and evaluation of the work environment. The most important of these are the Occupational Health and Safety Act (OHSA) of 1993 and its regulations on hazardous chemical substances and lead; and the Mine Health and Safety Act (MHSA) of 1996. These laws are enforced by the Department of Labour (excluding mines) and Department of Minerals and Energy (mines) respectively. The MHSA also has under its provisions a dedicated medical inspectorate to enforce the required occupational health standards. The South African Medicines and Medical Devices Regulatory Authority Act (1998) requires the occupational health nurse to complete an approved course in pharmacology in order to be licensed to practise. There is uncertainty as to whether the new Act will make it more onerous for occupational health nurses to practice primary clinical care in workplace-based occupational health services. The Occupational Health and Safety Act (OHSA) of 1993 and its regulations on hazardous chemical substances and lead passed to: “provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than person at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith”.

OSH administration: After defining key terms, the Act establishes an Advisory Council for Occupational Health and Safety, which is responsible for advising the Minister with policies relating to the provisions with the Act and with any matter related to occupational health and safety. The Act also gives the Council the right to collect and disseminate relevant information, establish rules for its operation, advise the Department of Labour concerning health and safety issues, and manage educational and training programmes about workplace health and safety. The Act also outlines the organization of the Council, stipulating the number and selection methods of councillors and describing other administrative issues. It also gives the Council the right to establish technical organizations to help them carry out the tasks described by the Act.

The Act imposes responsibilities upon Chief Executive Officers (CEOs), employers, employees and manufactures and suppliers or workplace equipment to take a certain level of care to ensure safe and healthy occupational conditions. The Act also creates the role of Health and Safety Representatives, who, among other tasks, are given the responsibility of reviewing the effectiveness of health and safety measures of employers who employ over 20 employees, identifying potential hazards and potential major incidents at the workplace, inspecting workplaces to ensure compliance with regulations, and consulting with inspectors, whose role is described below. As employers are obliged to designate a health and safety representative for every 100 employees, in the case there are two or more representatives, an employer must establish a health and safety committee that allows the representatives to coordinate their activities and make recommendations to employers, discuss any workplace incidents and any other functions that may be necessary.

The Act also creates the role of a chief inspector and inspectors, who are responsible for inspecting workplaces to ensure compliance with relevant legislation. Inspectors, unlike health and safety representatives, can enter workplaces without previous notice, can inspect work performed, and seize books, records or other documents that may serve as evidence of non-compliance with the law. Inspectors, who must be approved by the Minister of Labour, also have special powers and the right to conduct investigations. The Act outlines the inspection process, appeals procedure, penalties for non-compliance and the legal procedures if the inspections enter the jurisdiction of the judiciary. The Mines Health and Safety Act (No. 29 of 1996) and Regulations govern occupational health and safety in the mining sector. There are specialized inspectors from the mines department to ensure compliance of this legislation.

The National Department of Health and the nine ministries of the provinces are the leading departments in protecting and promoting health. But as health issues are impacted by socio-economic conditions, the Ministries of Housing, Environmental Affairs, Agriculture, Transport, and Provincial and Local Government contribute to policy making and monitoring of aspects relating to health protection. The Department of Labour is responsible for protecting the health and safety of workers in the work environment, as well as protecting all South Africans from risks relating to work activities. This mandate is enshrined in the Occupational Health and Safety Act No. 85 of 1993 and its accompanying regulations.

On a local level, the District Health System is in place, as are most of the services concerned with protecting and promoting health. Since 1994, a number of policies and laws have been developed and implemented. The major groups involved with advising the Ministry in formulating policy are Universities, the Research Councils, non-Governmental organizations and Community-Based Organizations. The Department of Environmental Affairs and Tourism (DEAT) is the competent authority for the Intergovernmental Forum for Chemical Safety, and the Department of Health is the competent authority for the Intergovernmental Programme on Chemicals Safety. DEAT coordinates the management of chemicals in issues related to environmental protection. The Department of Health

coordinates issues related to occupational health and the Department of Labour coordinates issues related to occupational safety.

SPAIN

The Strategy on Health and Safety at Work (2007-2012) aims to establish the general framework for occupational risk prevention, as well as health and safety measures at the workplace. Following a period of intense debate, the strategy was finally agreed between the government and the most representative social partners. The strategy aims to reduce the levels of industrial accidents and to improve workplace health and safety measures.

Health and safety strategy: The Spanish Strategy of Health and Safety at Work for the period 2007–2012 establishes the general framework for occupational risk prevention policies. The strategy, aiming to standardize measures related to health and safety at work, has two main objectives:

- a) to reduce the industrial accident rate by 25 per cent;
- b) to achieve continual improvements in health and safety at work.

After an intense process of social dialogue, an agreement on the workplace health and safety strategy was reached between the government, the autonomous local communities, the trade unions and the employer organizations. The agreement contains 100 measures that will have an impact on education, training, research and development (R&D), health, awareness-raising and information activities, companies, workers, and health and safety services. It also provides for strong and clear institutional and economic support from public administration for the development of health and safety policies and practices.

The strategy aims to facilitate compliance with these regulations in small and medium-sized enterprises (SMEs). It seeks to achieve quality and efficacy in risk prevention, and directly involves workers, employers, trade unions and employer organizations in conforming to the health and safety regulations.

The strategy aims to promote risk prevention at the workplace by:

- a) achieving a better and more effective compliance rate with the health and safety regulations, particularly in SMEs. To achieve this, social contributions will be reduced for companies with low accident rates and specific programmes will be set up to control and monitor companies and activities with high accident rates;
- b) improving the efficiency and quality of the health and safety system, particularly with regard to organizations specializing in this field;
- c) reinforcing the role of the social partners and involving workers and employers in the improvement of health and safety at work. To achieve this, collective bargaining at sectoral level will allow the social partners to negotiate the creation of specific sectoral bodies comprising representatives of employers and workers, in order to develop programmes that will aim to raise awareness of occupational hazards in the sector. These programmes will target companies, with between six and 50 workers, that do not have employee representation.

In addition, in an effort to lower the number of workplace accidents, the strategy aims to:

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- a) develop and consolidate the culture of risk prevention in Spanish society;
 - b) foster training in occupational risk awareness and prevention;
 - c) support those public institutions that are dedicated to occupational risk prevention;
 - d) improve institutional coordination in occupational risk prevention.

Looking forward: The Spanish Strategy of Health and Safety at Work 2007–2012 is the result of a long and intense process of dialogue between the government and the social partners. It was one of the objectives set out in the Declaration on Social Dialogue signed in July 2004 by the current government and the most representative trade unions and employers' organizations. A special commission was later set up to discuss the modalities of the strategy.

Social dialogue has led to several agreements on this subject, one of which reforms the regulations on health and safety services, and one which defines a new list of occupational illnesses and the procedures for declaring these. Furthermore, an agreement has been reached on updating the social contribution rates for occupational accidents and illnesses. Finally, as part of the national strategy for addressing accidents in the workplace, a law on subcontracting was also approved in the construction sector.

SWEDEN

Legislation on the Working Environment: The basic enactment for the work environment sector is the *Work Environment Act* (1977), applicable to all areas of working life. Numerous additions and amendments have been made to it. The Act is complemented by a Work Environment Ordinance containing certain supplementary rules. The Act contains basic provisions for the achievement of targets in the work environment sector and defines the framework for Provisions issued by the Work Environment Authority (SWEA). These Provisions contain more detailed stipulations and obligations with reference to the working environment. For example, they may concern risks of a particular kind, mental stress and physical loads, dangerous substances or machinery. The Provisions are worked out in collaboration with the social partners.

The statutory requirements are couched in fairly general terms, the reason being that the Act applies to practically the whole range of working life, with all its various branches of activity and forms of employment. Scope is thus left for adapting implementation of the Act to social and technical developments. The Work Environment Act is a typical framework enactment. Due to its general nature, it is often impossible to deduce directly from the Act itself what measures a party responsible for safety must take in order to achieve a satisfactory work environment, and so the Swedish system requires the framework to be filled out by means of more prescriptions that are detailed. In Chapter 4 of the Work Environment Act, the Parliament has granted the Government extensive powers to issue prescriptions on the work environment. Subsequently, through the Work Environment Ordinance, the Government has relayed those powers to SWEA. There are at present upwards of a hundred SWEA Provisions in force, and they are binding. About 40 of them contain provisions, which carry direct penal sanctions. Infringements are punishable by fines.

There are also three Provisions, which carry sanction charges. As regards the content of the provisions, the earlier ones often contain detailed requirements, while those issued in recent years tend to contain requirements of a more functional nature. Another tendency is that provisions drafted nowadays are normally for general application.

Provisions were often addressed to a particular industry. Swedish Work Environment Authority (SWEA) is distinguished by their being tasked both with issuing implementing provisions to accompany legislation and with checking to see that employers and other parties in Sweden with safety responsibilities conduct their activities in accordance with the legislation and Provisions.

The EU framework directive on health and safety was transposed through the Work Environment Act and the Work Environment Ordinance, enacted by the Parliament, (Swedish Statute Book 1977:1160 and 1977:1166, with later amendments), complemented by provisions issued by SWEA. The most important of those are the Provisions on Systematic Work Environment Management (AFS, 2001:1 and 2003:4). In the last years, the number of provisions was reduced from 5,768 to 1,926 and updated. The provisions should be easy in aspects of access, structure and language.

Inspections, organization and resources: The labour inspectorate of Sweden is called the Swedish Work Environment Authority (SWEA). The organization changed a lot since the latest Senior Labour Inspectors Committee (SLIC)-audit in 1996. Since January SWEA is the emulation of the former National Board of Occupational Safety and Health and ten independent Labour Inspectorate Districts. The main purposes of this reorganization is to strengthen workplace supervision and to deploy the available resources to greater effect; efficient management of objectives and results in uniformity of assessment. SWEA is headed by a Director-General appointed by the Government on a six years term. On October 1st 2008 SWEA started a new organization. The ten districts are divided in three inspection units: North, Mid and South. SWEA's duties are set forth in the SWEA (Standing Instructions) Ordinance, (2007:913), issued by the Government. The Ordinance designates SWEA the administrative authority responsible for work environment and working hour's issues except as regards employment on board ship. The inspectors should be 40 per cent of their working time outside the office. In the office there is some additional contact time to employers and employees by phone. Reality is that in one district the inspectors work near 26 per cent of their working time outside. The main reason is the high amount of administrative load.

SWEA: The SWEA was formed in 2001, through the amalgamation of ten districts of the Labour Inspectorate and the National Board of Occupational Safety and Health. SWEA has been tasked by the Government with supplementing and articulating the stipulations of the Work Environment Act, as well as with attending to the transposition of EU legislation on health and safety into Swedish law. Today there are some 130 Provisions relating to technical, chemical, organizational and psychosocial factors. New Provisions are published in the Statute Book of the Swedish Work Environment Authority (AFS).

The Authority's paramount objective is to reduce the risks of ill-health and accidents in the workplace and to improve the work environment in a holistic perspective, i.e. from the physical, mental, social and organizational viewpoints.

The Authority is tasked with ensuring compliance with work environment and working hours legislation and also, in certain respects, with the Tobacco Act and the Environmental Code with regard to certain issues relating to genetic engineering and pesticides. The Authority is also required to furnish advice, respond to inquiries and publish information.

The SWEA employs approximately 800 persons, viz., around 300 at the head office in Solna, and 500 at inspection offices in ten localities throughout the country. The authority's Board consists of the Director-General, as chairperson, and six members representing general knowledge of working life, all appointed by the Government.

Main tasks: The main tasks of SWEA are:

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- supervising compliance with work environment and working hours legislation and environmental legislation, to the extent indicated by the Surveillance (Environmental Code) Ordinance (1998:900);
 - work environment surveillance under the Tobacco Act;
 - issuing Provisions and General Recommendations by authority of work environment and working hours legislation;
 - issuing Provisions and General Recommendations to the extent indicated by the Provisions on Contained Use of Genetically Modified Organisms, the Plant Protection Ordinance and the Biocidal Products Ordinance;
 - having charge of Sweden's official work injury statistics;
 - having charge of the Work Injuries Information System (ISA);
 - observing developments in the work environment sector and taking the initiatives needed,
 - producing and distributing information in the work environment sector;
 - observing and promoting, in collaboration with the authorities and NGOs concerned, the development of occupational health services;
 - promoting co-operation between employers and employees in the work environment context;
 - assuming sectoral responsibility for disability issues in the work environment sector.

Finances: SWEA derives all its funding from the Swedish Government and is now going through a process of scaling down of the nations administration. The SWEA budget will be reduced by a total of 160 MSEK (= 35 per cent) or €17 M in 2007, 2008 and 2009. This reduction in the funding is impacting on the operations. As a consequence, each Office, will be reduced with 43 per cent and the experts department by 57 per cent. The inspection department will be reduced with 31 per cent in relation to the number in 2006. The reduction of management is 35 per cent; of inspectors is 27 per cent and of administrative staff 54 per cent. In 2010 the budget is at the level of €31,5 M.

Organization, planning and monitoring: The overall *planning* of SWEA activities at national level comes out of SWEA long-term objectives as decided by the Director-General and each SWEA department targets and priorities set on the basis of the annual targets, taking into account the annual Budget Bill which contains the Government's proposals on SWEA funding for the year. A drafting group consisting of representatives of the districts and the management staff of the Head of Supervision prepares a draft after analysing surveillance needs. The drafting group's proposals are presented a number of times to the Inspection Department (AI) management group (Head of Supervision/Assistant Head of Supervision/Directors of Supervision for the ten AI districts), whereupon planning is finalized by the AI Head of Supervision. The Government's Appropriation Warrant, which also indicates matters on which SWEA is to report back to the Government after year end, is taken into account during the preparation of the draft. After planning is concluded, an achievement contract is drawn up between the Director-General and the heads of the SWEA departments as well as between the head of AI and the heads of the ten AI districts.

There are national tasks usually set up for SWEA, among others:

- Surveillance in the electrical/telecommunications equipment and automotive industries concerning assembly and monotonously repetitive work;
- Surveillance in the engineering industry of companies' processing of accidents and incidents in order to identify direct and underlying causes;
- Surveillance of the risks of threats and violence in public transport;
- Surveillance of truck use (risk assessments, musculoskeletal ergonomics for truck drivers and truck drivers' competence);
- SLIC campaign concerning handling of heavy metals in the construction industry and retail trade;
- Risk assessment campaigns.

In addition to national, there are also regional tasks which are determined by each district according to regional conditions and its own priorities. Furthermore, special consideration in each district is to be paid to the need for surveillance focusing on musculoskeletal ergonomics and on organizational and psychosocial conditions.

A further part of the districts' activities, which are obligatory and handled entirely by demand concern:

- handling of work suspensions by safety delegates;
- handling of intervention requests from safety delegates;
- handling of accidents, harmful effects and serious incidents; handling of permit transactions; surveillance under the SEVESO directive.

Monitoring: Progress against plans is monitored regularly at all levels, i.e. monthly at the district and Director-General's management level. SWEA submits an annual report to management and the AI management levels, and monthly, three monthly and annually at the Government, presenting its activities and giving an account of the outcome of remits from the appropriation warrant for the preceding year. A financial section describes the employment of funding resources.

Inspector's competencies and independence: Recruitment is conducted by the district in which the inspector is to serve. SWEA central human resources division can provide any assistance needed. The union organizations also participate in the recruitment process but the district manager makes final decisions. The selection process is fair in terms of gender and race. At present, there are 164 women and 199 men inspectors. Inspectors are not graded. All of them are appointed as Work Environment Inspectors. Most of the inspectors recruited nowadays have post-secondary (university or college) qualifications.

All staff with supervisory duties, whether recruited by head office or the districts, undergoes a common foundation training programme which lasts for six months. This basic training is followed by individualized development measures over a three-year period. In the Swedish LI are many offers for the training of established inspectors. However, there also were some indications that the necessary training of established inspectors is declining due to the cuts in financial resources.

On particular topics, depending on the size of the district, there are often inspectors with an advanced knowledge primarily of one specific safety field. If the competence required is lacking within the district concerned, the district possessing the competence can be contacted. In addition, the Regulation and Expert Support Department at SWEA head office includes specialists in certain fields who can be consulted when needed. Unfortunately, the number of specialists stationed centrally has declined considerably over the past year and will be further reduced by reason of the funding cutbacks. As for Law consultancy, there are six lawyers available at the Legal Affairs Department of the head office, and at least one lawyer in every district, to ensure that inspections are conducted in accordance with work environment and administrative procedure legislation. The various branches of working life have been grouped into 18 different industries, allotted between the ten AI districts. The district responsible for an industry observes developments within the industry, proposes joint surveillance initiatives, judges the need for regulatory changes, new information and promotion activities and initiates cooperation within the industry's social partners at central level.

Chapter 1, Section 9 of the Constitution Act requires courts, administrative authorities and other bodies in the public service to respect universal equality before the law and to observe objectivity and impartiality. Further to this provision, The Public Employment Act forbids national government employees to have sideline occupations, which are liable to impair public confidence in the employee concerned. Sweden takes a restrictive line on the permissibility of sideline occupations.

Inspectors' powers: Inspectors' powers are in full compliance with the common principles. Although inspectors are allowed to enter workplaces without notice, most of the inspections are pre-announced. This enables labour inspectors to meet both employers' representatives and safety delegates during the inspection. Most construction site inspections are unannounced. Sanctions the labour inspectors are empowered to use, are: Inspection Notices; Injunctions; Prohibitions.

Inspection Notice: An inspection notice states the deficiencies and hazards revealed by the inspection and a deadline for the measures to be implemented by the employer. Although the notice does not have any direct legal consequences and therefore cannot be appealed, it seems to be taken seriously by the employers, and thus represents the most efficient and frequent tool for inspectors to use.

Injunction: A binding injunction is issued by SWEA in case no statement has been received from the employer in response to the notice or if SWEA is not fully convinced that the employer will have taken the measures concerned within the allotted time. The decision is made by the head of the district. Since 2008, the decision can be appealed to an administrative court. Most injunctions/prohibitions are issued subpoena, i.e. carry a contingent fine which the employer can be made to pay if the injunction/prohibition is not complied with. This decision is made by an administrative court on application being made by SWEA. The court has only to decide whether the injunction/prohibition is formally correct and must not undertake any assessment of the case on the merits. If SWEA does not issue the injunction/prohibition subpoena, a party representing the employer (manager, supervisor) can be fined or sentenced to up to one year's imprisonment by a common court. In this case a prosecutor must file proceedings against the right person within the undertaking and prove that person to have infringed the injunction/prohibition either willfully or by negligence. Because litigation of this kind is often expensive and not always successful, SWEA has normally found the issue of injunctions/prohibitions subpoena to be the most effective course.

Prohibition: Prohibition is applied when the inspector judges there to be an immediate and serious risk of accidents or ill health. It can only be issued after the inspector contacts his superior on the phone. In case this is not possible, or the danger is so

immediate and serious that there is not even time to make a phone call, the inspector can issue an immediate prohibition on his own authority. Such a decision of this kind is temporary and the inspector must notify the decision-making officer of the temporary prohibition on the following day at the latest.

Guidance for inspectors: Inspectors have various types of guidance at hand: Provisions, Guidance Memoranda, official regulations, templates, checklists, and questionnaires, among others. Provisions of the Work Environment Authority give effect to work environment legislation. The number of Provisions and rules is continuously being reduced by the regulation and expert support (RE) Department for the sake of simplification. Further guidance is obtainable from Government appeal case law. The principal Government decisions are collected on the SWEA intranet. The inspectors often refer to experienced colleagues and to the specialists of the RE Department. There are 30 Guidance Memoranda, which have been produced to ensure greater uniformity in the assessment of risks and the issue of stipulations. A Guidance Memorandum is based on previous experience from surveillance activities, and it is to be followed in the majority of situations. Official regulations govern the actions and conduct of the inspector in various situations. A person in breach of a binding official regulation can formally be held liable for dereliction of duty. However, an official regulation often includes parts, which are not binding but are to be regarded as recommendations, which often express one suitable way of meeting the regulation's requirements. It enables the inspector to have a certain scope for discretion so long as he keeps within the framework of the regulation.

One of the criteria for the selection of objects for inspection is a "surveillance index". All workplaces in the SARA register have an individual index rating (1, 2 or 3) which is computed automatically on the basis of adverse points scored for the following ten variables:

- work injuries occurring at the workplace;
- work injuries for the industry;
- sickness allowance paid;
- number of employees at the workplace; occurrence of certain types of document suggesting work environment problems;
- SAM status at the workplace;
- last inspection of the workplace;
- number of complaints laid under Section 2 of The Work Environment Ordinance (AMF);
- demands of the work and degree of direct control/influence;
- fatal accidents in the industry to which the workplace belongs 10 per cent of all workplaces, i.e. the 10 per cent of the workplaces with the highest adverse scores, receive an index rating of 1, the next 20 per cent are rated 2 and the remaining 70 per cent are rated 3.

The inspector has a discretionary power of inspecting workplaces other than those belonging to index group 1, great importance being attached to the inspector's knowledge of the individual workplaces. There is various inspection methods designed to make the inspections more focused, specific and effective and at the same time to ensure uniformity across the various districts:

Normal inspection is the most common type when the inspector taking a holistic view of the work environment, with technical, chemical, ergonomic and psycho-social hazards all made visible. The risks and deficiencies identified are linked to the quality of the employer's systematic work environment management and the routines applied. Stipulations are made with reference, not only to concrete deficiencies but also to systematic deficiencies.

Targeted surveillance is used for inspections of a limited risk zone and is planned and conducted in a project form. Modified guides and checklists are produced for these inspections. This method is usually supplemented by information measures addressed to stakeholders and the media (e.g., European campaigns). Focus inspection is an example of targeted surveillance focusing on organizational and psychosocial problems of the work environment. This type of inspection proceeds through structured group interviews, focusing on the employees' perception of the work environment. The procedure is for a sample population of employees to gather for discussions in small homogeneous groups to provide a comprehensive and reliable picture of reality. It ends with feedback reporting to the management and safety delegates of the undertaking inspected. The final assessments are then presented in an inspection notice, and a follow-up inspection takes place about a year later.

At *two-stage inspection*, the employer is asked to inform the inspector on his view of the hazards of the workplace and the ways they are being addressed. This information is analysed and forms the basis of the inspector's design of the agenda for the inspection, which then follows. So far, this method has been used for inspection of psychosocial or ergonomic hazards.

Macro inspection is used for inspecting employers carrying on business in many units or at a large number of geographically widespread workplaces. A number of inspections are made of a selection of workplaces sufficient to furnish an adequate body of data. The results of these inspections are assessed with reference to the risk factors identified in many workplaces and with reference to rules and routines concerning SAM. Finally an inspection is carried out at management level and the overall assessment of the outcome presented, e.g. advice that the stipulations which are going to be made apply both to source of risk in the operation and to SAM routines. A particular methodology has been developed for inspection of big companies with activity all over the country. Among others multiple chain stores such as IKEA have been inspected in this way.

Targeted remedial stipulations (RÅK) is used for reaching many inspection objects simultaneously, e.g. in the same industry. Well known and identified risks are chosen and the employers are then asked to inform SWEA whether they have these risks and, if so, what preventive measures have been taken. Employers not furnishing satisfactory information or not replying become a subject of inspection.

Inspectors have various tools at hand to collect data which they need, e.g. checklists, questionnaires and group interviews, accompanied by an assessment support which the evaluation team finds very helpful and effective.

Internal communication arrangements are at a high level. All personnel have access to the SWEA intranet, the Internet as a source of information is open to all associates, and email is very extensively used for communication. Every inspector is issued with a mobile phone. Video conferences are being held more and more frequently for communication among districts, proving to be a really effective tool that saves time and money.

Obligatory Surveillance: Obligatory Surveillance is governed entirely by demand and accounts about 15 per cent of the resources of the labour inspectors. Obligatory surveillance includes:

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1. handling of work suspensions by safety delegates;
 2. handling of intervention requests from safety delegates under Chapter. 6, Section 6a of the Work Environment Act;
 3. handling of accidents, harmful effects and serious incidents;
 4. handling of permit transactions and
 5. surveillance under the SEVESO directive.

Safety delegates: Safety delegates as the representatives of the employees have a strong position in the Swedish OSH system. A Safety delegate is allowed to suspend work if a particular job involves immediate and serious danger to the life or health. In these cases, SWEA has to carry out an inspection visit without delay and has to decide whether or under which conditions work can continue. The inspectors must ascertain whether the parties have attempted to resolve the issue in joint consultations. A safety delegate who believes that measures need to be taken to achieve a satisfactory working environment can approach the employer and request such measures. If the employer fails to ensure such measures, the safety delegate may contact SWEA. In some cases, the safety delegates seek advice from SWEA on the best approach. It is the duty of the inspectors to handle these cases with care. Unlike suspension of work by a safety delegate these representations do not require an immediate decision and usual rules of inspection come into play. The inspectors are well trained to communicate with safety delegates as well as with employers.

Accidents: Accidents have to be reported to the district by the employer. In the case of fatalities, severe injuries or those affecting several employees the notification is reported immediately by telephone. Since 2007 the accident notification can be entered directly onto the SWEA web site. On receipt of a notification, SWEA can decide to take no further action, request the investigation report from the employer, or carry out an inspection. The head of AI in the district decides what supervisory measures are taken. On the other hand, the inspectors contact the superior if they feel that an investigation needs to be broadened. Accident investigations are carried out with accuracy and based on systematic observations of the workplace coupled with interviews of the involved persons. The risk assessment and the employers' own investigations are also an important source of information to the inspectors. The surveillance of the companies falling under the SEVESO directive is conducted by specially trained inspectors. They have a specific occupational background for this task - most of them are chemists. The number of these inspectors depends on the number of sites in the region. In the northern districts they are less than in the central and southern parts of Sweden. A close exchange with the inspectors in the other districts who also handle the SEVESO directive is provided by video conferences between the inspectors and partly with other authorities. Special training is also provided at the head office in Stockholm and there is an annual meeting of all inspectors who are concerned with the SEVESO directive. The inspections are carried out as structured group interviews regarding the organizational and procedural structure in connection with purchasing, transport, storage and handling of chemicals. The surveillance includes both checking of important documentation and on-site visiting. The inspectors use special interview guidelines and checklists drawn up by the SEVESO group. Such inspectors are well trained in the inspection of safety management systems and deal with directors and chief executives in the plants.

Action taken as a result of an inspection: After the visit and within three weeks an inspection notice is sent to the employer and a copy to the safety delegate. The inspection notice is not a legally binding document but a description of findings, an indication of which measures should be taken, a time limit for improvements and a time limit for a response from the employer. Recommendations and further information are often added.

Subsequently a written or verbal report to SWEA is expected from the employer. More than 45 per cent of the inspectors' visits result in these written orders for improvements of the working environment. Only 450 of these 22,500 orders go on to the stage of injunctions or prohibitions. Some 20 cases per year lead to proceedings in a court of law. In case of an accepted written order the employer has to make a verbal or written report to SWEA explaining the measures taken in response to SWEA's stipulations. The reports are evaluated and in some cases, a follow-up visit is made. The number of follow-up visits has grown in recent years. Usually the inspection takes place in an open and easy manner. At all visits, the inspectors carefully explain to both employer and safety delegates the reason for the visit and possible outcomes. At the end of the visit, a summary and an explanation of actions to be expected from SWEA are given to both employers and safety delegates in an understandable and very helpful way. Where relevant the inspectors have contacts with workers during the visits.

The role of the safety delegates is central to the Swedish system and during the visits they work closely with inspectors. Safety delegates are contacted at the very beginning of the visits and information from them is used as part of the basis for the inspectors' conclusions. They also play an important role in the communication between the inspector and the enterprise when the inspection notice is served and later on when information is given to SWEA confirming that measures have been taken. Results and findings of the inspections are used for updating the information on the enterprise in the SARA and possibly influence the three-part categorization of the enterprises in the system. Public knowledge of stipulations at specific enterprises is available via a brief summary of the inspection on the SWEA web site.

UNITED KINGDOM

The UK OSH system came into being with the Health and Safety at Work etc Act (HSW Act) in 1974 with further significant modifications in 2008. The effect of this is to provide a unified institutional structure and legal framework for health and safety regulation.

The Legal Framework: Duties imposed by the Act: The Health and Safety at Work etc Act 1974 is based on the principle that those who create risks to employees or others in the course of carrying out work activities are responsible for controlling those risks. The Act places specific responsibilities on employers, the self-employed, employees, designers, manufacturers, importers and suppliers. The Act and associated legislation also place duties in certain circumstances on others, including landlords, licensees and those in control of work activities, equipment or premises. Under the main provisions of the Act, employers have legal responsibilities in respect of the health and safety of their employees and other people who may be affected by their undertaking and exposed to risks as a result. Employees are required to take reasonable care for the health and safety of themselves and others.

Most duties are expressed as goals or targets which are to be met ‘so far as is reasonably practicable’, or through exercising ‘adequate control’ or taking ‘appropriate’ (or ‘reasonable’) steps. Qualifications such as these involve making judgments as to whether existing control measures are sufficient and, if not, what else should be done to eliminate or reduce the risk. The main duties placed on employers and the self-employed under sections 2 and 3 of the Act, for example, are qualified by the phrase ‘so far as is reasonably practicable’. This means that the extent of the risk must be balanced against the difficulty involved (in terms of time, money or trouble) in controlling the risk further; additional controls are not necessary if the difficulty in implementing them would be grossly disproportionate to the risk, or to the reduction in risk that would be achieved. This judgment is an essential part of the risk assessment process and will be informed by approved codes of practice, published standards and HSE or industry guidance on good practice where available. The size of the business and its financial strength do not determine the health and safety standards to be achieved. In addition, the Act states that legislation passed before 1974 should be ‘progressively replaced by a system of regulations and approved codes of practice’. At the time the Act came into force there were some 30 statutes and 500 sets of regulations. In carrying out the reform of the law, the general principle has been that regulations, like the Act itself, should, so far as possible, express general duties, principles and goals and that subordinate detail should be set out in approved codes and guidance.

Following a review of health and safety regulations in 1994 the process of reform continues. Further change results from the European legislative process, which sometimes imposes more detailed and specific requirements than would be envisaged under the Act. Regulations are made by the appropriate government minister, normally on the basis of proposals submitted by HSE after consultation, as previously explained. They have to be laid before Parliament and become law 21 days after being submitted to Parliament, unless an objection is made. Approved codes of practice (ACOPs) are approved by HSE with the consent of the appropriate Secretary of State – they do not require agreement from Parliament. ACOPs have a special status in law. Failure to comply with the provisions of an ACOP may be taken by a court in criminal proceedings as evidence of a failure to comply with the requirements of the Act or of regulations to which the ACOP relates,

unless it can be shown that those requirements were complied with in some other equally effective way. ACOPs (which can be updated more easily) provide flexibility to cope with innovation and technological change without a lowering of standards. Providing information and advice HSE's principal means for providing health and safety information is its web site. HSE has a range of free leaflets which are also available through its web site. It distributes some four million hard copies each year at events or in response to requests from businesses, organizations and the public.

The system: The *Health and Safety Executive* (HSE) consists of a governing Board of up to 12 non-executive directors and approximately 3,500 staff. Members of the Board are appointed by the Secretary of State for Work and Pensions after consultation with organizations representing employers, employees, local authorities and others, as appropriate. HSE's staff includes inspectors, policy advisers, technologists, and scientific and medical experts.

The HSW Act and related legislation are primarily enforced by HSE or local authorities, according to the main activity carried out at individual work premises. The Health and Safety (Enforcing Authority) Regulations 1998 allocate the enforcement of health and safety legislation at different premises between local authorities and HSE.

HSE's statutory responsibilities under the HSW Act include proposing health and safety laws and standards to ministers. In preparing its proposals, it relies on the advice of its staff and on scientific research carried out by its in-house agency the Health and Safety Laboratory (HSL) and externally. It also consults extensively with organizations representing professional interests in health and safety, business managers, trade unions, and scientific and technological experts. This is managed through a network of advisory committees and by public invitation to comment on particular proposals. Special efforts are made to seek the views of small firms, often using a range of intermediary organizations representing trade, sector or business interests.

Local authorities: Local authorities enforce health and safety law mainly in the distribution, retail, office, leisure and catering sectors. HSE liaises closely with local authorities on enforcement matters through the HSE/Local Authorities Enforcement Liaison Committee (HELA). Partnership teams (comprising HSE and local authority staff) and an enforcement liaison officer network in HSE regional offices across Britain also provide advice and support. HELA was set up in 1975 to provide effective liaison between HSE and local authorities. Reconstituted in 2006, it provides a strategic oversight of the partnership aiming to maximize its effectiveness in improving health and safety outcomes – including enforcement priorities for local authorities. A Local Government Panel, comprising local authority councillors, was also established in 2006 and regularly meets the HSE Board for a strategic dialogue on local, central and devolved government issues that impact on health and safety regulatory functions. It also reviews the effectiveness and performance of the partnership between the two enforcing authorities.

Ministerial responsibilities: Health and safety is regulated in the same way across the whole of Great Britain and a number of different Secretaries of State are responsible to Parliament at Westminster for the activities of HSE in different areas. The Secretary of State for Work and Pensions answers to Parliament on HSE's staffing and resourcing, on matters affecting protection of workers and on all other HSE activities, except when these come within the specific area of responsibility of another Secretary of State, e.g. the Secretary of State for Energy and Climate Change on nuclear safety, the Secretary of State for Business, Enterprise and Regulatory Reform on the health and safety aspects of barriers to trade, the Secretary of State for Environment, Food and Rural Affairs on certain aspects of pesticide safety, and the Secretary of State for the Home Department on the security of explosives. In most of these matters, HSE and local authorities act by virtue of their powers and duties under the HSW Act and its associated legislation, or European

legislation. They act under agreements as the agent of the Secretary of State concerned. HSE is required to submit to the Secretary of State such proposals as it considers appropriate for making regulations under any of the relevant statutory provisions, and to submit to the Secretary of State particulars of what it proposes to do for the purpose of performing its functions. HSE is also required to ensure that its activities are in accordance with proposals approved by the Secretary of State. The Secretary of State has the power to direct HSE in particular matters (although they may not give directions with regard to the enforcement of the relevant statutory provisions in any particular case). In practice, almost all health and safety proposals since the 1974 Act have been put forward to ministers by HSE. In exercising their responsibilities for negotiating and implementing European Union health and safety law, ministers have always looked to HSE for help and advice.

Advisory committees: HSE provides policy, technological and professional advice. Other expert advice comes from HSE's network of advisory committees who deal with particular hazard areas and some with particular industries. Each includes a balance of employer and employee representatives and, where appropriate, technological and professional experts. The committees are supported by HSE staff whose main function is to recommend standards and guidance and, in some cases, to comment on policy issues or to recommend an approach to a particular new problem.

Consultation: HSE consults those who are likely to be affected by any proposal before it goes forward to the formal stage. Though this process frequently makes use of the advisory committee network, it normally extends more widely. Within HSE, policy staff makes use of the expertise of inspectors, scientists and technologists during the process of working up proposals into a practical form, as well as consulting local authorities. Before it puts forward proposals for new legislation or codes of practice to ministers, HSE issues formal consultation documents which are made publicly available and which have a very wide circulation. This ensures that HSE, in finalizing its proposals, is aware of the views of a range of people and institutions that may be affected by new health and safety provisions. The same procedure is followed whether the proposed law on standards originated domestically or from the EU. Though the consultation process in the latter case is necessarily constrained by the terms of the EU legislation, questions will normally arise about application and interpretation, about the chosen method of implementing a directive, and about any options or consequences for the reform of related British law. In every case it is HSE's objective to ensure, both in the negotiation of European proposals and in their implementation that established British standards are maintained or improved. HSE has links with other bodies, notably universities, engineering institutions and the Health Protection Agency, which has a national function in relation to ionizing and other radiations, infectious diseases and chemical incidents. Close contact is also maintained with professional and scientific societies, for example, the Royal Society, the British Occupational Hygiene Society, the Institution of Occupational Safety and Health and the Royal Society of Chemistry, which make a major input into the development of the scientific and technical base of occupational health and safety in the UK. Internationally, HSE assists and co-operates with the main institutions – notably those of the European Union (the Directorates General of the Commission, their advisory committees and working groups, and the European Agency for Safety and Health at Work), but also those of the Organisation for Economic Co-operation and Development (OECD), the International Labour Organization (ILO), the World Health Organization (WHO), and the International Atomic Energy Agency (IAEA) in developing and applying international standards, codes and guides.

Limits of HSE's responsibilities: Certain areas of risk or harm directly or indirectly related to work activity are covered by legislation other than the HSW Act and are not dealt with by HSE. These include consumer and food safety, marine, railway, and aviation safety and most aspects of environmental protection.

HSE: The Health and Safety Executive brings together staff from a range of different backgrounds including:

- administrators and lawyers with experience of policy development in government departments;
- inspectors;
- scientists, technologists and medical professionals;
- information and communications specialists, statisticians and economists;
- finance, accounting and personnel specialists.

Policy: Policy staff from all these backgrounds work across HSE to advice on policy concerns, including legislation. They ensure, among other things, that HSE's proposals are legally sound, embody high technical and scientific standards, have taken into account EU and other international requirements and are, in practice, enforceable. Policy staff is active in consulting stakeholders, liaising with other ministries, preparing briefings for ministers and Parliament and negotiating in a variety of EU and international working groups concerned with new legislation and standards.

Inspection: Most of HSE's inspectors work in the Field Operations Directorate (FOD), working from HSE offices across the UK. FOD inspectors are organized in geographical teams covering a diverse range of sectors and work activities with dedicated teams to deal with the construction industry. Inspectors work with, and are supported by, medical and other specialists who are also located in the regional offices. Their work is mainly concerned with inspection, investigating incidents and complaints, and enforcement, but they have a variety of other responsibilities including local authority liaison. Inspectors also act as front-line contacts with the public who may, for example, seek advice on hazards affecting them. FOD also has health and safety awareness officers whose primary role is to provide advice and guidance to small businesses through site visits and educational events; they will also support inspectors in complex investigations and other work. HSE regulates the nuclear industry through its Nuclear Directorate (ND). ND's primary goal is to ensure that those it regulates have no major nuclear accidents. The Nuclear Installations Act 1965 requires that the operator of a nuclear installation must hold a licence granted by HSE. The Act allows HSE to attach such conditions to the licence that it considers necessary in the interest of safety. Licensing does not absolve operators of nuclear installations from the requirements of the Health and Safety at Work etc Act. These requirements provide protection for workers and the public from ionizing radiation and are enforced by ND on nuclear sites. Since April 2007 the staff responsible for civil nuclear operational security and safeguards matters has been part of ND. The Hazardous Installations Directorate (HID) is responsible for enforcing health and safety legislation in:

- 'upstream' petroleum and diving industries; sites where chemicals are manufactured or processed, large quantities of hazardous chemicals are stored, explosives are manufactured, processed or stored, or biological agents (including human and animal pathogens) and genetically modified organisms are handled;
- pipelines transporting hazardous substances;
- road transport of hazardous substances; and
- mining operations and mining exploratory drilling.

HID also advises local authorities on planning for hazardous installations and other development in the vicinity of such installations.

Science and technology: HSE uses high-quality scientific and technological evidence to help it be an effective regulator and to ensure that policy and standards are technically sound and cost effective. HSE commissions a wide range of work on science and technology – around a quarter of the annual budget on original research and the rest on support including applied research, investigating incidents and analyzing and assembling evidence to support enforcement action. HSE’s Science and Innovation Strategy describe how it applies science and technology in support of its mission to ensure that risks from work activities are properly controlled. In particular, the strategy explains how scientific resources are deployed to meet the business targets set out in the Strategic Plan. HSE sources its scientific and engineering expertise from various groups: academia, external contractors, HSL and its own staff. The type of work commissioned varies from longer-term scientific analysis through to scientific support for investigations. HSL’s primary roles are to provide investigative work and services arising from HSE’s day-to-day operation, which often require a rapid multidisciplinary response. Much of the scientific and technological content of policy development and operational casework is provided by staff that is highly qualified in a range of industrial and scientific disciplines, and work across HSE’s operating directorates and in HSL. HSE maintains a dedicated horizon-scanning team based at HSL to keep the health and safety consequences arising from new trends in science and technology under review. HSE’s Chief Scientist is also Director of the Chief Scientific Adviser’s Group which brings together statisticians, epidemiologists, economists and social scientists to ensure that the evidence base for future policy making is robust and scientifically based.

Policy process: In developing its policy, HSE follows the principles of good regulation as adopted by the UK Government under the following headings:

- transparent: any regulation must be easy to understand with aims written in clear and simple language. People and businesses are given an opportunity to comment and time to comply before introduction;
- accountable: HSE answers to ministers, Parliament and the public for any legislation it proposes, with appeals procedures for enforcement actions;
- targeted: any regulation is focused on the problems and reduces adverse side effects to a minimum, where possible being goal-based, and regularly reviewed for effectiveness;
- consistent: new legislation is consistent with existing regulations – in health and safety and other subjects – and compatible with international law and standards; and
- proportionate: the effect that regulations have on people and businesses provides a balance between risk and cost, and alternatives to state regulation (such as guidance or electronic toolkits) are fully considered.

To follow these principles, policy staff is responsible for considering a broad range of options during the development of any legislative initiative, whether this originates from the identification of an issue peculiar to Great Britain or from a European or international initiative. This starts with the collection of evidence to justify the intervention – from various sources, such as experience with enforcement of existing legislation, scientific data and, if necessary, specially commissioned research. Alternative solutions, including non-legislative ones, are considered, an impact assessment carried out, and associated existing legislation considered for contradictions or compatibility.

Impact assessment: All new policy initiatives, both regulatory and non-regulatory, that are likely to have an impact on duty holders (businesses, charities and the public sector) need to be supported by an impact assessment. This identifies the rationale for government interventions and defines the specific objectives and intended outcomes of the initiatives; assesses the risks; assesses the benefits and costs for each option, including a “do nothing” baseline case, in (where possible) monetary terms; summarizes which sectors or groups of society will bear these costs and benefits, and identifies and assesses any issues of equity or fairness; assesses a range of other impacts, such as impact on small firms, on competition, on the environment, on carbon emission and on gender, race or disability equality; sets out the arrangements for securing compliance, with details of sanctions for non-compliance; and identifies how the policy will be monitored and evaluated, with results feeding back into the process of policy development. The impact assessment develops throughout the policy process. A draft accompanies the consultative document and feedback is used to refine the analysis. The final results are presented to ministers or, depending on the type of initiative, other relevant parties who having read the impact assessment sign a statement which states they are satisfied that “...it represents a reasonable view of the likely costs, benefits and impact of the leading options”.

Evaluation and review: Plans for evaluation of the impact of legislation are required before its introduction. These use the data gathered earlier in the process, which was used to justify the intervention, to contribute to a definition of a baseline and to allow the impact of the regulations to be quantified. The success of the legislation will be judged against how well it meets its objectives. Legislation, once introduced, is normally evaluated against a pre-announced timetable. The aim is to repeat this process at intervals to identify whether the legislation should be modified or repealed.

Powers of inspectors: The HSW Act and related legislation are primarily enforced by HSE or local authorities, according to the main activity carried out at individual work premises. The Health and Safety (Enforcing Authority) Regulations 1998 allocate the enforcement of health and safety legislation at different premises between local authorities and HSE. The main object of inspection is to stimulate compliance with health and safety legislation and to ensure that a good standard of protection is maintained. Inspectors have, and make use of, important statutory powers. They can enter any premises where work is carried out without giving notice. They can talk to employees and safety representatives, take photographs and samples, and impound dangerous equipment and substances. If they are not satisfied by the levels of health and safety standards being achieved, they have several means of obtaining improvements:

- verbal or written information and advice;
- improvement or prohibition notices. An improvement notice requires a contravention to be remedied within a specified time. A prohibition notice is issued if there is, or is likely to be, a risk of serious personal injury, and it requires an activity to be stopped immediately or after a specified time unless remedial action is taken. There is a right of appeal to an employment tribunal; improvement notices are suspended pending the hearing of the appeal but a prohibition notice remains in force unless the tribunal directs otherwise;
- prosecution in the criminal courts. In England and Wales most cases are heard by magistrates who may, for serious offences, impose a maximum fine of £20,000. Some cases are referred to the Crown Court where there is no limit on the fine that may be imposed. In Scotland cases are taken in the sheriff courts either on summary procedure or on indictment procedure before a jury. Certain very serious offences by individuals may attract a prison sentence. A prosecution may be brought against individuals and corporate bodies;

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- in the case of a death resulting from a work activity, the need for a manslaughter investigation is always considered. Such manslaughter (in Scotland, culpable homicide), including corporate manslaughter (or in Scotland, corporate homicide), investigations are conducted by the police, with assistance from HSE or the local authority as appropriate; and
 - informal investigation of particular accidents or incidents, so as to learn lessons or prepare legal action. There are various means of disseminating the experience gained in such investigations, for example, by publishing studies and reports.

Local authorities: Over 400 local authorities in England, Scotland and Wales have responsibility for the enforcement of health and safety legislation in over one million premises. These include offices, shops, retail and wholesale distribution, hotel and catering establishments, petrol filling stations, residential care homes and the leisure industry. More than 11 million people are employed at these premises which, by their nature, attract millions of members of the public through their doors every year. While local authorities are the principal enforcing authority in these sectors, HSE may also have some enforcement responsibilities. Therefore a system of 'flexible warrants' was introduced in 2006 allowing local authority and HSE inspectors to enforce in each others' area of primary responsibility. Inspectors in local authorities are typically environmental health officers. Environmental health departments discharge their HSW Act enforcement duties alongside other local authority enforcement responsibilities, including food safety, pollution, housing etc. Each year some 1,600 offences are prosecuted by HSE and local authority inspectors (by the Crown Office and fiscal procurators in Scotland). The number of notices issued by HSE and local authority inspectors in 2007/08 was 13,725. About 78 per cent of offences prosecuted result in a conviction. HSE aims to be a firm but fair regulator and inspectors decide what enforcement action is appropriate in accordance with HSE's published Enforcement Policy Statement. The Enforcement Policy Statement drives proportionate and targeted interventions so that the highest risks and most serious offences attract the firmest enforcement action. HSE policy requires that enforcement action should be proportionate to the risk created, targeted on the most serious risks or where hazards are least well controlled, consistent and transparent. HSE is empowered to carry out investigations falling within its remit and publish reports. It may also, with the consent of the Secretary of State, direct an inquiry to be held.

Planned inspections: HSE's inspection visits may take place in response to a complaint from a worker, an inquiry by a member of the public, to follow up previous inquiries or to conduct investigations. But the majority of the inspections are largely made without warning, are planned as part of a programme of preventive inspection designed to ensure that health and safety is properly managed and that the law is complied with. Inspectors will visit both fixed establishments and temporary worksites such as construction sites. Inspectors may also visit the head offices of major national companies to discuss and secure improvements in the management of health and safety throughout the company. Each regional office implements national intervention plans according to local need, focusing inspection towards workplaces and processes that present the highest risk. Risk is assessed by, among other things, an inspection rating system that takes account of previous performance and attitudes.

A systems approach: Assessment of the quality of health and safety management is an important element in HSE's approach to inspection. Companies are obliged by law to set out their health and safety policies and are increasingly encouraged to define and monitor their management systems. HSE's inspectors are trained in how to assess management systems, and are able to carry out audits. HSE learns about beneficial developments in health and safety management, such as the relevance of the principles of quality management techniques, and provides guidance on their use.

Training inspectors: HSE places great emphasis on recruitment and training of its entire staff, relying as it does on a wide range of professional skills. Almost all HSE inspectors are graduates who undertake four years of training. This programme of field training under the supervision of experienced inspectors, together with HSE-led tutorials, is integrated with a specially designed academic course, which leads to the award of a post-graduate diploma in occupational health and safety. Following on from this, as with all HSE inspectors, there is ongoing access to programmes of competence-related mid-career training which keep them professionally well equipped and in tune with the latest thinking in HSE and outside. Guidance is also issued to local authorities on the training and competence of local authority enforcement officers.

Sharing experience: HSE encourages the sharing of regulatory best practice such as models of enforcement management, and develops and produces corporate operational policies and procedures. This provides a focus for inspection excellence enables issues of common concern to all enforcing authorities to be identified and discussed and, through local authorities, ensures that HSE's objectives are achieved in the local authority enforced sector.

Control of risks at the workplace: Employers are required to set out their approach to managing risks to health and safety at the workplace. This should include a clear statement of who is responsible for doing what. HSE strongly believes that everyone has a part to play in managing health and safety at work and places a strong emphasis both on leadership by management, and the meaningful involvement of workers in managing their own health and safety. Risk assessment ensures that the employer's response in managing risk is appropriate to the risk. The principle of risk assessment is implicit in the HSW Act. It is also explicit in the Management of Health and Safety at Work Regulations which (together with existing legislation) implemented the European health and safety Framework Directive (89/391/EEC). HSE is keen to ensure that risk assessment is a practical exercise that results in protection from real risks, not simply a paperwork exercise; it therefore places emphasis on keeping paperwork fit-for-purpose and ensuring that actions identified are implemented in practice. HSE does not stipulate a single risk assessment methodology, allowing organizations to use different methodologies according to the circumstances. However, its guidance "Five steps to risk assessment" sets out a straightforward methodology that SMEs and the self-employed can choose to use. The five steps are:

- identify the hazards;
- decide who might be harmed and how;
- evaluate the risks and decide on precautions;
- record the findings and implement them;
- review your risk assessment and update if necessary.

HSE's own approach to making policy decisions (e.g. whether regulations should be introduced, revoked or amended) is set out in its publication Reducing risks, protecting people: HSE's decision-making process. The document sets out the stages in decision making, as well as the factors to be taken into account and is based upon the principle of tolerability of risk.

Consultation: In workplaces where trade unions are recognized, the unions have the right to appoint safety representatives to act on the employees' behalf in consultations with their employer about health and safety matters. Employers must consult with any

employees not represented by an appointed safety representative either directly or through representatives elected by the employees concerned.

Health and safety assistance: Employers must appoint one or more “competent persons” to help them meet the requirements of health and safety law. A competent person is someone who has sufficient training and experience or knowledge and other qualities that allow them to assist the employer properly. The level of competence required will depend on the complexity of the situation and the particular help the employer needs. When appointing people, it is advisable for employers to give preference to those in their own workforce who have the appropriate level of competence. In some circumstances, a combination of internal and external competence might be appropriate. For example, employers may need outside help in devising and applying measures identified in risk assessments that are needed to protect workers’ health and safety. Employers may also need help from experts such as health professionals to advise on the health effects of particular work activities or to carry out procedures such as health surveillance.

Permissioning regimes: ‘Permissioning’ regimes are those which involve a requirement for a duty holder to gain the regulator’s approval or permission for certain activities. They include testing, licensing, certification, approvals, exemptions and acceptance of notifications. Licensing or approval regimes are reserved for areas where the nature of the risks or other potential effects demand detailed controls. For example, HSE’s Nuclear Directorate ensures that nuclear installations are designed, constructed, commissioned, operated, maintained and decommissioned to the highest standards of safety under a licensing scheme. Installations cannot operate without HSE issuing a site licence, to which conditions are attached. Other hazards covered by licensing include the manufacture and storage of explosives, work with asbestos, and running an adventure activity centre. Safety reports/cases for major hazard installations identify and evaluate the hazards and describe the management system and the precautions designed to prevent, control or minimize the consequences of any significant accident. In the case of nuclear installations, permissioning decisions are based primarily on an assessment of these safety cases.

In the case of offshore installations, an installation is not allowed to operate unless it has a current safety case which has been ‘accepted’ by HSE. Offshore safety cases have to include provision for internal audit to ensure that the arrangements are kept under regular review. In the case of onshore major hazard installations, the safety report must demonstrate that major accident hazards have been identified and that the necessary measures have been taken to prevent such accidents and limit their consequences for people and the environment. The outputs from safety cases and safety report assessments are used by inspectors in all areas to determine inspection priorities, and as a standard against which to judge the operator’s performance. In accordance with government policy, HSE recovers the costs involved in operating permissioning regulatory regimes. HSE’s cost recovery policy applies to the major hazards industries – gas transportation, offshore and onshore petrochemicals and nuclear installations (including charges for generic design approval and the provision of advice to potential licence applicants). HSE also recovers its costs for conventional health and safety at most high-hazard sites. Charges are made for inspection, investigations, the assessment of safety cases or reports, notifications, the issue of new licences and of amendments to existing ones. Well-developed means of communication are used to inform duty holders about cost recovery issues. In the larger schemes, tripartite Charging Review Groups for each of the industry sectors oversee the effectiveness and efficiency of the cost recovery schemes.

Insurance and compensation: Employees who are injured or made ill at work because of an act or omission by their employer may be entitled to bring a claim for damages in the civil courts. Employers are required by law to take out compulsory insurance against their civil liabilities in respect of injuries or disease sustained by their employees at work. Some

employers are exempt from this provision – most public organizations for example – see Employers' Liability (Compulsory Insurance) Act 1969: A guide for employers. This does not give the employee an automatic right to compensation but, if the employee's civil action succeeds, the insurance policy will ensure that the employee is compensated. The insurance policy must provide cover of at least £5 million arising out of any one occurrence. The insurance is provided by private insurance companies who in some cases also provide some preventive services such as testing and inspecting high- risk plant. Such tests and inspections are required by law for plants such as pressure systems and lifting machinery and equipment. Any employee who is injured or made ill at work is also entitled to treatment from the National Health Service and, in certain circumstances, to claim benefits under the state social security system. The Industrial Injuries Scheme provides preferential social security benefits for disablement caused by an accident or a prescribed occupational disease arising out of or in the course of employment. It is not necessary to have paid National Insurance contributions to be eligible for these benefits. Benefit is paid irrespective of fault on the part of the employer; it can be paid even if the employee was at fault.

UNITED STATES OF AMERICA

According to the *Occupational Safety and Health Act* (1970), employers are legally obligated to provide employees with a safe and healthy environment. The Act offers a positive solution to improve workplace safety, while preserving the workers' rights to be involved in decisions that affect the quality of their lives. This increased employee participation can be viewed as a double cure to the ethical problem of workplace safety, and to the social responsibility of managers to improve the morale of the organization requiring employers to provide workplaces free from serious recognized hazards and to comply with occupational safety and health standards.

The United States *Occupational Safety and Health Administration* (OSHA) is an agency of the United States Department of Labour. It was created by Congress of the United States under the Occupational Safety and Health Act, signed by President Richard M. Nixon, on December 29, 1970. Its mission is to prevent work-related injuries, illnesses, and occupational fatality by issuing and enforcing rules called standards for workplace safety and health. The agency is headed by a Deputy Assistant Secretary of Labour. The OSH Act, which created OSHA also created the National Institute for Occupational Safety and Health (NIOSH) as a research agency focusing on occupational health and safety. NIOSH, however, is not a part of the U.S. Department of Labour. OSHA federal regulations cover most private sector workplaces. The OSH Act permits states to develop approved plans as long as they cover public sector employees and they provide protection equivalent to that provided under Federal OSHA regulations. In return, a portion of the cost of the approved state programme is paid by the federal government. Twenty-two states and territories operate plans covering both the public and private sectors and five — Connecticut, Illinois, New Jersey, New York and the US Virgin Islands — operate public employee only plans. In those five states, private sector employment remains under Federal OSHA jurisdiction.

In 2000, the United States Postal Act made the U.S. Postal Service the only quasi-governmental entity to fall under the purview of OSHA jurisdiction.

History: OSHA was widely criticized in its early years for confusing, burdensome regulations. A good deal of the early conflict came about because of inconsistent enforcement. In addition, businesses were expected to introduce safety devices on existing equipment and to implement other hazard controls, often at considerable expense, to bring them in line with then-current best safety practices. Other requirements, such as mandated training, communication, and extensive documentation were seen as even more difficult

and expensive. With time, manufacturers of industrial equipment have included OSHA-compliant safety features on new machinery. Enforcement has become more consistent across jurisdictions, and some of the more outdated or irrelevant rules have been repealed or are no longer in force. During the Jimmy Carter administration, under the leadership of the University of Cincinnati toxicologist Eula Bingham, OSHA began to concentrate more on health hazards, such as toxic chemicals. Bingham also launched the "New Directions" programme, OSHA's first worker training grant programme. With the Ronald Reagan and George H.W. Bush administrations came efforts to weaken OSHA enforcement and rulemaking, although several of OSHA's most important rules were issued including hazard communication (right to know about chemical exposures) and blood-borne pathogens (to protect workers against illnesses such as hepatitis and AIDS). The Reagan administration also launched OSHA's Voluntary Protection Programme (VPP), OSHA's first foray into voluntary programs and partnerships with industry. In the VPP, management, labour, and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health. The Clinton administration began a reorganization of OSHA's approach, focusing more on "stakeholder" satisfaction through compliance assistance. The number of inspections OSHA conducted was significantly reduced by the Clinton Administration. When the Republicans took over Congress in 1994, one of their goals was to improve the scientific validity of the standards issued by OSHA. Some Republican sponsored bills were stopped by the Democratic minority and moderate Republicans, but other legislation passed, such as the Small Business Regulatory Enforcement Fairness Act of 1996 and the Congressional Review Act.

In 2000, OSHA issued the ergonomics standard after ten years of study and struggles with business associations such as the Chamber of Commerce and National Association of Manufacturers that were unconvinced that additional government regulation was the right way to address the issue of ergonomic injuries to American workers. Ergonomic injuries (also known as musculoskeletal injuries) such as back injuries and carpal tunnel syndrome, account for one-third of all serious injuries suffered by American workers. In March 2001, the Republican controlled Congress voted to repeal the standard and the repeal was one of the first major pieces of legislation signed by President George W. Bush. Since the repeal of the ergonomics standard, OSHA has issued three ergonomics guidelines, and only a small handful of ergonomic citations under the Act's "general duty" clause.

The Bush administration has largely replaced the process of issuing mandatory regulations with voluntary guidelines and put additional resources into other, previously existing voluntary programs, as well as a new "Alliance" programme. In 2004, the General Accounting Office issued a report recommending that the Agency collect more data from participants in order to better ascertain the benefits of the programme. A GAO report released in 1992 concluded that employers participating in the programme benefited from significant cost reductions in workers' compensation premiums while improving labour productivity. The number of inspection conducted by OSHA improved during the Bush Administration compared to the Clinton years.

It is sometimes believed that the Agency promotes "voluntary compliance" when, in fact, all employers are required by law to comply with all final published rules promulgated under the Occupational Safety and Health Act of 1970. In June 2009 David Michaels was nominated by President Obama to be the new head of OSHA.

Debate: Much of the debate about OSHA regulations and enforcement policies revolves around the cost of regulations and enforcement, versus the actual benefit in reduced worker injury, illness and death. A 1995 study of several OSHA standards by the Office of Technology Assessment (OTA) found that regulated industries as well as OSHA

typically overestimate the expected cost of proposed OSHA standards. OSHA has come under considerable criticism for the ineffectiveness of its penalties, particularly criminal penalties. OSHA is only able to pursue a criminal penalty when a willful violation of an OSHA standard results in the death of a worker. The maximum penalty is a misdemeanor with a maximum of 6-months in jail. In response to the criticism, OSHA, in conjunction with the Department of Justice, has pursued several high-profile criminal prosecutions for violations under the Act, and has announced a joint enforcement initiative between OSHA and the US Environmental Protection Agency (EPA) which has the ability to issue much higher fines than OSHA. Meanwhile, Congressional Democrats, labor unions and community safety and health advocates are attempting to revise the OSH Act to make it a felony with much higher penalties to commit a willful violation that results in the death of a worker. Some local prosecutors are charging company executives with manslaughter and other felonies when criminal negligence leads to the death of a worker.

Lately with the new Obama administration, OSHA has regained its role and momentum, especially in a period of crisis. During the last testimony of Secretary of Labour Hilda L. Solis before the Subcommittee on Labour, Health and Human Services, Education and Related Agencies Committee on Appropriations of the U.S. House of Representatives, (March 2010) Ms. Solis stressed the point that OSHA was restoring its capacity to enforce statutory protection, provide technical support to small enterprises, promulgate safety and health standards, strengthen the accuracy of safety and health statistics, and ensure that workers know about the hazards they face and their rights under the law. The new strategy would be to reduce workplace injuries by targeting establishments and industries with the highest injury, illness, and fatality rate – with the goal of reducing by two percent per year the number of fatalities associated with the four leading causes of workplace death in OSHA's jurisdiction; falls; electrocution; caught in or between; and struck by. With additional financial requests to the OSHA budget, there will be a stringer enforcement presence in the country's workplaces and ensure that hard-to-reach workers know about their rights and the hazards they face.

Here are some of the changes in industrial safety regulation brought about by OSHA:

Guards on all moving parts - By 1970, there were guards to prevent inadvertent contact with most moving parts that were accessible in the normal course of operation. With OSHA, use of guards was expanded to cover essentially all parts where contact is possible.

Permissible exposure limits (PEL) - Maximum concentrations of chemicals stipulated by regulation for chemicals and dusts. They cover around 600 chemicals. Most are based on standards issued by other organizations in 1968 or before.

Personal protective equipment (PPE) - Broader use of respirators, gloves, coveralls, and other protective equipment when handling hazardous chemicals; goggles, face shields, ear protection in typical industrial environments.

Lockout/tagout - In the 1980s, requirements for locking out energy sources (securing them in an "off" condition) when performing repairs or maintenance.

Confined space - In the 1990s, specific requirements for air sampling and use of a "buddy system" when working inside tanks, manholes, pits, bins, and similar enclosed areas.

Hazard Communication (HazCom) - Also known as the "Right to Know" standard, was issued as 29CFR1910.1200 on November 25, 1983 (48 FR 53280), requires developing and communicating information on the hazards of chemical products used in the workplace.

Process Safety Management (PSM) - Issued in 1992 as 29CFR1910.119 in an attempt to reduce large scale industrial accidents. Although enforcement of the standard has been spotty, its principles have long been widely accepted by the petrochemical industry.

Bloodborne Pathogens (BBP)- In 1990, OSHA issued a standard designed to prevent health care (and other) workers from being exposed to bloodborne pathogens such as hepatitis B and HIV.

Excavations and Trenches - OSHA regulations specify that trenches and excavations wherein workers are working five feet or more down must be provided with safeguards in addition to proper sloping and storage of excavated material in order to prevent collapses/cave-ins.

Exposure to asbestos - OSHA has established requirements in 29 CFR 1910.1001 for occupational exposure to asbestos. These requirements apply to most workplaces - most notably excepted is construction work. "Construction work" means work for construction, alteration and/or repair including painting and decorating. Occupational exposure requirements for asbestos in construction work can be found in 29 CFR 1926.1101.

VIETNAM

Occupational Safety and Health (OSH) and Environmental Protection are one of the most important issues, to which the Vietnamese State and Party have paid a great deal of attention to the strategy of the socio-economic development, especially in the period of industrialization and modernization of the country.

Legal framework: In Vietnam, OSH has been concerned since the country was founded. More than last 55 years, the State of Vietnam has promulgated directives, resolutions and legal documents to regulate labour protection. Environmental protection has also paid attention to the renovation process of the country. On 27 December 1993, Environmental Protection Law was promulgated and on 26 June 1994, Labour Code reserved chapter IX for OSH, which was promulgated and officially legalized OSH and environmental protection. Trade Union organization was entrusted to collaborate with the State agencies in order to carry out this important task that contributes to protect people's health, especially workers.

The achievements on OSH and environmental protection of Viet Nam are significant. However, these achievements have not fully met the requirements of production and protection of workers' health.

Implementation: in order to implement OSH regulation, the government is committed in the implementation of the following policies:

- a) To establish a synchronous management system on OSH and have a general action plan for each stage of economic development;
- b) To complete gradually legal system, policies, standards and norms on OSH and environmental protection step by step. To reorganize management apparatus from the Central to grassroots, to establish reasonable mechanism to put in force the legislation;
- c) To modernize production technology step by step: to collect modern technology used to newly invest, to reform and upgrade the existing technologies. For the consideration of investment effectiveness, it also needs to achieve the combination among productivity, quality and OSH and environmental protection;
- d) To speed up scientific research, safe technology, OSH and environmental protection in institutes and production units. Scientific research does not just pay attention to passive solutions (treatment of hazardous and harmful factors appearing in production), but also focuses on study, proposal technologies, safer and cleaner machines (so that the production nature of technologies, machines included safety solutions and environmental protection);
- e) To develop the wide potentiality and role of social organizations, especially Trade Unions in OSH and environmental protection. To strengthen and maintain regularly the movement "Greenness - Cleanness - Beauty, ensuring OSH" has been promoted by Viet Nam General Confederation of Labour since 1996, to develop the movement both in the width and the depth with better effectiveness.

Bibliography

Andreoni, D., (1986), *The cost of occupational accidents and disease*. Occupational, Safety and Health Series, ILO, Geneva

Arrigo, G., Casale, G., (2010) *A Comparative Overview of Terms and Notions on Employee Participation*, LAB/ADMIN, WD No. 8, ILO, Geneva.

Brady W., Bass J, Moser R, *et al.* (1997), *Defining total corporate health and safety costs—significance and impact. Review and recommendations*. J. Occup. Environ. Med. 39:224-31.

Casale, G., Sivananthiran, A., (2010), *Fundamentals of Labour Administration*, LO, Geneva

De Lange AH, Taris TW, Kompier MAJ, *et al.* (2003), *The very best of the millennium": longitudinal research and the demand-control-(support) model*. J. Occup. Health Psychol. 8:282–305.

Eakin J.M. (2007), *Work-related determinants of health behavior*, In (Gochman D.S. ed.) *Handbook of health behavior research I: personal and social determinants*. New York: Plenum Press.

EASHW (2004), European Agency for Safety and Health at Work, Electronic Newsletter, OSH mail.

European Network for Workplace Health Promotion (1999), *Healthy employees in healthy organizations. Good practice in workplace health promotion (WHP) in Europe*. Germany: BKK Bundesverband (Federal Association of Company Health Insurance Funds) Essen.

European Union (2005), *Inspection-related incidents and acts of violence perpetrated against labour inspectors in Europe*, Brussels.

Fasani, M. (forthcoming), *Labour Inspection in Italy*, LAB/ADMIN WD, ILO, Geneva.

Goetzel RZ, Jacobson BH, Aldana SG, *et al.* (1998), *Health care costs of worksite health promotion participants and non-participants*. J Occup Environ Med 1998;40:341–6.

Heaney C.A, Goetzel R.Z. (1997), *A review of health-related outcomes of multi-component worksite health promotion programs*. Am J. Health Promot., 11:290–307.

ILO (2001), *An ILO Code of practice on HIV/AIDS and the world of work*, Geneva.

ILO (2004a) *A Fair Globalization: Creating Opportunities for All*, Report of the World Commission on the Social Dimension of Globalization, International Labour Office, Geneva.

ILO (2004b) *Towards a fair deal for migrant workers in the global economy*, International Labour Conference, Report IV, Geneva.

ILO/SafeWork (2005a), Introductory Report: *Decent Work – Safe Work*, International Labour Office, Geneva.

ILO (2005b), *Multilateral Framework on Labour Migration. Non-binding principles and guidelines for a rights-based approach to labour migration*, Geneva.

ILO (2005c), *Report of the Committee of Experts on the Application of Conventions and Recommendations*. International Labour Conference, 93th Session, 2005. Geneva.

ILO (2006), *Labour Inspection*, General Survey of the ILO Committee of Experts on the Application of Conventions and Recommendations, Report III (Part 1B), International Labour Conference, 95th Session, Geneva, June 2006.

ILO (2011), Report V, Labour Administration and Labour Inspection, 100th Session, Geneva, June 2011.

Jorgensen, K., (1988), *Audits, inspections and investigations: reporting and compiling accident statistics*, in *Encyclopedia of Occupational Health and safety*, ILO, Geneva.

Kreis, J., Bödeker, W. (2004), *Health-Related and Economic Benefits of Workplace Health Promotion and Prevention*. Initiative Gesundheit & Arbeit, BKK Bundesverband, Dresden, Report 3e., 28.

Kuhn K, Beermann B, Henke N. (2001), *Healthy employees in healthy organizations: the European Network for Workplace Health Promotion. WHIP in Europe*. Dortmund: Federal Institute for Occupational Safety and Health.

Landsbergis P.A, Schnall PL, Deitz DK, *et al.* (1998), *Job strain and health behaviors: results of a prospective study*. Am J. Health Promot. 12:237-45

Landsbergis P.A. (2003), *The changing organization of work and safety and health of working people: A commentary*, in Journal of Occupational and Environmental Medicine, New York, 45 (1), p. 63.

Leigh J.P., Markowitz S.B., Fahs M., *et al.*, (1997), *Occupational injury and illness in the United States: estimates of costs, morbidity and mortality*. Intern. Med. 157:1557-68

Maes S., Verhoeven C., Kittel F., *et al.* (1998), *Effects of a Dutch work-site wellness-health programme: the Brabantia Project*. Am J. Public. Health. 88:1037-41.

O'Donnell M.P. (1997), *Benchmarking best practices in workplace health promotion. The art of health promotion*, Suppl. Am J. Health Promot, 1:1-9.

Pelletier K.R. (2000), *A review and analysis of the health and financial outcome studies of comprehensive health promotion and disease prevention programs at the worksite*. Am J. Health Promot. Special Report.

Polanyi M.F.D., Frank J.W, Shannon H.S., *et al.* (2000), *Promoting the determinants of good health in the workplace*. In (Poland B.D., Green L.W., Rootman I, eds). *Settings for health promotion: linking theory and practice*. Thousand Oaks, CA: Sage Publications.

Portes, A. (1994), *By-passing the rules: The dialectics of labour standards and informalization in less developed countries*, in (W. Sengenberger and D. Campbell, eds), *International Labour Standards and Economic Interdependence*. Geneva: International Institute for Labour Studies, pp. 163-168.

Rantanen,J.;Kauppinen,T.,Toikkanen,J., (2001),*Accidents at work*, in *Work and Health Country Profiles: Country profiles and national surveillance indicators in Occupational, Health and Safety*, Finnish Institute of Occupational Health, Helsinki.

Shain M. (2001), *Returning to work after illness of injury: the role of fairness*. Bulletin of Science, Technology and Society, 21:361-8.

Shehadeh V, Shain M. (1990), *Influences on wellness in the workplace: a multivariate study. Technical report*. Ottawa: Health and Welfare Canada.

Singh, A.; Zammit, A. (2004), *Labour standards and the race to the bottom: Rethinking globalization and workers' rights from developmental and solidaristic perspectives*. ESRC Centre for Business Research, University of Cambridge, Working Paper No. 279.

Sorensen G., Stoddard AM, La Montagne AD, *et al.*, (2002), *A comprehensive worksite cancer prevention intervention: behavior change results from a randomised controlled trial (United States)*. *Cancer Causes Control*, 13:493–502

Vega-Ruiz M.L., (2009), *Labour Administration: to ensure good governance through legal compliance in Latin America. The central role of labour inspection*, LAB/ADMIN, WD No. 1, ILO, Geneva, 2009.

Vega-Ruiz M.L., (2009), *La inspeccion del trabajo en Europa: retos y logros en algunos paises seleccionada aun en tiempo de crisis*, LAB/ADMIN, WD No. 3, ILO, Geneva,

Woodward, D., Drager, N., Beaglehole, R., Lipson, D. (2001), *Globalization and health: A framework for analysis and action*. World Health Organization, Geneva, p. 876.

Ziglio, E., Hagard, S., Griffi T. J. (2000), *Health promotion development in Europe: Achievements and challenges*, Health Promotion International, Oxford University Press.

Zimmer, S., Rühl R. (2005), *Autorisierte Branchenregelungen: Nutzung freiwilliger Selbstregulierungen für den Arbeitsschutz*, paper presented at the World Congress on Safety and Health at Work, Orlando.