Technical Session

[TS01-01]
ILO Guidelines on Occupational Safety and
Health Management Systems (ILO-OSH 2001)

Sameera Maziad Al-Tuwaijri

ILO

At the onset of the twenty-first century, a heavy human and economic toll is still exacted by unsafe and unhealthy working conditions. The *Guidelines* call for coherent policies to protect workers from occupational hazards and risks while improving productivity. They present practical approaches and tools for assisting organizations, competent national institutions, employers, workers and other partners in establishing, implementing and improving occupational safety and health management systems, with the aim of reducing work-related injuries, ill health, diseases, incidents and deaths.

The *Guidelines* may be applied on two levels – national and organizational. At the national level, they provide for the establishment of a national framework for occupational safety and health (OSH) management systems. They also provide precise information on developing voluntary arrangements to strengthen compliance with regulations and standards, which, in turn, lead to continual improvement of OSH performance.

At the organizational level, the *Guidelines* encourage the integration of OSH management system elements as an important component of overall policy and management arrangements. Organizations. employers, owners, managerial staff. workers and their representatives are motivated in applying appropriate OSH management principles and methods to improve OSH performance.

[TS01-02]
Occupational Safety and Health Management
Systems Development and Implementation in
Thailand

Chaiyuth Chavalitnitikul

Ministry of Labor, Thailand

Occupational accidents and diseases have been a major concern of the Ministry of Labour (MOL) for many years. Although the accident statistics have been declining but the rates are still high compared with many other countries. The MOL has been developing and strengthening the national occupational safety and health systems for providing OSH protection and services to all workers continuously for more than two decades. The systems are aiming to reduce occupational accidents and diseases by means of (1) improvement of legal enforcement and compliance monitoring systems, (2) promoting the implementation of OSH in the enterprise, (3) formulating Ministerial Regulation on Occupational Safety and Health Management System (OSH-MS), and etc. The development and implementation of OSH-MS has taken place at the MOL since 1995. In 1997 the MOL encouraged the Ministry of Industry to develop a new Thai Industrial Standard on OHS-MS based on the British Standard 8800, called "TIS 18000-OHS-MS". Since the TIS 18000 is the voluntary standard, and by itself does not have enough flexibility especially for small business, currently only limited number of enterprises that have achieved the requirements and have been certified. As the national OSH policies and plans, and legislative mandate under the Labour Protection Act, 1998 have given the direction for further development of the Ministerial Regulation on OSH-MS. During 2003-2008 the National Tripartite Committee on OSH has been supporting the MOL to develop the Ministerial Regulation on OSH-MS based on the framework of the ILO Guidelines on OSH-MS (ILO-OSH 2001). Recently, the Cabinet has approved the proposed draft Ministerial Regulation on OSH-MS of the MOL. This draft regulation will be requiring the organizations employing 50 or more workers must develop and implement the OSH-MS within a specified time frame by an authorized institution which has been licensed from the MOL. It is expecting that by the end of 2008 the draft regulation would be promulgated and to be enforced by 2009.

[TS01-03]
Safety and Health Management Systems Case of
France

Murielle Gauvain

Association Française de Normalization (AFNOR
Certification), France

Occupational Safety and health management is a major
challenge for any organisation that engages in a process of
progress and allows:
- To identify and assess risks;
- To take into account the requirements of
  increasingly complex nature (legal, regulatory,
  contractual…) and to meet the needs and
  expectations of employees and their
  representatives;
- Contribute to the social dimension of sustainable
  development and to improving the organisation's
  image regarding its OSH performance.

Faced with these multiple benefits, many documents
(standards, guidelines, …) have been developed in recent
years. Among them, ILO-OSH 2001, "Guidelines on
occupational safety and health management systems",
developed by International Labour Office (ILO), is the only
international reference adopted in a tripartite framework -
governments, employers and workers - which gives this
tool of progress legitimacy unparalleled.

In France, AFNOR Certification has adapted ILO-OSH
2001 in agreement with ILO in order to perform third party
assessments, and published an "Evaluation guide for
occupational safety and health practitioners and auditors
according to ILO-OSH 2001"

Prefaced by ILO, the Guide is intended both for persons
responsible for OSH in companies wishing to implement an
occupational Safety and health management system and
for auditors responsible to conduct the evaluation

Today in France, a thirty companies are certified according
to ILO-OSH 2001, and the first having successfully
implemented the guiding principles of ILO-OSH 2001 have
been witness to the major interest for their organization and
performance.

[TS01-04]
From the Theory to Practice: Reflection on the ILO Guidelines on Occupational Safety and Health Management Systems (ILO-OSH 2001)

Nilton Freitas

International Federation of Trade Unions of Chemical,
Energy, Mines and General Industries - ICEM, Brazil

From a point of view of the workers and their
representatives, the adoption of the ILO Guidelines on
Occupational Safety and Health Management Systems,
has an important implication in taking actions for the
promotion of the highest levels of safety and health of
workers. The guidelines make a valuable contribution, as a
tool for OSH management system, for the promotion of an
integrated approach of policies inside the organizations and
the concept of continual improvement working with the
environment and the quality policies and others. A special
dimension of the ILO Guidelines is that they recognize the
roles of the workers' and employers' organizations in the
process of developing and applying policies and actions for
prevention. In a current context of search for sustainable
enterprises – recent resolution of the International Labour
Conference – the ILO-OSH 2001 Guidelines should have a
priority place in the actions of the International Labour
Office, by means of the technical cooperation with the
member states. The promotion of ILO OSH management
systems approach is important in view of promoting
management systems approach as a part of national OSH
strategy formulated by tripartite partners, and not as a part
of commercial drive of management systems. Thus we
should work in the spirit of the Declaration of Philadelphia:
Labour is not a Commodity.

[TS01-05]
Employers' Perspective: Management of Health and Safety, an Economic Necessity

Kris de Meester

Federation of Enterprises, Belgium

**Management of health and safety, an economic
necessity**
Nowadays businesses operate in a context of globalization,
characterized by the restructuring of economy and politics,
a more competitive world economy and increased
productivity with restructuring of organizations and
management, internationalization of business and business
processes. Our world becomes "smaller" (a global village in
a "global" world). More goods and services are exchanged,
capital and financial flows are on the increase. We witness
the rise and diffusion of new technology, the flow of ideas,
new production methods and changing job contents
including the shift from traditional workplace to homework,
mobile office,… innovation is the keyword. There is a
geographic shift: the movement and migration of persons,
including workers. More and more we have to face and
overcome language barriers in training, instruction and
communication in general. The role of media is growing,
including social media and social networking. And let's not

forget: the pace at which all these changes take place is on the increase.

These trends are reshaping the world of work in a profound way. Businesses not only need to be able to survive, stay profitable, grow in that context. In order to increase their chances in doing so, they have to adapt their processes, services, work environment, work organization, management and social relations and go for excellence in every of those fields. The enormous economic costs of problems associated with health and safety at work inhibits economic growth and affects the competitiveness of businesses throughout the world. Poor OSH conditions are a human burden, an enterprise burden, a societal burden. Managing health and safety in every aspect, implementing a health and safety management system therefore is not just an opportunity but an economic necessity in the long term, even for the smallest businesses.

The ILO's Guidelines on occupational safety and health and management systems provide a guiding light. At an organizational level the guidelines are intended to, "motivate all members of the organization, particularly employers, owners, managerial staff, workers and their representatives, in applying appropriate OSH management principles and methods to continually improve OSH performance."

[TS01-06]
ILO-OSH 2001: Re-introducing OSH Management Systems in the CIS Countries

Roman Litvyakov, Wiking Husberg, Marat Rudakov

ILO Moscow, Grigoriy Faynburg, Perm Regional OSH Centre

Eleven CIS countries (former Soviet Union republics) approved in 2007 the new inter-state standard GOST 12.0.230-2007 identical to the ILO-OSH 2001 "Guidelines for occupational safety and health (OSH) management systems". An old type of OSH management system (MS) was implemented in the planned economy. The division of the Soviet Union and the following transition period towards market economy led to the abolishment of all social responsibility functions in the enterprises, which did not produce immediate profit, including the systematic OSH approach and all OSH functions.

An extremely disturbing negative demographic population decrease, partly due to occupational accidents, diseases and poor working conditions, has lifted the improvement of working conditions higher on the political agenda.

Implementation of the new GOST Standard is a starting point towards improving the situation.

The introduction of modern OSH managements systems is a part of the ILO systematic approach. Several CIS countries, such as Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, have included modernisation of their OSH systems in their tripartite Decent Work Country Programmes with ILO.

The GOST Standard is tested in Russian regions and some CIS countries in conjunction with ILO projects. In Karelia and Leningrad region in Russia employers' organisations and pilot enterprise are introducing the new modern OSH MS. The Union of Employers of Armenia has started utilization of the new Standard.

Implementation and audit manuals and guidelines, training packages assessment and social partnership have been produced.

Enterprises, based in the CIS countries, which aspire towards contacts with the global market, are demanding an international OSH certification system. ILO-OSH 2001, being the only international OSH management standard, is the obvious base for such a system.

[TS01-07]
Steps Taken towards the Improvement of Activities Related to ILO-OSH 2001 Adherence in Argentina

Juan Horacio Gonzalez Gaviola

Superintendency of Occupational Risks, Argentina

Argentina, through the Superintendency of Occupational Risks ("Superintendencia de Riesgos del Trabajo"), recognized the ILO-guidelines on Occupational Safety and Health Management Systems (ILO-OSH 2001) on 28 April 2005 and thus became the first Latin-American country to formally recognize them.
As a result, cooperation between ILO and Superintendency of Occupational Risks started so as to find the ways to follow up the guidelines. Once this period concluded, and in order to start planned activities, Resolutions 523/07 and 1629/07 were written. Both Resolutions were intended to complement the following aims: to give a national framework as an adjustment process from ILO-guidelines at a national level, to find the ways for the follow-up, and to assure workers'participation. Resolution N° 523 set the emphasis on the adoption of the National Guidelines on

Occupational Safety and Health Management Systems for all the specific guidelines. This Resolution contemplates that the adherence to these rules is voluntary and that it complements the pre-existing regulations, not replacing them. Specific guidelines based on kind and size of the organizations were planned and in order to get to these specific guidelines, three basic steps of actions based on flexibility were taken. Resolution 1629/07 includes the rules and regulations for the implementation of the OSH Management Systems at a national level.

As the National OSH Management System Guidelines are not mandatory, the Regulatory Authority encourages incentives to the companies which send there adherence to them.

Taking into account   the national guidelines, a pilot activity was performed by an electricity company (private employer), a workers´ union ("Federación Argentina de Luz y Fuerza- FATLYF") and a state representative (Superintendency of Occupational Risks).   Preliminary result will be presented.

Technical Session II
**[TS02] Impact of Changing Working
        Conditions on Workers' Protection**

June 30, 13:30 - 15:45
Room: 104/105, COEX

Moderators:
Gerhard Mehrtens, ISSA
Jacques Tonner, ISSA

[TS02-01]
Impact of Changing Working Conditions on Workers' Protection

Jorma Rantanen

International Commission on Occupational Health

Traditional risks, occupational accidents and occupational diseases still continue to occur in both industrialized and developing countries and need full attention for better recognition, registration and first of all prevention. Despite these risks still cause an unreasonable burden to health, work ability and well-being of workers and major economic loss for nations, they remain largely unrecognized.

Simultaneously, several new risks emerge and call for predictive risk assessment and new preventive strategies. New competences among occupational safety and health personnel are needed. Recognition and prevention of new types of accidents, musculoskeletal disorders, psychosocial stress and new types of social behaviour need to be strengthened. Numerous challenges but also opportunities are provided by new technologies.

The clients of occupational health safety are in a dynamic structural change. The big global operators take good care of their workers' health, while the small-scale enterprises, micro-enterprises and self-employed are seriously underserved. The developing world is for 85% to 90% uncovered by any safety and health services. Putting current knowledge and research on safety and health into practice for protection of all working people is a challenge of occupational health safety and health in the next decade. WHO, ILO and ICOH have jointly launched a new strategy for Basic Occupational Health Services, BOHS, to give a response to such a major global health challenges. The BOHS approach is currently introduced and implemented in all continents. The ultimate objective of the new strategies of ILO, WHO and ICOH is to provide a certain minimum level of services for each working individual in the world. Similar set of basic safety services would be needed and preferably both basic safety and health services should be provided together.

[TS02-02]
Changes in the World of Work

Richard Delmas

National Health Insurance Fund for Salaried Employees (CNAMTS), France

10 years ago, while traditional risks seemed to be progressively mastered in Europe thanks to a more comprehensive regulation the current change in the economic activities represents a new challenge. Traditional risks are growing in new circumstances and new additional risks are emerging in addition to them.

We will probably notice soon the results and conclusions of the works engaged some years ago. These reports are in accordance with the current evolutions: globalization of the markets, continuous search for competitiveness, deeply changes in the traditional work structures and increasing use of new technologies.

The collective work body is splitting and become atomized. Work itself becomes more and more insecure. Different opinions agree however on one of this many-sided evolution: the impact of the growing number of working women and the global ageing of the working population.

Another important new fact is that media and public opinion have a great interest in this matter. The topic of occupational health and safety has become a current subject that is not limited to the enterprise any more. This interest has as a consequence the lost of confidence of the general public and its concern regarding risks. Occupational risks appear like something of the past that is not accepted any more by the public opinion. The notion of quality and well-being at work takes all its sense and combines itself with the notion of quantity of work.

The need of research, wakefulness, permanent and reactive observations of the evolutions that are harmful to occupational health becomes obvious. We need appropriate tools allowing us to constantly manage change, to determine reactive performing indicators to follow-up occupational health and safety, to adapt mentalities to this perpetual evolution and to expect to find the unattended in control fields that were unexplored before.

A great watchfulness is also necessary because of the lack of experience regarding the introduction of new products or new technologies and their long-term effects.

[TS02-03]
Migration and Safety and Health at Work: Migrant Construction Workers in the US
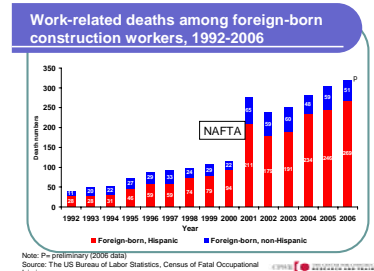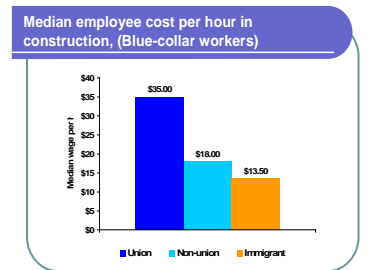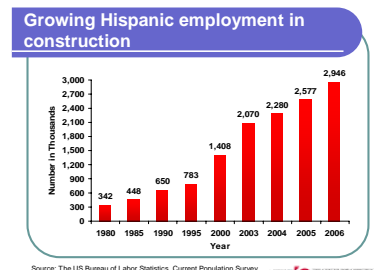
Knut Ringen, Sue Dong, Pete Stafford

Center for Construction Research and Training, United States

The construction industry has always been characterized by great mobility of employers and workers, given the temporary nature of construction projects and construction work. However, increasing globalization of the economy and the expansion of free trade agreements in recent years are having a severe effect on workers and the stability of the construction industry, and is threatening to set back both safety and health and the social security arrangements that have been created for construction employment.

In the mid-1990s, the US entered into the North American Free Trade Agreement (NAFTA) with Canada and Mexico. While this agreement did not include free movement of labor across borders, it did result in displacement of labor that unleashed a vast illegal migration of workers from Latin America (mainly Mexico) into the US. While for these workers this represented a good opportunity, it had consequences, in the form of lowering wage and benefit levels and increasing injuries and fatalities.

While globalization will continue to be a reality, we believe this is an issue that ISSA should address. Specifically, we think ISSA should insist that safeguards of labor standards be incorporated in international economic agreements, by insisting that nothing in such agreements should lead to a deterioration of prevailing labor standards, including safety and health protections, occupational health services and social security arrangements.

Growing Hispanic employment in construction

Source: The US Bureau of Labor Statistics, Current Population Survey

Median employee cost per hour in construction, (Blue-collar workers)

Work-related deaths among foreign-born construction workers, 1992-2006

Note: P= preliminary (2006 data)
Source: The US Bureau of Labor Statistics, Census of Fatal Occupational Injuries

[TS02-04]
Occupational Safety and Health Concerns in the Informal Economy

Sanjiv Pandita

Asia Monitor Resource Centre, Hong Kong SAR, China

Informal sector workers and workers working informally continue to be one of the most vulnerable groups in terms of exposure to workplace hazards, access to social security (including compensation) and other basic rights. Definitions may vary, but there is an agreement on the scale and magnitude of this sector and in many (developing)

countries, this is the largest sector in terms of employment and overall output, yet the workers in this sector are outside the per view of any protective or regulatory legislation, a majority of times. Many a times hazardous work is deliberately outsourced to this sector so as to reduce the costs on safety. Informal sector also poses a challenge in terms of improving OSH conditions, as it is not a priority of the workers. Having a job is more important than the quality of job. However, working in such conditions can cause work related accident or disease and if it affects the sole bread earner, it can push their family into deeper poverty. Women and children also work in this sector as there is, sometimes, no clear distinction between the workplace and home.To address this problem, we need to develop different strategies depending on the context. However, the major problem arises due to lack of clarity in terms of employment relations and thus the key question who pays? Given the importance of this sector in the economies, one may explore different options of empowerment of workers and victims, contributory insurance scheme subsidised by the government or making the big businesses to contribute when the product supply chain can be traced down to these informal workers. New ways of organising also need to be explored and it needs a partnership of Trade Unions, Labour groups and the Environmental Groups to tackle this overwhelming issue.

[TS02-05]
Changing and Poorly Cared Working Conditions and Their Impact on Health and Safety of Construction Workers in Japan

Eiji Shibata[1], Hitoshi Kubota[2], Ippei Mori[2], Michihiro Kamijima[3], Jian Sun[4], Naomi Hisanaga[5]

Aichi Medical University[1], National Institute of Occupational Safety and Health[2,] Nagoya Postgraduate School of Medicine[3,] Aichi University of Education[5], Japan
Institute of Health Economics, Edmonton[4], Canada

Recently, newly developed materials and techniques are introduced in construction, and construction workers are exposed to those new hazards. Therefore, much attention should be paid to the health and safety of construction workers. But like most countries in the world, small scale enterprises (SSE) are playing substantial roles in construction industry in Japan.

The aim of the present report was to demonstrate some aspects of the health and safety of construction workers in Japan through our research activities and to provide suggestions about health effects of the development of technology on the health and safety of the workers.

On the basis of the membership of Construction Workers' Health Insurance Society of Mie Prefecture (CHISM) in Japan, standardized mortality ratios (SMRs) were calculated during the period of 1973-1993. And in order to demonstrate the past and current exposure to various risk factors in construction, we also conducted a questionnaire survey of the workers on an occasion for the annual health examination carried out by CHISM.

Cancers of trachea, bronchus and lung was tend to be high, though not significant. SMR of lung cancer of ironworkers was 2.88 (95% CI: 1.44-5.15), suggesting the health effect of spraying of amphibole asbestos.

The questionnaire survey demonstrated the construction workers are exposed to dusts including asbestos in the past. Significant association between use of noise-making tools and subjective hearing impairment was found.

Through the experience in CHISM, the importance of organization to carry out the activities for occupational safety and health of SSE or self-employed workers should be recognized. To strengthen organizations, persons with various specialties should collaborate with common consciousness.

We should take care of occupational safety and health of construction workers continuously to improve working condition of them and check the health effects of the past exposure to harmful materials including asbestos.

[TS02-06]
Inter-country Networking of Participatory Training in Occupational Safety and Health by Trade Union Initiative in Changing Working Conditions

Toru Yoshikawa[1], Kazutaka Kogi[1], Koji Suzuki[2]

Institute for Science of Labour[1], Japan International Labour Foundation (JILAF)[2], Japan

The safety of work varies enormously between countries, economic sectors and social group. Developing practical risk assessment tools and its implementation programs for securing workers protections in changing working conditions is needed. The participatory, action-oriented training program in occupational safety and health named POSITIVE (Participation-Oriented Safety Improvements by Trade Union InitiatiVE) was developed through trade union network in Asia under the cooperation of Japan International Labour Foundation (JILAF). This program established in Pakistan and extended to other countries in Asia. The steps taken in the development of the POSITIVE program included collecting local good examples in safety and health, developing an action-checklist, testing a participatory training program, and conducting follow-up activities to examine local achievements. Training

manuals were compiled to provide workers with the practical, easy-to-understand information on safety and health improvements and on the positive roles of trade unions. Trade union trainers trained in the methodology conducted serial POSITIVE training workshops in Pakistan and then in Bangladesh, Mongolia, Nepal, the Philippines, Thailand, China Indonesia, Vietnam and Laos. These workshops resulted in many low-cost improvements at the workplace level. These improvements were carried out in the technical areas of materials handling, workstations, machine safety, physical environment, and welfare facilities. The trade union networks have been vital in reaching an increasing number of grass-root workplaces and in expanding the program to other countries. This included the visits to Mongolia and Thailand of Pakistani trade union trainers to demonstrate the POSITIVE training. The participatory training tools used in the POSITIVE program such as the action checklist and group discussion methods were commonly applied in different local situations. Participatory approaches adopted in the POSITIVE program have proven useful for providing practical problem-solving measures based on the local trade union initiative in changing working conditions in workplace world wide. More information; web site:
http://www.jilaf.or.jp/English-jilaf/index.html

Technical Session III
[TS03] New Challenges and Opportunities in Occupational Safety and Health (I)

June 30, 13:30 - 15:45
Room: 103, COEX

Moderators:
Doo-Yong Park, Occupational Safety and Health Research Institute, KOSHA
Antonio Moccaldi, National Institute for Occupational Safety and Prevention (ISPESL), Italy

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[TS03-01]
From Sharing of New Technologies through Health and Safety Networking to Using New Technologies for Health and Safety Networking

Jukka Takala, Sabine Sommer, Andrew Smith

European Agency for Safety and Health at Work, Spain

Occupational safety and health issues (OSH) are complex and diverse. Dealing with them effectively and equitably is more than individual persons, organisations or countries can manage alone.
This is where OSH networks and networking can make a difference. Networks are powerful tools for raising awareness and sharing information and good practices on OSH issues.

By pooling resources and uniting voices where and whenever relevant networks have a greater impact in the development of a culture of risk prevention as one single actor alone.
Over the time, many OSH networks have developed, ranging from regional networks over specialist and topical networks to virtual networks of cross-linked websites.
There are many achievements – tangible, e.g. reports, conferences and intangible, e.g. contribution to a better understanding of different cultural backgrounds and OSH settings

However, the figures for work-related diseases and accidents are still high, and today there are many changes in the workplaces as well as in the way we can communicate which each other, particularly the younger generation.
Can we meet these challenges with the current networks and networking methods and what could OSH networks to more and better to address these new challenges?

After providing a short overview of OSH networks and networking on OSH today, in his presentation Dr Takala will highlight present and future challenges in OSH and discuss what possibilities new communication tools, such as web 2.0 social media can offer for sharing OSH information and reaching out to a large audience.

[TS03-02]
Safety and Health Challenges and Improvement Opportunities in Asian Region

S. Veerasingam

Asia Pacific Occupatioanal Safety and Health Organization, Malaysia

Safety and Health Challenges and Improvement Opportunities in Asian region
The Asian region consist mostly of third world and developing countries, where productivity is the first priority and safety and health is implemented only if cheap or convenient. As a result, accident and severity rates are way below acceptable "international" standards. This trend is

made worse by attitude of industries that third world countries are sources of cheap labor, where companies are free to squeeze maximum profits at the expense of the working population.

OSH improvements can and should be spearheaded by multinational corporations, non-governmental organizations, regional committees, and even the United Nations and the International Labor Organization. While raking in profits by the billions, there is a corporate social responsibility to help raise the standard of living of the working population, if not at least the standard of safety and health. Safety and health is not free, but it does not cost much either. All you need is a team of committed people, the time to carry out safety activities, some basic resources, and the knowledge and skill to carry out safety and health programs.

MNCs can play a big part in improving safety and health in this region. Some of the programs that can be implemented by MNCs are

- Setting high standards of safety and health in their branch countries; they should not follow the country's minimum standards, but be a benchmarked with leading MNC's and to be followed.
- Mentor-mentee program where MNCs can adopt and help mentor a few SMIs of their choice
- Sponsoring "OSH in Schools" to help raise awareness in students before they enter the job market.

Regional committees such as ASEAN OSHNET can help through promotion of Country OSH Policy and follow up by guiding its implementation. There can also be annual or biennial conferences where participating countries take turns to host. Current safety and health issues can be discussed, to be followed by benchmarking and revision of legal requirements and standards.

To do all these, we need a champion. We need funds, international expertise, and a force to drive this program. How can we start? Are regional countries willing to be part of this program? Can we start at all? As Dylan says, the answer is blowing in the wind.

[TS03-03]
New Challenges in Occupational Health: "Securing Workers' Health Rights by the Strengthening Food Safety through Proper Diet"

Han-Og Sur

KOSHA, Korea

In Korea, compared to 2006, the number of accidental casualty increased by 1.3%(1000), while the number of occupational disease as 12.1%(1234), showing an increase.

According to National health and nutrition examination survey in 2005, the risk of stroke in adults suffering from chronic diseases is 2-5 times higher than not adults. The most serious thing is that the workers, more than half of adults in Korea, are cerebro-cardiovascular disease high risk group and 3/4 workers of those does not have the proper management. Industrial Accident Insurance payment for cerebrovascular disease and heart disease is occupied 8-9% of total, which are holding a position as a burden on industry. These are closely related to lifestyle such as eating, smoking, exercise. so it is called as lifestyle related diseases.

KOSHA in the last year, published "self control health" is a small booklet. It suggests appropriate life style such as proper diet, healthy food, how to exercise in workplace.

I think the best effective strategy to prevent occupational disease is to adjust worker's life style. Among those, the most important thing is eating. Traditionally it is said in Korea that food and drug come from same root. That means any illness occurs in food, so food treat illness. Therefore, we should secure worker's heathy rights by the strengthening food safety through proper diet in work place.

[TS03-04]
Green with Envy: What Safety and Health Managers Can Learn from the Corporate Environmental Movement

Leo Carey

National Safety Council, United States

Starting in the 1990s, corporations around the world began developing Corporate Social Responsibility (CSR) codes. These CSRs are generally composed of several parts which may include: environmental performance, labor rights, health and safety practices, human rights, community economic development and supply chain management. Although occupational health and safety has gained attention in the last decade, the majority of attention by far has been given to the environmental aspect of these codes. Safety and health managers concerned with global health and safety practices within supply chain management can learn from the strides made in environmental sustainability at companies. Worker safety and health has as many potential benefits as corporate environmental responsibility, but that message has not yet researched consumers. What can those striving to improve worker safety both within their own company and within their global supply chains learn from the corporate environmental movement? First, poor working conditions in Asia, India and the United States can create a backlash.

Second, improvements in safety and health—both within the parent company and within supply chains—help the company bottom line. Each year the Robert W. Campbell Award is given to companies that demonstrate how their safety and health programs have improved profits. Leaders in these companies have made the connection between safety in their operations and corporate sustainability. Third, audits and objective metrics and measures can help. Finally safety and health professionals can follow the lead of their counterparts in environmental affairs and make a convincing business case for the connection between an outstanding occupational safety and health records and a successful business.

[TS03-05]
The Forest for the Trees: A System Approach to Occupational Safety and Health

Harri Vainio

Finnish Institute of Occupational Health, Finland

I explore the relationship between current research directions in occupational safety and health and occupational health policy. Specifically, I suggest that continued emphasis on 'old' traditional approaches to the exclusion of other 'new' approaches will impede the discovery of important breakthroughs in health and safety research necessary to understand the emerging hazards of today. I recommend redirecting research programmes to interdisciplinary and population-focused research that would support a systems approach to fully identifying the occupational factors that contribute to negative health and safety outcomes. Such an approach is able to address the interactions between psychosocial, cultural, and physical aspects of our work environment and explicitly include these in the evaluation and management of health risks from occupational sources.

[TS03-06]
New Strategies for Product Certification Impacting Occupational Safety and Health

Keith Williams

Underwriters Laboratories, United States

It is both a challenging and opportune time for individuals responsible for product safety. Consumers, retailers, workers, and regulators are focused on product safety issues today, largely because of recent high-profile incidents with consumer products, but also because of on-the-job catastrophes in mines and other work environments. It is a natural evolution for societies to seek improvements in the quality and safety of the environments where they work and live. Today, we are expanding the traditional definition of safety hazards (fire, shock, and casualty) to encompass concerns about the impact manufactured products have on the environment. We are also coping with shifts in global supply chains that impact the types of materials human beings are exposed to, and the safety and quality of the products they use. Standards development organizations and testing and certification bodies are continually striving to keep pace with new developments, in order to design compliance solutions that meet the confidence of the marketplace and regulators in ways that do not overly restrict the flow of commerce. Developing a global safety consciousness and harmonizing standards and conformity assessment systems internationally are the keys to unlocking current product safety challenges. When countries have common understandings of the risks inherent in products and purposefully use standards, testing and certification schemes as tools to improve the quality and safety of products, rather than protectionist barriers to trade, human environments are positively impacted and dramatically improved.

[TS03-07]
New Education and Training for Occupational Safety and Health

Jin Geol Kim

KOSHA, Korea

There have been many changes in modern industrial training environment e.g. limitation of school education caused by rapidly changing society, shortening of knowledge lifespan and Extension of Average Human Life Span and Social Change Intervals. In addition, it is needed for us to take lifelong learning of which several method of education including credit bank system can be used.

Category	Industrial Society	IT Society	Ubiquitous Society
Target	School constituency oriented	Extended to industry workers	Unlimited
Method	Collective learning	Field studies	Individual/customized
Medium	Classroom (blackboard, books)	Broadcasting media, computer	Internet/BcN/USN etc.
Time	Weekdays	Weekdays/evenings	Unlimited
Location	School	School/industry site	Unlimited

Since Internet communications training commenced in the form of E-Learning had been introduced, several methods were developed like Official Cyber University, EBS SAT

Internet Broadcasting and the amount of e-learning market have been expanded enormously. Reflecting this trend, KOSHA also adopted E-learning for occupational safety using credit or point system so that 9,714 workers have attended since 2001.

Amongst the attendees, about 80% satisfied in the education effectiveness. On the basis of the result acquired by e-learning for many years, KOSHA plans to innovate it by combination and standardization of education contents, which is called Sharable Content Object Reference Model. KOSHA also plan to adopt the U-learning system, which means "Ubiquitous".

In future education, the offline format of education that takes place in real-world educational facilities will be limited. It is anticipated that theoretical studies and hands-on exercises will be done in a 3D space where reality is integrated into a virtual environment, evolving in such a way that lifelong learning that transcends time and space is made possible.

Educational institutions will need to create environments appropriate for this and actively prepare to meet the rapidly evolving education paradigm.

Technical Session

Technical Session IV
[TS04] Strategies and Programmes of Safety and Health for the Future

July 1, 09:00 – 12:00
Room: 101/102, COEX

Moderator:
Andras Bekes,
Ministry of Social Affairs and Labour,
Hungary

[TS04-01]
Promotional Framework for Occupational Safety and Health

Seiji Machida

ILO

Occupational Safety and Health (OSH) has been a core programme f the ILO since its establishment in 1919. Over 20 international Conventions directly addressing OSH have been adopted providing international standards. In 2006, Promotional Framework for Occupational Safety and Health Convention (No.187) was adopted providing a comprehensive promotional framework for OSH. The Convention calls for the promotion of national preventative safety and health culture and periodic review of the measures for implementation and ratification ILO Conventions in the field of OSH. The systematic improvement of national OSH performance should be sought through the formulation of national OSH policy, national OSH system, and national OSH programmes. Active participation of social partners in the formulation of national OSH programme is essential for the successful development of practical programme. The compilation of relevant information in the form of national OSH profile is a logical step for reviewing the progress and identifying priority areas for action for reinforcing national OSH system and programme. The national OSH profile also serves as a tool for sharing the information on national OSH situation including OSH data and OSH system information among all the stakeholders within the country. The information compiled as a national OSH profile should be used also for the review of the progress in the later year. By comparing the national OSH profiles compared at different in time, we could measure the progresses through OSH data (such as

occupational accidents and diseases) and OSH system performance (such as OSH straining courses and inspections carried out). The ILO has been collaborating with its member States for the implementation of the systems approach to occupational safety and health in line with the Convention No.187. Recent developments will be reported.

[TS04-02]
Occupational Health and Safety: Key Instrument for the Promotion of Sustainable Jobs and Sustainable Enterprises

Cecilia Brighi

Italian Confederation of Trades' Union (CISL), Italy

Human losses deriving from non promotion of occupational health and safety measures are dramatic and costs for society are also extremely high. OHS is not only a fundamental human right. All the figures show that there is a strong moral and economic case for improving the situation in the area of occupational safety and health. Preventing occupational accidents and diseases should therefore be given the highest priority at enterprise, national and international levels.

Sustainability and safe jobs cannot be not anymore discretionary issues in the enterprise strategies. These issues are not against profitability of companies. On the contrary more and more they become the new benchmark. Occupational health and safety have a strict link with sustainability, with climate change and with the need for the creation of a shared participatory culture.

International institutions, governments, employers, workers organizations have to play a specific role to guide such changes to respond to the new challenges of building sustainable development strategies that enshrine and combine both the issue of health and safety and the issue of climate change.
We need to create joint systems to manage the challenge of OHS and of the environmental partnership at wok place. Procedures to define target setting, implementation, evaluation and monitoring systems can be very helpful for the promotion of OHS and environmental issues and to create a new culture in which not only injuries and accidents are avoided but also the highest degree of physical, mental and social well being of the work is implemented.
The trade unions are fully committed to participate and are responsible actors in the implementation of the strategies enshrined in the main ILO conventions on Health

and safety and in the development of the new using at different levels the instrument of collective bargaining, social dialogue and innovative industrial relations that enhance workers participation in the decision making of companies to build safe works, sustainable enterprises, sound productivity and competitiveness strategies that, while aiming at increasing the process and product qualities, does not shrink working conditions and workers rights along the whole production chain.

This comprehensive approach that includes the whole production chain is crucial, particularly for categories of workers in small enterprises, in the informal economy and in contract jobs that are particularly vulnerable to occupational hazards and risks.

The integrated approach on health and safety need to be built on the existing promotional framework, but cannot be used in isolation, unrelated to the other existing ILO instruments on occupational safety and health. On the contrary, it should enshrine the promotion of the existing ILO instruments on occupational safety and health and should contribute to the ratification and effective implementation of the other key occupational safety and health conventions, in particular the occupational safety and health convention (N° 155).
The ILO should therefore promote a ratification campaign accompanied by a program of technical assistance to help member states to overcome the obstacles to ratification.

[TS04-03]
Making National Programmes and Strategies on OSH more Effective

Antonio Peñalosa

International Organisation of Employers, India

As an international organization representing employers, the IOE is conscious of the importance of occupational safety and health. Effective OSH programmes and strategies are not just about enhancing a company's productivity but also about preserving life itself.
Occupational safety and health should therefore be accorded the highest priority on national agendas and governments should undertake concerted action to foster political commitments at the highest levels in order to develop effective national strategies. These strategies should be developed through tripartite consultations and dialogue in order to build consensus on what needs to be done in order to improve occupational safety and health in the country. Of critical importance is the need to bear in mind the specific circumstances of the country and to adopt a preventative safety and health culture and a management

systems approach at enterprise level. A national OSH profile is necessary in order to ascertain what needs to be done.
The IOE strongly supported the adoption by the International Labour Conference in 2006 of the Promotional Framework for Occupational Safety and Health Convention (No.187). This signals a new approach to standard setting as it is non-prescriptive. The call for each member state to develop, maintain and periodically review a national policy, a national system and a national programme will undoubtedly enhance the contribution and participation of the workplace stakeholders as the representative organizations of employers and workers will take part. Further, it is important that adequate resources are allocated by the ministries of finance so that the necessary infrastructure or system to implement it is in place. Having decided on the infrastructure, what needs to be done is to come up with objectives, priorities and means of action. It is crucial that the tripartite constituents take part not only in the design, implementation but also in the monitoring and evaluation of programmes.

[TS04-04]
Great Britain's Strategic Programme: "Fit for Work, Fit for Life, Fit for Tomorrow"

Jane Willis

Health and Safety Executive, United Kingdom

This paper provides an overview of the programme of work developed by the Health and Safety Executive (HSE) in the past three years in partnership with local authorities and other key partners to tackle the principal causes of ill-health and injury at work in Great Britain (GB). It sets out our targets and records our achievements. The annex provides greater detail of the activities undertaken in GB in terms of the primary causes of injury and ill-health in the workplace.

[TS04-05]
Strategies and Programmes of Safety and Health for the Future: The Case for Nigeria and Other Developing Economies

S.D. Kassim

Federal Ministry of Labour, Nigeria

The importance of OSH goes beyond the protection of the national workforce as this constitutes the majority and most active population of the nation and their state of wellbeing is very significant in determining the general wellbeing of

any nation. Nigeria recognizes this critical role of OSH in national socio-economic development and the Constitution of the Federal Republic of Nigeria that "the State shall divert its resources towards ensuring that health, safety and welfare of all persons in employment shall be safeguarded and not endangered or abused".

The government of Nigeria has remained committed to this provision even in the current economic expansion plan under Vision 20.20-20 and the President's 7-Point Agenda.

Emerging economies in Africa and elsewhere as exemplified by Nigeria confront an ever-increasing wave of occupational hazards occasioned by work. Into the future, the quest for rapid economic expansion to meet developmental aspiration will further expand the spectrum of occupationally related hazards in transportation, energy, manufacturing, petroleum, mining and agriculture.

Globalization, new exposure patterns and the dumping of discarded technologies will add to the burden of the existing labour safety inspection and enforcement services. Political, structural and managerial impediments are already hampering the efficiency and effectiveness of inspection systems who act sometimes antagonistically and in the process, undermine and weaken existing inspection systems.

Targeted action by the international and national labour administration systems such as the ILO, WHO and UNDP and National Governments through technical assistance, development of policy/standards, structured advocacy, awareness raising and international training and dialogue is required.

At the national levels integration of occupational safety and health services which seek to protect the worker from hazardous working environment and employment services which seek the most optimum working conditions, including integration of employment cadres should be pursued more vigorously to remove the rivalry between labour administrative cadres. This way the most efficient deployment of human, material and financial resources competing with other developmental demands is made. The instrumentality of social dialogue, bipartism/tripartism and transformative mediation together with sustained training should be deployed to address both foreseen and unforeseen safety and health challenges of the future.

[TS04-06]
Progress of the National Occupational Safety and Health Programme

Yoshiyuki Fukuzawa

Ministry of Health, Labour and Welfare, Japan

Japan formulated the first five-year national programme on occupational safety and health (OSH) in 1958 and the 11th national programme has been launched in April 2008. During this fifty years period, we have achieved drastic decrease of occupational accidents and diseases. We believe that the national programmes and the Industrial Safety and Health Act, which was promulgated in 1972, contributed a lot to this drastic decrease by well working of complementary effects. The national programmes have been formulated by analysis of OSH level at that time, achievements of the previous programme and taking systematic consultation process with various stakeholders. National OSH policy was clearly set in the programme and the policy was shared among related ministries, employers associations, labour unions and the other stakeholders. They shared the issues, priorities, targets and measures. The programmes contributed to face the government and stakeholders toward the same directions and enhance cooperation between each other for addressing the common issues. In 2007, Japan became the first country to ratify the ILO Convention concerning the Promotional Framework for Occupational Safety and Health (No.187, 2006). The latest 11th national programme was formulated by full reflection of principles of the ILO Convention No.187. Management system approach was adopted at the national level and it encourages stakeholders to formulate their own OSH programme or plan by the same manner. It is highly expected that continuous improvement of OSH would be observed by making PDCA cycles function from national level to workplace level.

[TS04-07]
Public Policies for Safety and Health at Work in Mexico 2007 - 2012

Alvaro Castro

Ministry of Labour, Mexico

Dr. Castro will first refer to the status of safety and health at work in Mexico at the beginning of the current administration.

Then, he will briefly describe the eight projects that are part of the Public Policy on Safety and Health at Work 2007-2012, which are:

1. Establishing a National System on Safety and Health at Work;

2. Modernizing standards and regulations on safety and health at work;
3. Potentializing the Management and Self Evaluation Program on Safety and Health at Work;
4. Developing the National Information System on Occupational Accidents and Diseases;
5. Strengthening mechanisms for consultation and risk prevention;
6. Financing prevention of occupational risks;
7. Encouraging training and skilled technical education on safety and health at work, and
8. Strengthening review processes, verification and labor inspection regarding occupational safety and health, which also requires revision and updating of the standards framework on this matter.

Finally, he will describe the progress made during the first eighteen months of the current administration, such as:

- Reactivation of Consultative Commissions on Safety and Health at Work, at national, state and Federal District level.
- Implementation of a web site for the Consultative Commissions on Safety and Health at Work at national, state and Federal District level.
- Development of a Study on the Impact of the Modification of the Insurance Incentives related to Occupational Risk Reduction.
- Publishing of new seven Mexican official standards on safety and health at work, for public consultation.
- Development of the Project on the Official Mexican Safety Standard on Underground Coal Mining.
- Development of nine procedures for assessing conformity of verifying units, testing laboratories and certification entities.
- Design of an information tool called "Search engine" aimed at determining standards to be applied to the enterprises and their OSH experts with regard to occupational safety and health.
- Integration of a Sub-commission[1] and eleven working groups about the Modification of the Occupational Disease Table.

1 Sub-commission of the National Consultative Commission on Safety and Health at Work (COCONASHT)

[TS04-08]
Developing a National WSH Strategy: Singapore's WSH2015

Ho Siong Hin

Ministry of Manpower, Singapore

Singapore's workplace safety and health (WSH) landscape went through major changes in 2005 with the launch of a new WSH framework. The framework was designed to guide the efforts of all stakeholders towards achieving and sustaining continuous improvement in national workplace safety and health standards.

To implement the framework, the performance-based Workplace Safety and Health Act was introduced in 2006. This was complemented by our national WSH roadmap – WSH 2015. Under WSH 2015, a national vision of a safe and healthy workplace for everyone and to make Singapore a country renowned for best WSH practices was established. Four key strategies were also identified to drive Singapore towards vision. These are building strong capabilities to better manage workplace safety and health; implementing an effective regulatory framework; promoting the benefits of WSH and recognizing best practices; and developing strong partnerships locally and internationally.

Many initiatives and action plans were rolled out to implement the four strategies. They include the strengthening risk management framework and the capabilities of our WSH professionals, effective and targeted interventions, a national campaign to raise awareness of WSH, a national WSH awards to recognise the best, a programme to integrate safety and health into business of small and medium enterprises and forming key partnerships within the region.

Moving forward, it is crucial for Singapore to remain cognisant and responsive to emerging trends and challenges. A strong and all-encompassing WSH culture only becomes possible and sustainable when all stakeholders are committed and involved in making workplaces in Singapore safe and health for everyone.

Technical Session V
[TS05] New Challenges and Opportunities in Occupational Safety and Health (II)

July 1, 09:00 – 12:00
Room: 104/105, COEX

Moderators:
Doan Minh Hoa,
Ministry of Labour, Vietnam
Helmut Ehnes, ISSA Section Mining

[TS05-01]
Increasing Safety Imperative vs. Technological Progress in Basic Industries

John McEndoo

ISSA Mining Section, AngloGold Ashanti Limited, South Africa

This presentation firstly discusses the ever-increasing pressures for companies in basic industries, mining in particular, to improve safety and health performance. Areas covered include both moral and business related issues.
Secondly, the success of various safety and health improvement initiatives is discussed. Popular opinion has moved to favor behavior-based programs, and the author contends that whilst there have been successes, mainly in the first world, the vast majority of "basic" industries are located in the developing and sometimes third world, where the success of these programs has been much less successful.
The presentation suggests that one guiding principle has not been utilized as effectively as it should, and the presentation shows that the application of the hierarchy of controls has been enduringly successful in most areas of safety and health improvement initiatives, providing sustainable improvements in safety and health performance.

[TS05-02]
Taking Over Responsibility World Wide: OSH is Everyone's Responsibility

Vincent McNeilly

Akzo Nobel, United Kingdom

"Taking over Responsibility World Wide" or as I would see it - taking responsibility. occupational safety and health is everyone's responsibility and in today's global village that responsibility encompasses the office, warehouse, factory, laboratory, customers premises and driving a car, these are the environments that make up our world of work.

AkzoNobel is a global leader in Coatings and specialty Chemicals and as part of AkzoNobel my Business Unit is the market leader in high performance Coatings for the Marine, Heavy Industry, Yacht and Aerospace markets, known by our customer base as International Paint

International Paint is a global organisation; it has 20 manufacturing sites and employs 5200 people globally.

We have manufacturing facilities, research laboratories, offices, warehouse areas we control to the high standards set within the Business Unit and AkzoNobel. One fifth (1/5) of our workforce operate in customers premises i.e. shipyards, construction sites, chemical and petrochemical plants, aircraft hangers and boat yards, interestingly our customers premises are acknowledged as high hazard working environments.

Shipbuilding and construction are recognised as high risk areas where accident rates are high.

In the past twenty years, within our business unit, we have had 6 people lose their lives and several more sustain serious injuries in our factories and on our customers premises…these are unacceptable, as in any organisation that stands fully behind the edict that it is every employee's right to go home alive and healthy from work.

In 2005 we embarked on a project to develop a process to continually improve and sustain occupational safety and health.

It has taken two years to formulate a vision and develop a strategy for occupational safety and health within our business unit.

The process involved the creation of an HSE executive team (members of this team are executives and senior managers) to formulate improvement processes and feed the improvement recommendations to the executive board. These recommendations are based on hard data produced through project teams using the tried and trusted process of the Deming cycle (Plan, Do, Study, Act) and addressing the socio-psychological issues that effect up to 95% of our daily decisions and discussions in our work. Behaviours and attitudes play a major part in our daily working routines and must be addressed.

The HSE executive developed the vision and strategy…our strategy is very important in achieving our vision.

the need to understand the occupational safety and health process in the BU was critical to developing the strategy, as can be seen by the system map, a process flow of safety through our organisation.

Our vision - Our ultimate goal is to eliminate all accidents and incidents in the workplace, this can only be achieved by;

- Active leadership that is visible across all levels in the organisation

- The sharing of good safety practices across the organisation

- The involvement of everyone in continuously improving safety performance

- The designing and maintenance of safe facilities and processes

- The development of safety skills of all employees

- The support of a global network of professional safety advisors

To drive responsibility for occupational safety and health throughout our business, these are key elements we feel are important and essential to ensure continued improvement and success in occupational safety and health – from the general manager cascading down into the heart of the business, our people are responsible for occupational safety and health

In today's world of work we all have a duty to ensure occupational safety and health is everyone's responsibility.

[TS05-03]
The New Labour-Perspective: Working Everywhere at any Time: New approach for OSH Needed

Ulrich Klotz

German Union for the Metal-Industry, Germany

Intangible values play an increasing role in the economy and society. An economy whose most important product is information that is easily multiplied functions according to rules that are different from those in an economy where material goods are manufactured and traded under the application of traditional raw materials such as capital and labor. With the advance of computer networks and digital products, new forms of added value and new enterprise models are emerging. Similar to the transition from agricultural to industrial society, the concept of work is transforming itself fundamentally in the course of a multi-facetted process.

Since around the middle of the Eighties the implication has been that, with the assistance of the technology which decisively characterized the socio-economic development of the 20th century in its final years, many activities could be liberated from the obligations that industrialization brought with it.

Accompanying this, today's understanding of work as 'spatially and temporally established gainful employment that is to be performed continually' has been especially transformed. Work is decaying in many forms, and the boundaries between work-time and free-time, work location and residence, learning and working, dependent and free-lance employment, producers and consumers as well as between operations and branches are becoming increasingly frayed.

Everywhere where categories such as work-time, work location, work performance and workplace are blurred, the foundation of a structure that characterizes our behavioral patterns and value systems more than we are consciously aware and which is made up of agreements, norms, rules, laws, organization forms, structures and institutions is crumbling. Institutions such as labor unions, for instance, whose actions are related to the industrially characterized definition of work, are being stealthily robbed of their traditional business fundamentals and presented with new challenges. · · ·

[TS05-04]
The Human-Perspective: Aging Workface Ergonomics and Safety for Construction Machines

Daniel Roley

Caterpillar Inc., United States

Safety and comfort for operators of construction machines has always been an important consideration in the design and development of machines. As the workforce ages, becomes less physically fit, and must work until an older age, the ergonomics for operating construction machines becomes even more important. Construction machine manufacturers are responding by making machines easier and safer to operate, with improved ergonomics to compensate for some of the physical changes that occur with age.

The first challenge is the daily maintenance before beginning to operate construction machines. To make the daily maintenance easier, maintenance points are being moved to ground level so that it is not necessary to climb to reach these points.

The second challenge is to access the operator station on construction machines. To make access easier, several improvements are being implemented for access systems:
-    Angled ladders on small machines

- Stairways on medium sized machines
- Elevating access platforms for large machines

To compensate for the reduced strength and range of movement, control efforts are being reduced. Automated machine functions, such as bucket loading, reduce the physical work required to operate machines. CCTV (closed circuit TV) and additional mirrors reduce the time that the operator must turn in the seat for viewing around the machine.

To compensate for eyesight challenges for reading labels on machines, more symbols and pictorials are being used to minimize the need to read small print.

Advanced suspension seats position operators in an optimal position relative to the controls and minimize shock and vibrations. Remote controls can enable operators to run machines from a controlled environment off the machine.

[TS05-05]
The Knowledge-Perspective: New Technology and Automatization Requires Life Long Learning at Work

Marie Larue

Occupational Health and Safety Research Institute in Canada (IRSST) /ISSA Education and Training Section

Over the past 15 years many efforts have been made to promote education, training and teaching as a strategic component of the risk prevention. During this period many initiatives have been led by Education and Training Prevention Section of the International Social Security Association (ISSA) to promote the development of a framework for cooperation between institutions involved in occupational health and safety (OHS) and educational-vocational training community. The Quebec City Protocol and the Berlin Declaration define principles, strategies and measures associated with the concrete process designed to integrate OHS competencies into the educational process for a given occupation.

In the context of the ongoing and fast introduction of new technologies like nanotechnology, what are the challenges and opportunities in terms of OHS training, especially when the scientific knowledge about risks exposure is not well enough documented ?

The IRSST has a relevant contribution in the identification of potential hazards, safety control and prevention aspects related to nanoparticules. On the basis of the actual knowledge, it is strongly recommended to inform the employers and the workers about these issues even in the absence of a strong body of knowledge. This initiative is considered as the first stage of life long learning at work. Then the workplaces will be able to build programs specifically designed to prevent occupational and safety problems related to nanoparticules.

[TS05-06]
Employers and Employees in Active Partnership: The European Social Dialogue

Laurence Boens

SCR-Sibelco NV, Belgium

European social dialogue is a unique and indispensable component of the European social model, with a clearly defined basis in the EC Treaty. It refers to the discussions, consultations, negotiations and joint actions undertaken by the social partner organisations. Art. 139 of the EC Treaty provides the possibility for management and labour to enter into contractual relations and notably to sign European Social Dialogue Agreements.

At European level, social dialogue takes two main forms - a bipartite dialogue between the European employers and trade union organisations, and a tripartite dialogue involving interaction between the social partners and the public authorities, combining the values of responsibility, solidarity and participation.

European social dialogue has resulted in a variety of outcomes, including the adoption of over 300 joint texts by the European social partners. Amongst these, several handle issues of Health and Safety at Work.

The NEPSI industry sector organisations and their counterpart trade union federations negotiated a multisectoral social dialogue Agreement between 1 September 2005 and 2 February 2006.

The European Commission supported the project, qualifying it as innovative: indeed, where European social dialogue agreements are usually sectoral or cross-industrial, this one is the first of its kind.

Two working groups were set up for the negotiation: one Steering Working Group to draft the Agreement and discuss political aspects, and one Technical Working Group (made up of producers and consumers of products and materials that contain crystalline silica) to draft the technical annexes of the Agreement, especially the Good Practice Guide. Experts from national health institutes – the HSE (UK), the BerufGenossenschaften (D) and the Instituto Nacional de Silicosis (ES) – supported the technical working group.

The final text was unanimously approved by the negotiating Parties and the negotiations ended on 25 April 2006 with

the signature of the Agreement, in the presence of Commissioner Spidla.

[TS05-07]
Are OSH Policies and Strategies Effectively Responding to Emerging Challenges and Realities of International Migration?

Piyasiri Wickramasekara

ILO

Most of the world's migrants, estimated at 191 million in 2005 by the UN Population Division, are migrant workers (94 million according to ILO estimates) - those seeking work - and their dependants. This means that international migration is very much a decent work and labour market issue.

Occupational safety and health (OSH) is a key issue in achieving decent working conditions for all. Migrant workers are entitled to equal treatment with national workers in terms of conditions of employment, including health and safety at work, regardless of whether they work or not legally. Nevertheless, the practice is different and migrant workers tend to pertain to the vulnerable labour force group and work at greater risk. Firstly, migrant workers are often over- represented in high risk and hazardous sectors of the labour market. They are more likely to find employment in the so-called 3 D jobs – dirty, dangerous and demanding. Secondly, the reality is that many migrant workers are willing to earn as much in as short a time as possible; for which reason migrant workers may accept working overtime and in poor safety and health conditions. Thirdly, they suffer from a lack of information, knowledge and training in the occupational safety and health regulations applied in the destination country due to language and cultural barriers. Employers should provide all employees, whatever their origin, culture, habits, language, with the appropriate safety training to enable them to pursue their job without risk of illness or injuries.

Migrant workers may be subject to face greater health and safety risks due to their relatively short period of employment and their exclusion from or insufficient social security coverage under short-term contracts. This is particularly of a concern in the current context of increasing interest given to temporary and circular migration programmes as an option to maximize the mutual benefits of labour migration for development of both destination and origin countries. In addition, these programmes target labour shortage in economical sectors with greater risks of accidents and occupational diseases, such as agriculture,

construction, mines, and the hotel industry. Safety and health in agriculture relates to hazards connected with the use of agricultural machinery and equipment as well as hazards which arise in connection with dangerous chemical substances and pesticide. Workers in construction and mines endure a high rate of fatal accidents and injuries, as well as the risk of disease and cancer due to the use of dangerous work substances.

Ever since it was founded in 1919, the subject of occupational safety and health has been at the heart of the ILO work, including its standards-setting activities. The ILO has developed a wide array of OSH instruments – more than 70 Conventions and Recommendations, and over 30 Codes of Practice- covering general provisions, specific risks and special economic sectors where migrant workers are largely employed. All ILO standards apply to migrant workers (whatever their status), unless otherwise specified. "Decent work must be safe work" was reiterated at the 91st Session of the ILO International Labour Conference in 2003. OSH for migrant workers, including domestic workers, need to be promoted and integrated in labour migration policies in accordance with the ILO Multilateral Framework on Labour Migration and international labour standards.

Technical Session VI
**[TS06] Safety and Health Management
         Systems (II)**

July 1, 09:00 – 12:00
Room: 103, COEX

Moderator:
   Leo Carey, National Safety Council,
   United States

[TS06-01]
Occupational S&H Management System in Korea [KOSHA 18001]

Woo Bong Lee

KOSHA

Safety and Health(S&H) in the workplace has been recognized as an essential value with quality and environment in business operation. And recently, S&H paradigm is changing from compliance system by government to self-regulatory system by organization.

Keeping pace with this international trend, KOSHA has developed OSH-MS(System) named as KOSHA 18001 for the continual improvement of S&H performance with PDCA cycle by the self-management of S&H activities in the organization.

In this presentation, author gives various information about the system introduction and shares valuable experience in System operation.
- What should be considered in System introduction
- What are main components in System and Key contents of each component
- What are the positive outcomes of System performance and issues in operation

Finally, several key factors are suggested for the successful System settlement in the organization.

[TS06-02]
Safety Professional Competencies Needed for Today's Worldwide Workplace Safety & Health Challenges

Warren Brown

American Society of Safety Engineers, United States

The American Society of Safety Engineers' members – occupational safety, health and environmental professionals working worldwide are committed to protecting people, property and the environment as are the people attending the conference. The ILO estimates that work related incidents and diseases kill 2.2 million workers each year and cost approximately 4 percent of the world's GDP. A World Health Organization (WHO) report "Regional Framework for Action for Occupational Health 2006-2010" indicates that little has changed over the past 10 years. The same report notes that prevention programs, employing safety professionals, safety training, and networking can help reduce these incidents. We must all work together to develop and implement programs worldwide aimed at preventing workplace injuries and illnesses – if not people as a whole and our worldwide economy will suffer.

Our cultures, languages and governments may differ, but the desire for excellent SH&E performance transcends these differences --applying to all people, businesses & organizations.

To achieve this we must continue to focus on mutually defining and building competencies for the SH&E profession. A safety, health and environmental professional through academic preparation, work experience, and accredited certification or licensing has mastered and applies a recognized body of knowledge for

the prevention of injury, illness, property and environmental damage. And so as an SH&E professional we must bring certain competencies to our workplaces. The four competencies that will be discussed are: foundation skills, core competencies, technical & professional skills and executive competencies.

As more countries align with the WHO Global Plan of Action to increase workplace safety and see more countries push for developing safe and healthy workplaces the demand for safety, health and environmental professionals will continue to grow. ASSE will continue to join with you and others to be a key resource for not only providing the framework for safety professionals but a guide to the competencies needed for the future ahead.

[TS06-03]
Leadership-The Business Case for Health and Safety

Maureen Shaw

Industrial Accident Prevention Association, Canada

The value of workplace safety—whether it "pays"— depends on its position in the broader continuum of health, safety and wellness.

The further a workplace progresses toward a comprehensive workplace health and safety managed system, the greater its potential return on investment. For instance, "compliance" based programs, located near the beginning of the continuum, are typically reactive and strive to adhere to relevant laws. These programs enable the workplace to avoid penalties and fines. Further along the continuum, "performance" based programs are directed beyond compliance toward business improvement. They enable the workplace to reduce compensation premiums, reduce injury costs, improve safety metrics, enhance production, etc. Further still, healthy workplace programs in pursuit of "excellence" make a long-term commitment to loss prevention. These programs provide a competitive advantage, which adds economic value and contributes to other business measurements, such as share price and brand value. Each of these approaches—compliance, performance and excellence—offers progressively greater benefits to any organization.

Many companies, large and small, are starting to assess their position on the continuum, and quantify the business advantage of investing in health, safety and wellness. In her presentation, Maureen Shaw will draw on IAPA interviews with leaders of North American companies that have highly evolved programs. These leaders discussed

their health, safety and wellness goals, the contribution of health, safety, and wellness to overall organizational success, and returns generated to date.

[TS06-04]
Internal Corporate Social Responsibility and Improved Productivity

Mark Pritchard

Work and Pensions Committee in House of Commons, United Kingdom

[TS06-05]
Building a Safety Culture

Tom Fisher

Office of Federal Safety Commissioner, Australia

Objectives

The Australian Government is committed to a safe and healthy building and construction industry. One of the FSC's responsibilities is overseeing the Australian Government Building and Construction OHS Accreditation Scheme (the Scheme), with the result being that Australian Government agencies will only contract with construction companies that demonstrate a high level of commitment to OHS.

In addition to using its power as a major procurer of construction services to enhance OHS performance, the Australian Government is committed to working cooperatively with industry to promote cultural change.

The XVIII World Congress on Health and Safety provides a unique opportunity for the FSC to highlight the key achievements of the Australian Government and the Scheme in promoting improvement of OHS in the industry.

During his presentation, the FSC will also provide information on other OHS initiatives the Australian Government has been developing such as:

- the collection of data on OHS performance;
- safe design in the construction industry;
- ensuring the commitment of senior management to OHS;
- investigating how subcontractors can take a more systematic and effective approach to OHS; and

- working with other Australian Government agencies to strengthen their capacity to deliver effective OHS outcomes as a model client.

Expected outcome

The FSC's presentation "Building a Safety Culture" will provide international delegates with an understanding of Australian Government OHS initiatives which are bringing about cultural change in the building and construction industry.

[TS06-06]
Asiana Airlines-Aeromedical Management System

Hyun-Mee Han

Asiana Airlines, Korea

I. Aviation health Management System
(1)Health Policy : ①Offering the Disease Prevention & Systematic Health Management for employees ②Clearing the Work-related Risk Factors & Improving the Healthy Working Environment ③Establishment of Aero-medical Supporting System for the Passengers ④Increasing Productivity by Improvement in Health Welfare
(2)Goals : ①Promoting the Aviation Safety by Increasing Physical, Mental and Social Well-being of the Employees ②Increasing Productivity by Improvement in Health & Safety of Work Environment
(3) Medical Function : ① Asiana Medical Clinic ②AME Institution ③Physical Exam Facilities For Workers (Ministry of Labor) ④Facilities for Medical Treatment
(Medical Insurance) ⑤BLS Training site (KACPR)

II.Activities for Aviation Health Management
(1) Physical Exam & Certification: For issuance of medical certification for aviation operating practitioners / For pre-employment and pre-disposition(2)Counseling and nursing provision (3)Health Education and Operating Training(4) Medical services for sick Passenger (5) Occupational Health (6) Management of On-board Medical Equipment (7) Others: Clinical Activity / Management of Working Environment /Professional Education & Job Training

III.Research: 1 『 Medical Problems in Civil Airline Pilots : A 9-Year Review(1998-2006)*May 12-15, 2008 AsMA 79th Annual Scientific Meeting* 2. 『Analysis of In-flight Medical Emergencies in Civil Airlines 』 *May*

13-17, 2007   AsMA 78th Annual Scientific Meeting 3. 『Beneficial Effect of Weight Reduction in Overweight ; Improvement risk factors of cerebro-cardiovascular diseases』 *April 26, 2006   Asiana Airlines Medical Services Conference*

[TS06-07]
Successful Safety and Health Management System in Enterprises

Dale Outhous

DuPont, United States

DuPont has developed a safety and health management system that is based on our experience and that of other enterprises throughout the world. Designed to impart strong operating discipline in the areas of workplace safety, this system, in conjunction protective equipment and apparel, is having positive and sustainable results in a wide range of industries. This presentation discusses the DuPont Safety Management System which is grounded in operational discipline and based on the 22 Essential Elements of Safety. The 22 Essential Elements of Safety are composed of two primary groups: 1) elements that help create a sustainable safety culture, and 2) elements that encompass operations risk-based behavior in terms of technology, personnel and facilities. Central to the implementation and interaction of the elements is the unwavering commitment of top level company management.

Creating a sustainable safety culture requires strong leadership, the right structures and focused action.

Leadership must demand and visibly demonstrate high standards of safety performance. The right structure relates to requiring line management to accept accountability for safety, building a talented support staff, setting meaningful safety goals and creating a process for change management. Focused action includes robust two-way communications, constant safety training and meaningful auditing. Technology and facilities play major roles in the development of a safe environment. This presentation also will address risk-based behaviours and how to instil operational culture changes through a systems approach.

[TS06-08]
Health and Safety Management in Veolia Water Asia Pacific

Franck Benichou

Veolia Water, France

Veolia Water Asia Pacific has activities in municipal and industrial fields for water and wastewater services in the Asia Pacific region. As the installations, regulations and situations in the various sites where we operate can be very diverse, Veolia Water Asia Pacific has decided to promote sound and active Health and Safety management based on its internal policy and water activity know how. In order to reduce the hazards linked with our specific activity, and to provide a safe and healthy work environment, this health and safety management is based not only on documents but also on site assessments and intensive training.