

DRAFT

The ILO/Japan Asia-Pacific Regional Seminar on Occupational Safety and Health Management Systems (Kuala Lumpur, Malaysia, 22 – 24 May, 2001)

Inaugural session

The inaugural session comprised of opening statements by Mr Rueben Dudley (ILO Deputy Regional Director) and Mr Motoshige Sasaki (Director, International Office, DOSH, MLHW, Japan) followed by the opening address by Dr Abdul Latiff Ahmad, Deputy Minister of Human Resources, Malaysia.

In his opening statement Mr Dudley welcomed the Deputy Minister of Human Resources, conveyed greetings from the ILO Regional Director Mr Nodera, and acknowledged the financial support provided by the Government of Japan for the seminar. He stated that the seminar will address issues that are at the heart of THE ILO's mandate i.e. decent work and that unsafe work is not decent work. He informed the audience that THE ILO's programme on SafeWork targeted preventive policies and programmes. He reminded them that every year there were a million deaths from work related accidents and diseases many of which could have been easily prevented. He outlined the need for strategic approaches routinely applied in business planning to occupational safety and health and that THE ILO's new guideline on "OSH-MS", developed by tripartite parties, could be used by national institutions and enterprises of all sizes and shapes. He felt that the seminar is the first step towards making effective OSH measures and management systems part of the working lives of all people in the region. In closing he reiterated the need to maintain and strengthen commitment to achieving a working environment that is safe and healthy for all.

Mr Sasaki began with expressing his deepest appreciation to the ILO office, the ILO Regional Office for Asia and the Pacific and also the Malaysian government for their support for the seminar. During his speech he addressed the significance of social protection and social security, the role of THE ILO in OSH, the development of OSH-MS in Japan and international cooperation in OSH particularly Malaysia. He reiterated THE ILO Director General Juan Somavia concept of decent work, its four objectives and his strong support of the concept of social protection and social security. He stated that the world of work had to face rapid changes in working conditions and environment and supported the ILO's development of OSH-MS to cope with these changes. He informed the audience of Japan establishing guidelines on OSH-MS in 1999 and its promotion throughout Japan. In closing he expressed the continued support of the Japanese Government of the ILO's activities and efforts in the region.

The Deputy Minister welcomed the organizers and participants to the seminar and conveyed the best wishes of the Minister of Human Resources. In his opening address he highlighted the need for formal management systems for OSH just as any other business

activity as finance, marketing, quality and the environment. He stated that by creating safe and healthy working conditions injury, illness, death and property damage can be prevented and without adverse occurrences employees will have stronger commitment towards their work resulting in increased productivity. He emphasized that OSH-MS at the workplace is the most important approach to building OSH capacity in the workplace and implementation of which will be more successful if it is supported by a safety and health culture within the organization. He explained that in Malaysia the government enacted the Occupational Safety and Health Act 1994 to ensure safety and health at work and spur the growth of safety and health culture in workplaces in the country. He emphasized that while accident rates have declined we could go further and in tandem with 'zero defects' in quality circles, the OSH field should have a long term goal of 'zero accidents' and 'zero diseases'. He stated that the best approach would be to 'adopt and adapt' approach and that the Malaysian while also supporting other OSH-MS, looked forward to 'adopting and adapting' THE ILO OSH-MS and to make it an industry code of practice and if approved could be a guide for employers to establish in house OSH-MS.

Introduction on THE ILO Guidelines on OSH-MS

In his **Introduction on the ILO Guidelines on OSH management systems (OSH-MS)**, Dr. Jürgen Serbitzer (SafeWork THE ILO) indicated that the application of the system models of the ISO 9000 series of standards (quality) and the ISO 14000 series (environment) to occupational safety and health management and the elaboration of international OSH-MS standards were discussed at an ISO International Workshop on OSH-MS Standardization in 1996. The workshop formed the view that the ISO should discontinue its respective efforts and that the ILO, because of its tripartite structure, would be a more appropriate body than ISO to elaborate international documents for the establishment of effective voluntary OSH-MS.

In the light of the Workshop's decision, the Occupational Safety and Health Branch (now: SafeWork) of the ILO , in co-operation with the International Occupational Hygiene Association (IOHA), started in 1998 with the identification of key OSH - MS elements in existing standards and guidance documents and the preparation of draft THE ILO documents addressing these elements. The drafts were systematically reviewed at international level and improved continuously.

At the end of 1999, the ISO member body British Standards Institution (BSI) launched an official proposal (Ballot document ISO/TMB/TSP 190) for the creation of an ISO Technical Committee with a view to develop a non-certifiable international ISO standard. This competing activity to on-going THE ILO work was subject to an international campaign initiated by SafeWork and supported by the International Organization of Employers (IOE) and the International Confederation of Free Trade Unions (ICFTU) and their affiliates. It resulted in an unanimous and concerted reaction in favour of the ILO and the failure of the BSI proposal.

A final draft THE ILO document was submitted for comments to THE ILO constituents early 2001. A tripartite Meeting of experts adopted **the ILO Guidelines on OSH management systems (THE ILO/OSH 2001)** in April 2001 as a practical tool for assisting organizations and competent institutions in achieving continual improvement in OSH performance.

Dr. Jürgen Serbitzer emphasized that THE ILO/OSH 2001 provides a unique international model, is compatible with other management system standards and guides, is not legally binding and not intended to replace national laws, regulations and accepted standards. Its application does not require certification. Chapter 2 provides for flexible action at national level: the nomination of (a) competent institution(s) for OSH-MS, the formulation of a national policy and the establishment of a framework for an effective national application of THE ILO/OSH 2001, either by means of its direct implementation in organizations or its adaptation to national conditions and practice (by national guidelines) and specific needs of organizations in accordance with their size and nature of activities (by the ILOred guidelines).

Chapter 3 of THE ILO/OSH 2001 provides the basic structure and arrangements for an OSH-MS in an organization. The main elements of such a system are: OSH Policy, Organizing, Planning and Implementation, Evaluation, and Action for Improvement

OSH Policy should be specific and appropriate to the organization. The overall responsibility of the employer for the protection of safety and health and appropriate OSH activities, compliance with OSH requirements, strong leadership and commitment to OSH, and the establishment of OSH-MS are fundamental requirements. The OSH-MS should be compatible with or integrated in other management systems of the organization. The participation of workers and their representatives is essential for effective planning and implementation of the OSH-MS and is therefore required throughout the ILO/OSH 2001.

Organizing includes the allocation of responsibility, accountability and authority for the development, implementation and performance of the OSH-MS. OSH is to be seen as a line management responsibility. Competence requirements should be defined and necessary training programmes established. OSH-MS documentation and records should correspond to the needs of the organization. Internal communication of OSH information needs to be ensured.

Planning and Implementation should be based on an initial review and achieve realistic OSH objectives. Hazards and risks needs to be identified and hazard prevention and control procedures established. This includes also the possible impact on OSH of internal and external changes, and the emergency prevention, preparedness and response. Procurement and contracting deserve special consideration.

Evaluation comprises active monitoring (inspection, surveillance) and reactive monitoring (investigation of injuries, diseases) on a regular basis. Audits are needed to identify whether OSH-MS and its elements are in place, adequate and effective.

Management reviews should evaluate whether the OSH-MS is able to meet the overall needs and the planned performance objectives of the organization.

All evaluation activities are needed for the identification of any failure of the OSH-MS and for **Action for Improvement**.

Group discussion to identify key elements of OSH-MS

1. The participants were divided into four groups and discussed the following three questions: 1) What are the key elements of OSH-MS, which show the uniqueness of the ILO Guidelines? 2) Why? 3) What are the advantages of the ILO guidelines?
2. Three groups identified “Worker participation” was identified as a key element, because workers were the direct beneficiary of the performance of the OSH-MS and they would play the role of monitors. Workers should be considered as partners by the management and not as tools for production. “Employers’ overall responsibility, accountability and leadership” was essential to put employers in the driver’s seat and to provide honour and pride for success. “Initial review” was considered important as a take off point, a guide for direction setting and the basis for proper evaluation. “Planning and implementation” was essential for proper system arrangement. “Continual improvement” with audit and review was also considered important since things would degrade as time passes unless efforts to improve were not made systematically. “OSH-MS to be compatible with or integrated in other management system” was a key for the success as enterprises involved not only OSH activities but also other activities.
3. The identified advantages of “**the ILO Guidelines**” included:
 - Easy implementation and flexibility which insures higher degree of success
 - They give a sense of ownership or belonging
 - Efficiency, productivity will be increased by this **the ILO** made methodology
 - They facilitate need based approach (responding to basic needs of companies)
4. After the presentation of the group discussion results, there was a general discussion. In response to a question on the establishment of THE ILO accreditation system, Dr Serbitzer explained that the ILO Guidelines included the need for arranging methods for recognition of good OSH-MS practices such as certification, insurance premium reduction and inspection interval extension. The National OSH-MS Framework should decide appropriate ways based on local conditions and practice and define necessary sub-systems. A participant asked the reasons for dropping an annex on risk assessment which was in the draft Guidelines. It was explained that earlier THE ILO drafts included several annexes, but during the process of consultations on draft Guidelines most of them were dropped and the one on risk assessment remained in the final draft. However, the Meeting of Experts, which examined the draft, preferred not to list only one risk assessment methods since there were many methods.

Expert presentation by Dr. Kazutaka Kogi

Dr. Kazutaka Kogi presented a summary of country papers on Occupational Safety and Health Management Systems programmes. These papers showed considerable differences in approaches taken at the national level. Four different kinds of approaches were noted: (a) emphasizing mandatory OSH-MS in combination with third-party auditing in Indonesia and Singapore; (b) application of nationally applicable OSH-MS standards with arrangements for certification organizations in Australia and New Zealand, China and Thailand; (c) promotion of national OSH-MS models through statutory bodies in Hong Kong, Japan and Korea; and (d) promotion of enabling steps toward improved OSH management in India and Malaysia. Nationally promoted standards included AS/NZS 4801 widely applied in Australia and New Zealand with the support of the Joint Accreditation System of the two governments (JAS-ANZ), OHSMS Trial Standard in China and TIS 18000 in Thailand, in addition to the mandatory OSH-MS standards in Indonesia and Singapore. In Malaysia and a few other countries, the application of OHSAS 18000 series was being promoted. National models were promoted by the Hong Kong Occupational Safety and Health Council, the Japan Industrial Safety and Health Association (JISHA) and Korea Occupational Safety and Health Agency (KOSHA). In most of these countries, a number of enterprises also applied private OSH-MS standards. The main elements of the national OSH-MS standards, guidelines and models were strikingly similar with respect to policy and planning, responsibility, prevention and control measures, emergency preparedness, auditing and continual improvement. The application of industry-specific OSH-MS was also stressed in Japan and Singapore. Compared with the comprehensive THE ILO guidelines paying due attention to flexibility, worker participation, contracting and management of change, these national standards, guidelines and models seemed to concentrate more on risk management functions.

National or semi-national certification or accreditation systems were available in the majority of these countries except for India, Japan and Malaysia. While these systems were diversified, certification bodies usually required to be accredited or approved through formal procedures. The number of certified organizations was increasing in the countries where such systems were applied. Advisory guidance and relevant training regarding the implementation of OSH-MS were actively promoted in all the countries with the growing awareness of the need for self-regulation. However, relatively few numbers of small and medium-sized enterprises established OSH-MS due to various constraints. Thus step-wise progress was considered essential for smaller organizations. There was generally a strong need to take a more flexible approach and adopt the ILO guidelines taking into account the size and infrastructure of these organizations.

As future directions, the country papers noted wider application of established standards and models, development of performance audit criteria, strengthening certification criteria, the need to involve small and medium-sized enterprises and

enhanced training in OSH-MS procedures. There was a general consensus about the leading role of the ILO guidelines. Almost all the reports pointed out that the ILO guidelines could help establish the national framework for OSH-MS promotion and serve as a guidance document for enterprise-level programmes and for training.

Based on this overview, Dr. Kogi mentioned, as important clues for future developments of OSH-MS programmes in the region, exchanging positive experiences in national standards and guidelines, strengthening worker participation, harmonizing certification criteria, developing practical risk assessment procedures, exploring procedures the ILO to SMEs, support measures for training and networking mechanisms for regional cooperation. In the subsequent discussion, the need to harmonize certification systems while taking into account the differences in national laws and practice was stressed. The need to the ILO guidelines particularly for small organizations was also pointed out.

Expert Presentation by Mr. Seiji Machida

1. Mr Machida made a presentation on “Roles of THE ILO Guidelines on OSH-MS (THE ILO/OSH 2001) in Asia and the Pacific”. He underlined the usefulness of applying OSH-MS as a new powerful tool in response to the increase in the occupational accidents and diseases with rapid economic growth in recent years in the region. The systematic OSH approach for continual improvement with the commitment and leadership of the top management and with active participation of workers would provide the basis for “self-regulation” which had been promoted in many countries. He summarized the existing OSH-MS applications in Asia and classified in the following three groups: 1) system without third party recognition, 2) voluntary certification and 3) compulsory third party audit.

2. He also introduced the approaches taken in Poland and Norway as different ways to use OSH-MS. In Poland, the National OSH-MS Standards were established jointly by the Ministry of Labour and the National Standards Organization. Voluntary certification by the accredited institutions was encouraged with the incentive of the exemption of government inspection. Ten years ago, Norway introduced the Internal Control which required OSH-MS implementation in all enterprises. As most of enterprises were small, the system requirements were limited to eight key components with flexible application depending on the nature and the size of the enterprises. With the introduction of the Internal Control, the role of the government inspection was changed focus on advising and convincing the management, influencing workers and evaluating risk assessment. The inspectors required a major cultural change from policing to advising and auditing. An extensive training on new competence for inspectors was required.

3. Mr Machida emphasized the need for establishing National OSH-MS framework as a key element of National OSH policy and programmes. This was because the introduction of OSH-MS would require changes in the role of inspectorate, OSH services and other OSH programmes. The competence training of all those concerned was important for the effective functioning of OSH-MS including particularly auditors.

Incentives such as certification should be considered for the promotion of OSH-MS. He concluded his presentation with a question on certification and the level of OSH-MS implementation. In other words, what certification should mean, system in place in theory, system functioning or system showing tangible results (performance) ?

Tripartite panel presentation and discussion on practical application of the ILO Guidelines on OSH-MS to the Asia Pacific Region

Mr. Zabidi bin Dato' Md Adib, Director, Department of Occupational Safety and Health, State of Penang, Ministry of Human Resources, Malaysia, representing the Government's view gave the history of the Factories and Machinery Act of Malaysia and how the Act was changed in 1994 by having OSH Act wherein 10 sectors got covered compared to 3. He also mentioned that the amended Act calls upon the enterprises to lay down a company policy signed by the CEO, formation of a committee of representatives of management and workers. He emphasised the needs for training and felt that OSH-MS as formed by THE ILO will become the guideline to help company to be self-regulated.

Mr. H. Lal, Advisor, Occupational Health and Safety, All India Organisation of Employers' spoke on the employers point of view wherein the OSH-MS is moving the function from the shop floor officers to top management. He felt the document needs to be reformulated into two parts ie. one for the Government and the other for the employers. He desired that the Government in each country must build technical standards and also training facilities on (i) systems and (ii) risk. He desired that OSH-MS must deal also with operational control. He perceived that there are employers who believe OSH systems will involve substantial costs, which is not true. He desired training for both workers and trade union on OSH-MS so that confidence and awareness building will take place. He also desired that there should be a subsidy scheme by the Government on the expenditure on consultants on OSH-MS. He desired that the ILO project be undertaken on OSH-MS in SME's.

Mr. Ariel Castro, Director for Education, Trade Union Congress of the Philippines while speaking on behalf of the workers felt that there is poor or inadequate legislation and enforcement of OSH in most of the countries and there is absence of clear policies. He also saw that most training programmes are at supervisory level rather than having joint training programmes on OSH for employers and workers. He saw that OSH-MS as a welcome addition with a proactive approach. He was clear that trade unions must support OSH-MS as it will benefit their members and employers must ensure trade union involvement for success. He felt there must be training programmes on risk assessment, understanding of OSH-MS and also for workers at the grassroot level.

The panel discussion was chaired by Mr. Kazutaka Kogi, Institute for Science of Labour, Kawasaki, Japan.

Expert presentation on Progress of OSH-MS in Japan and roles of THE ILO Guidelines by Motoshige Sasaki

Mr Sasaki started his presentation on the role of OSHMS in Japan, and the role of the ILO Guidelines in this. He started by reviewing the history of occupational accidents and diseases. He showed that accidents and diseases increased due to the rapid industrialisation of Japan. The government then took measures to reduce this. These measures were effective initially, but after several years, the frequency rate of occupational accidents had reached a saturation point (frequency rate stopped falling). It was then decided to introduce OSH-MS nationally, and arrangements were made to include this concept in national legislation. The overall objective of this was to prevent occupational accidents and to improve health and safety at work. It should also be part of the national legislative framework and should promote self-regulation. OSH-MS should also be applicable to all sizes and types of organisation, and should promote worker participation as an essential part. It should also be compatible with other systems already in place. He showed how the OSH-MS in Japan corresponded with the internationally accepted management model of plan-do-check-act. OSH-MS implementation and promotion in Japan was his next topic. This was mainly carried out through information dissemination and training (including specialised training for auditors and risk assessment). He then went on to compare the national framework in place in Japan with that presented in chapter 2 of the ILO guidelines. It was seen that these were both in line and corresponded. HE then continued to cross-reference the guidelines for the OSH-MS in the organisation with the model presented in Chapter 3 of the ILO guidelines. It was seen that these corresponded as well.

Expert presentation: Application of OSH-MS to small enterprises by Dr. Tsuyoshi Kawakami

Dr. Kawakami started this presentation with historical review of OSH services in SME's providing examples of effort by the Government in Singapore (combining regulatory and advisory programmes for high risk SME's), Philippines (institutionalizing wise into nation OSH), Thailand (mobilizing provincial offices to provide training to SME's) and in Viet Nam training labour inspectors for advisory services). He highlighted the role of employer organization in Mongolia and Lao P.D.R and the role of National Trade Union Centre in OSH training.

He informed the audience that THE ILO OSH-MS can provided SME's the ILO action oriented guideline and practical risk assessment methods. He outline the step to initiate OSH-MS in SME's which included OSH Policy, responsibility, initial review, risk assessment, prevention and control measures, documentation and evaluation. He suggested ready to use guidance the ILO to SME's, risk assessment tools and continued support mechanism were necessary for OSH-MS in SME's. He close with suggestion of

having the ILO guidelines for SME's, training workshops and support for owners and workers in SME's.

Group discussion “National standards and certification”

1. There were different views on certification among the members of the group. If the certification system was to be used, it should ensure the performance of the system. The group considered that auditing of OSH-MS by third party was important for ensuring proper functioning of OSH Management System at organizations. Certification might be issued after a few audits. For these purposes, the group suggested that an independent, tripartite non-profit body should be established to set national standards on OSH-MS Audit based on the ILO Guidelines. This body could accredit auditing to qualified institutions or audit itself. The body should arrange for capacity development of auditors with OSH knowledge. The body should also monitor the performance of the accredited audit institutions and auditors.

Group discussion on “roles of social partners”

Group discussions were made on the roles of the social partners to promote the implementation of the ILO Guidelines on occupational safety and health management systems. The group firstly decided that it would be helpful to define what the term “social partners” exactly meant. It was decided for the purpose of this exercise, social partners would be governments, employers and workers. The group stressed the importance of combining the efforts of the social partners for implementing the ILO Guidelines in the organization. This would enable a “common mind” approach and a non-contradictory policy for implementation. This would thus result in a win-win situation for all. The main roles of each social partner were then discussed in turn. The group agreed that government should be responsible for the development of the national framework and the overall set up. They should also provide training, especially in specialized areas such as auditing and risk assessment. Employers would be responsible for implementing the system in the organization, using clear-cut procedure so that everyone would know their roles. They would also promote the participation of workers in the implementation and ensure that it would be reviewed regularly. Workers would be responsible for following the procedures laid down, as well as acting in a watchdog capacity so that all non-conformities in the system may be brought to light.

Group work on Practical application of OSH-MS to SMEs

Mr. Parat from Employers' Confederation of Thailand made a presentation on the summary of the discussion. The group identified the three important steps for applying OSH-MS to SMEs. (1) Clear government policies and responsibilities to support OSH in SMEs were noted as the first important step. The government needs to help develop the ILO-made guidelines to meet practical needs of SMEs. Initial target industries should be set to apply the ILO guidelines. (2) Training directly to SME owners and workers will be the second step. The training should be action-oriented, focusing on local good practices and practical risk-assessment methods. (3) Effective follow-up mechanisms are needed to

help SMEs to continue to improve OSH-MS. Human resources in the government, employers and workers' organizations need to be mobilized to assist SMEs in sustaining their OSH-MS.

Expert presentation on “Practical experience of the application of OSH-MS at the enterprise level” by Dr. Jaya

Dr. M.S. Jaya presented “Practical experience of the application of OSH-MS at the enterprise level”. He first gave the background of PETRONAS as a leading oil and gas multinational company, and pointed out the link between the lessons learned from major accidents such as Piper Alpha fire in 1988 and the structured management approach for health, safety and environment. The structured means geared to changes in technological developments and associated risk were integrated to managing the business. He explained the OSH policy of PETRONAS and the organization of OSH-MS built as HSE-MS. The quality planning cycle consisting of “Plan, Do, Check and Feedback” had been incorporated into the management system within the framework of the business control by management responsibility. Appropriate standards and procedures were essential to operationalizing the HSE policy and the risk management process. He explained the risk management tools and showed the risk matrix. These tools were used to identify and reduce risks while involving the line people. The third party audit played a crucial role.

In the discussion of Dr. Jaya's paper, the participants stressed the need to help cooperating companies and contractors establish coherent OSH-MS. Subcontractors who wanted to work with PETRONAS had to convince PETRONAS that they understood and implemented OSH-MS. Since PETRONAS was a global company, It was necessary to review and align OSH-MS in each country. Adjusting the audit procedures and training in OSH-MS were considered crucial. PETRONAS also established subpolicies such as alcohol and drug policy, HIV/hepatitis B policy and smoking policy, and their relation to OSH-MS activities were discussed. The need to build safety culture coupled with the OSH-MS and to reduce unsafe behaviour was noted. Training based on the audit results was important.

Expert presentation on “Linking THE ILO/OSH 2001 and the legislative framework, and ways and means of promoting its application” By Mr. Baichoo

Mr. Baichoo, from the ILO's InFocus Programmeme on Safety and Health at Work and the Environment (SafeWork) then proceeded with expert presentation 6 on “Linking THE ILO/OSH 2001 and the legislative framework, and ways and means of promoting its application”.

He firstly introduced the participants to the core THE ILO Conventions on safety and health, namely the Occupational Safety and Health Convention (No. 155), 1981 and the Occupational Health Services Convention (No. 161), 1985. He explained that these two conventions provided the national framework for occupational safety and health (OSH), as well as the principles for action at the level of the organisation. He said that at the country level, national OSH policies are formulated and implemented through legislation

and other programmes in line with the above international labour standards and other international labour standards on OSH which address the issues of specific hazards and types of industrial activities.

He explained that due to globalisation and the worldwide liberalisation of trade and economies, the world of work has become increasingly competitive. This implied that organisations had to face rapid changes in working conditions and environment, processes and work organisation that were necessary for sustained growth. The result of this was that there were new hazards and risk emerging, which the traditional command-control approaches to OSH could no longer handle. Accompanying this, OSH legislation was either too fragmented, or could not be adapted quickly enough to handle these new and emerging hazards and risks.

Hence, a new approach was required to address OSH, namely the “systems” approach along the same lines as used with the international standards on quality and environmental management (ISO 9000 and 14000 respectively), that is through the introduction of occupational safety and health management systems (OSH-MS) in the organisation. He explained that studies had shown the positive impact of introducing OSH-MS were a reduction in occupational accidents and diseases, as well as greater productivity.

Mr. Baichoo then showed that there was indeed quite close linkage between OSH legislation and OSH-MS. He said the legislation usually focussed the responsibility for OSH at the organisation on the employer, as well as providing the framework for preventive and protective action and worker participation. He explained that the only part missing in legislation was the mechanisms for implementation, as this was usually left to the employer who would have to find the way to meet his or her legal requirements. This was where OSH-MS came in as it provided the process for which the systematic management of occupational safety and health could be achieved in the organisation. Using Convention 155 as a generic OSH legislative text, Mr. Baichoo then showed how the elements of the ILO Guidelines on Occupational Safety and Health Management Systems (THE ILO/OSH 2001) could be cross-referenced to articles of the Convention.

Mr Baichoo then explained the recommendations for promoting the application of OSH-MS contained in THE ILO/OSH 2001. These were namely through the formulation of a national policy on OSH-MS and the establishment of a national OSH-MS framework. He explained that the national framework was a direct result of the national policy, and should be used to implement the national policy either through the development of national guidelines on OSH-MS or the ILO guidelines. He also stated that both the national guidelines and the ILO guidelines should be based on the model given in Chapter 3 of THE ILO/OSH 2001.

Mr. Baichoo then elaborated on these points, giving special regard to the national policy. This policy required the nomination of a competent institution, which would be responsible for the formulation, implementation and periodic review for the

establishment and promotion of OSH-MS in the organisation. It would have among its function the enforcement of OSH legislation (either through sanctions or intensive assistance), as well as serving as an advisory body. He explained that the current trend for regulatory bodies was to serve as guidance bodies, as compared to the former sanction-biased approach. The provision of guidance was wide ranging, he explained. It could be as a service providing sector-specific information, an accreditation body for parties providing third-party audit/certification services, aid in the sharing of best practice as well as providing specialised training and subsidised OSH expertise, which was very important especially to small organisations.

Mr Baichoo then provided some examples of how the application of OSH-MS could be promoted in practice nationally. These ranged from national activities such as awareness campaigns, zero accident programmes, national safety week etc. to incentives such as insurance premium rebates, less frequent inspections, public recognition, greater productivity and certification. The presentation session ended with a general discussion on these incentives, and the consensus of the participants was that the ILO should provide further guidance for developing countries, in the form of a manual on these issues, as well as the specialised topics of certification/accreditation, auditing and risk assessment.

Annex
Summary of country papers
on Occupational Safety and Health Management Systems programmes
in Asia and the Pacific

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1. Introduction

There has been remarkable progress in applying occupational safety and health management systems (OSH-MS) in most countries in Asia and the Pacific. This is clearly seen in the country papers submitted to the ILO/Japan Asian-Pacific Regional Seminar on Occupational Safety and Health Management Systems (Kuala Lumpur, 22-24 May 2001). This paper gives an overview of OSH-MS programmes in the countries participating in the seminar based on the country papers submitted in April and May 2001.

Information on the current situations of OSH-MS programmes at national and enterprise levels was collected from Australia-New Zealand, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Singapore and Thailand. Reflecting the developments in harmonizing national occupational safety and health programmes with international standards and guidelines and in the preparation of THE ILO Guidelines on Occupational Safety and Health Management Systems, several important moves have taken place in most these countries. Comparative analysis of the varying situations reveals differences between OSH-MS policies and programmes and gives some relevant clues to further developing the national framework and operations of OSH-MS.

The initial part of this report gives a brief overview of the on-going developments in OSH-MS in the countries covered. Differences in approaches taken and implementation levels are shown. The second part of the report comprises information about OSH-MS legislation and guidelines as adopted in these countries. Some prominent examples of regulatory measures and guidelines, including industry-specific approaches, are provided. In the third part, support programmes and advances in enterprise-level activities are noted. The fourth part reviews future plans reported in the country papers and the role of the ILO guidelines on OSH-MS as seen by the individual country papers. Finally, comments as to future challenges are offered based on this overview.

2. Overview of OSH-MS programmes in Asia and the Pacific

The country papers clearly demonstrate the rapid progress in introducing OSH-MS with the strong governmental support in the countries covered. Most these countries have recently adopted national measures to set up occupational safety and management systems in many industries. While the main features of the enterprise-level systems being

promoted are similar, the national approaches taken by these countries are varied. An overview of the reports submitted is given in Table 1.

Most of the countries covered have provisions about the promotion of OSH-MS. Usually, these provisions have recently been incorporated in laws or ministerial regulations. In India and Malaysia, OSH laws refer in general terms to the employers' responsibility in managing OSH and do not specifically mention the promotion of OSH-MS. In Australia, the implementation of OSH-MS measures is regulated by State-level legislation that has a broad agreement about what should be included in an effective management system. The governments of Australia and New Zealand have made a formal agreement to establish an international organization known as the Joint Accreditation System of Australia and New Zealand (JAS-ANZ). The support for certifying management systems, particularly those based on an inter-country OSH-MS standard known as AS/NZS 4801, is more advanced in the two countries. Indonesia and Singapore are unique in making the organization of OSH-MS mandatory in specified undertakings. Japan and Korea have introduced, in the provisions of the OSH law, arrangements to promote OSH-MS on voluntary basis. Similar arrangements are in place in Hong Kong. China has taken national-level measures to support accreditation organizations promoting OSH-MS. Both China and Thailand have established national OSH-MS standards called OHSMS Trial Standard and TIS18000 series.

Such considerable differences in the legislative background for promoting OSH-MS (shown in (1) of Table 1) are due to the differences in the approaches taken, as described below. Nevertheless, all the countries are actively strengthening guidance and advisory services as to the introduction of OSH-MS at enterprise level (as shown in (2) of Table 1). This is obviously based on the common trends in these countries toward promoting voluntary measures to upgrade safety and health at the workplace in both large and small enterprises. Another important trend influencing the governmental measures as to OSH-MS is the fact that an increasing number of enterprises in different industries in these countries are adopting either internationally acknowledged or nationally disseminated OSH-MS standards or models. This is typically shown by a substantial number of enterprises certified for AS/NZS 4801 in Australia and New Zealand and a certain number of enterprises certified for OHSAS 18000 in Malaysia and a few other countries. Similarly, a rapidly increasing number of enterprises adopting nationally advocated schemes in China, Indonesia, Japan, Korea, Singapore and Thailand may be mentioned.

In contrast to the observed diversity in national approaches toward OSH-MS, there is also a common understanding of the government functions with respect to dissemination of OSH-MS in the jurisdictions (as shown in (3) of Table 1). Most countries listed are positively advancing governmental support for creating or spreading OSH-MS standards in a manner adjusted to individual countries. Guidelines addressing the ways to establish OSH-MS and the main contents of management systems are in place in these countries. Although the situation is somewhat different in India and Malaysia as to the legal backgrounds for promoting OSH-MS, there is also a clear understanding in these countries about the need to strengthen relevant promotional

measures. This is further shown by the unanimous agreement in all the countries on the need to support training institutions and activities for OSH-MS. Differences in the support mechanisms of certification systems are discussed in a separate section of this paper.

This common understanding of the governmental functions can be the basis for reviewing the agencies or bodies responsible for OSH-MS (shown in (4) of Table 1). Generally, the ministry responsible for OSH is actively engaged in promoting OSH-MS, while a special national mechanism has been established in China and Thailand. In relation to the particular promotional arrangements in the country, certain semi-governmental agencies or approved bodies are usually active. Examples include the above-mentioned JAS-ANZ for Australia and New Zealand, committees associated with the National OHSMS Guidance Committee in China, the OSH Council in Hong Kong, OSH agencies associated with the responsible Ministries in Indonesia, Malaysia and Singapore, the Japan Industrial Safety and Health Association (JISHA), the Korean Occupational Safety and Health Agency (KOSHA) and the Thai Industrial Standards Institute (TISI). Non-governmental bodies are operating extensively in all these countries.

At this stage, the OSH-MS standards applicable in the countries covered are notably different reflecting the diverse approaches (as shown in (5) of Table 1). This is in part due to the lack of universally applicable international OSH-MS standards. This aspect seems of particular importance in discussing the role of the ILO guidelines on OSH-MS. Formal standards that have been formulated for the purpose of nation-wide application are found in Australia, China, Indonesia, Singapore (for specified undertakings) and Thailand. Nationally recommended models are available in Japan and Korea, and to a certain extent also in Malaysia. Nationally applicable guidelines are available in these countries. In close association with the non-governmental OSH-MS bodies active in the region, there are other voluntary or commercial standards on OSH-MS being adopted by a number of enterprises. This is seen in connection with the successful implementation of ISO 14000 in a large number of enterprises in the region.

An additional important feature of the recent national measures as to OSH-MS in these countries is the particular effort to establish and strengthen the certification or accreditation systems aimed at increasing the number of enterprises adopting relevant OSH-MS (as shown in (6) of Table 1). Such systems are in place in Australia and New Zealand, China, Indonesia, Korea and Thailand. Though not specifically mentioned in all the country papers, private certification systems are more or less promoted in these countries as mentioned above. The number of enterprises receiving relevant certificates for OSH-MS seems still limited in individual countries (as shown in (7) of Table 1). This relates to the different approaches being taken. It should be noted that the reported numbers in the table do not include those enterprises certified through private systems. It is thus anticipated that enterprises formally certified according to the national certification systems will further increase in a more expedited manner in the near future.

The picture of OSH-MS in small and medium-sized enterprises (SMEs) is not explicitly clear from the reports submitted. This is due to the relatively short history of the relevant measures as to SMEs and to the fact that certification programmes usually

embark on their application to larger enterprises reflecting the adopted approaches. However, there is a common understanding in any country surveyed that special measures are necessary to spread OSH-MS in SMEs. Very few SMEs have adopted the nationally recommended OSH-MS in the majority of these countries. In Australia and New Zealand, a considerable number of SMEs have adopted either AS/NZS 4801 or other voluntary systems. In the reports from Hong Kong, Korea and Singapore, there is a mention of some SMEs having launched OSH-MS. All the country papers point out the urgent need to take more effective measures to apply OSH-MS in SMEs, including management systems and procedures adjusted to the realities of these enterprises

3. Approaches taken based on OSH-MS legislation and guidelines

The different approaches taken to introduce OSH-MS into industries are summarized in Table 2. All these approaches are associated with the legislative provisions and national-level guidelines. There are four different kinds of approached are noted in the table.

- a. Mandatory OSH-MS in specified undertakings with regulatory and advisory measures (Indonesia, Singapore)
- b. Nationally applicable voluntary OSH-MS standards with certification support (Australia and New Zealand, China, Thailand)
- c. Promotion of national OSH-MS models through a statutory body (Hong Kong, Japan, Korea)
- d. Promotion of enabling steps toward improved OSH management (India, Malaysia)

Table 2. Approaches taken to introduce OSH-MS into industries.

Report from:	Approaches taken
Australia-New Zealand	Within the National OHS Improvement Framework by the National Occupational Health and Safety Commission, most states and territories of Australia develop OHSMS model or guidance; Joint Accreditation System of Australia and New Zealand (JAS-ANZ) by agreement of the governments, with certification and OHS auditing organizations controlled by a government board.
China	National OHSMS Guidance Committee by the State Commission of Economy and Trade develops OHSMS standards, supervises accreditation and manages auditor registration; SCET has promulgated OHSMS Trial Standard, and a number of OHSMS accreditation organizations are being organized.
Hong Kong	Occupational Safety and Health Council as a statutory body operates safety audit schemes in selected industries and auditor accreditation; OSH Councils promote OSH-MS training, including “Safety and Health Management DIY Kit for SMEs” and the award scheme.
India	The Ministry of Labour lays down general OSH standards and guidelines, with the State governments responsible for enforcement and with certain standards containing some aspects of OSH-MS.

Indonesia	Under the Ministry Regulation (PER.05/MEN/1996), the implementation of OSH-MS including audit is compulsory for enterprises with 100 or more workers and/or high workplace risk; The Ministry issues certificates to companies recommended by an independent audit body.
Japan	Under the Ordinance on Industrial Safety and Health, the Ministry of Health, Labour and Welfare provides the guidelines of OSH-MS and operates OSH-MS promotional programmes; Under the notifications of the Ministry, the Japan Industrial Safety and Health Association (JISHA) certifies those who finish training in OSH-MS operation, risk-assessment and OSH-MS audit.
Korea	Under the Occupational Safety and Health Law, the government supports voluntary OSH-MS and entrusts the Korea Occupational Safety and Health Agency (KOSHA) with distributing OSH-MS; KOSHA issues certification, in agreement with British Standards Institution and others, to workplaces having OSH-MS components of KOSHA 2000 Programme and provides the guidelines for OSH-MS.
Malaysia	Under the Occupational Safety and Health Act 1994, the Department of Occupational Safety and Health of the Ministry of Human Resources attempts to secure OSH-MS elements of the Act; Employers are encouraged to self-regulate OSH programmes including OSH-MS elements, especially OHSAS18001.
Singapore	The implementation of OSH-MS is mandatory in shipyards, specified construction worksites and three classes of factories in the manufacturing sector, with different auditing requirements; The Occupational Safety and Health Division of the Ministry of Manpower develops guidelines on OSH-MS and on safety audits and accreditation criteria for auditing companies and auditors.
Thailand	The Ministry of Labour and Social Welfare and the Ministry of Industry cooperated in setting up the Thai Industrial Standard on Occupational Health and Safety Management System (TIS 18000); The Thai Industrial Standards Institute (TISI) provides general rules on the certification of OHS-MS.

The first approach is based on the emphasis placed on mandatory OSH-MS in combination with regulatory and advisory measures. This is taken by Indonesia and Singapore. In Indonesia, the Ministry Regulation (Permenaker 05/96, 1996) stipulates the compulsory implementation of OSH-MS including auditing for enterprises with 100 or more workers and has high risk for accident or illness from workplace. Audit is to be carried out by an independent body, the audit level being divided into three categories specified by the number of parameters. Achieving 60% or more of these parameters is required. The number of parameters is 64 for small companies, 122 for medium companies and 166 for large companies or those with a high risk level. In Singapore, there have been stepwise progress in providing mandatory OSH-MS in shipyards and construction worksites where the contract sum of work to be carried out is S\$10 million

or more since 1994 (with frequency of audit every 12 months). The larger worksites working for S\$30 million or more are required to have the OSH-MS audited by external auditors at least once every six months. Since 2000, mandatory OSH-MS and auditing have been extended to three classes of factories in the manufacturing sector (factories engaged in the processing of petroleum or petrochemical products, those manufacturing semiconductor wafers and those manufacturing fabricated metal products, machine or equipment in which 100 or more persons are employed, frequency of audit being every 24, 24 and 12 months, respectively).

The second approach is based on nationally applicable OSH-MS standards with certification support. This is taken in Australia and New Zealand, China and Thailand. As stated above, the approach in Australia and New Zealand is associated with the agreement on JAS-ANZ controlled by a government board appointed by the governments. The principal role of this system is to be the joint accreditation body for organizations that certify that management systems, products and personnel comply with prescribed standards. In Australia, there are state-regulated models and guidelines. In general in these two countries, OSH-MS based on AS/NZS 4801 is widely adopted with the support of the governments. China has promulgated OHSMS Trial Standards in 2000, and the National OHSMS Guidance Committee has established the National OHSMS Auditor Registration Committee and the Accreditation Organization Certification Committee in 2000. The certified accreditation organizations are engaged in certification work and supervised by the latter Committee. The Registration Committee is responsible for national OHSMS auditors. Thus so far about 100 enterprises apply for OHSMS identification from certification organizations. Together with extensive training activities in OSHMS involving a large number of enterprises, a rapid progress in widely applying OSH-MS is anticipated. The Thai Industrial Standard series on OSH-MS, TIS 18000, has been launched since 1999 and over 100 enterprises are expected to be certified by the TISI within 2001.

The third approach concerns the promotion of national OSH-MS models through statutory bodies. This approach is taken by Hong Kong, Japan and Korea. The statutory bodies concerned are Occupational Safety and Health Council (OSHC) in Hong Kong, JISHA and KOSHA. In Hong Kong, the OSHC operates safety audit schemes in selected industries and performs auditor accreditation. The OSHC also advocates the application of a DIY OSH-MS kit for SMEs. JISHA presents an OSH-MS model in accordance with the Ministry guidelines and provides technical services for training of OSH-MS-assigned workers and leaders and for risk assessment and audit. JISHA has organized the Preparatory Meeting for OSH-MS Promotional Council involving employers' organizations. Some industries, such as automobile, chemical, steel and shipbuilding industries, are promoting industry-specific OSH-MS guidelines with the support by JISHA. KOSHA promotes KOSHA 2000 Programme for self-regulated OSH-MS, assists in analysis and evaluation of management systems in applying enterprises and decides on certification through an evaluation committee. The certification of KOSHA 200 Programme is valid for three years.

The fourth approach, taken by India and Malaysia as well as by some other countries in the region, concerns the promotion of enabling steps toward improved OSH management. The enabling nature of legislation, such as the Occupational Safety and Health Act 1994 of Malaysia, facilitates the government action supporting self-regulation in OSH management. Advisory services through inspectorates are also important. It is noteworthy that SIRIM QAS Sdn Bhd under SIRIM Berhad, a standards research institute, carries out certification as to OHSAS 18001. In these and other countries, training and support for certification are provided by a number of consultancy services.

The main government functions linked with legislation for promoting OSH-MS are listed in Table 3. It is shown that government agencies responsible for OSH and relevant supervision are usually taking initiative in promoting OSH-MS. Even among the countries taking a similar approach with respect to OSH-MS may have different legislative backgrounds. The differences are notable in the way to provide nationally applicable OSH-MS standards. Despite these differences, there are various attempts to promote nationally applicable OSH-MS standards or models that are in conformity with the international trends in such standards. Thus guidance services are provided extensively by the governmental agencies and statutory bodies concerned. With the exception of a few countries, the majority of the governments also attempt to establish and sustain certification systems as part of their administrative functions.

Two prominent features of these governmental functions in OSH-MS may be mentioned. The first is the link between these governmental functions and management standards or models which are in principle for voluntary application. The governmental agencies concerned attempt as a rule to concentrate on promotional and facilitatory aspects of the administrative support they provide. Even in countries with mandatory OSH-MS, a careful approach is taken so as to encourage the enterprises involved to take voluntary action to establish effective management systems. This explains why statutory bodies, such as OSHC, JISHA, KOSHA and others, play a major role in promoting the application of OSH-MS. The second feature is the effort to adjust the relevant standards to the national situation. Much effort is done not only through legislative functions but also through guidance and support functions. The existence of nationally adjusted standards and models and the use of numerous guidance materials are evidence for this effort.

The elements of OSH-MS standards and models applicable in the countries covered are compared in Table 4. The listing of these elements are based on the country papers submitted and the materials attached, and may not necessarily reflect the contents of the respective standards or models. But the table demonstrates the general agreement of these standards and models in terms of the elements covered and their composition. Without exception, they cover the key elements of management systems now developing internationally in this field. This is striking, but understandable. This may be explained by the generic nature of these management elements and the international impact of recent management-related standards such as ISO 9000 and ISO 14000 and of comprehensive THE ILO safety and health standards. The globalization of economy and technological developments pointing to the need of effective management may also be

mentioned as associated reasons. It is natural that all the OSH-MS models and standards being adjusted to the local situation are formed to incorporate all the important generic elements of a management system.

This leads us to recognize the important fact that OSH-MS standards are developing because they are aimed at voluntary management systems. It is thus noteworthy that these nationally applicable standards in the countries surveyed take into account most, if not all, of the main elements of the ILO guidelines on OSH-MS.

The relation of these standards and models to the overall national policy of protecting workers from work-related risks must be kept in mind. In this respect, the enabling nature of the national legislation compatible with these generic elements of OSH-MS is particularly important as demonstrated by some leading examples.

Table 3. Government functions for OSH-MS.

Report from:	Agencies responsible	Creating laws and standards	Issuing guidelines	Supporting certification systems
Australia-New Zealand	National OHS Commission and the governments of States and Territories of Australia; Agencies related to JAS-ANZ	(the National OHS Improvement Framework by NOHSC)	Guidance by most States of Australia; support for AS/NZS 4801	Control of JAS-ANZ that accredits OSH-MS certification bodies
China	State Commission of Economy and Trade; National Safe Production Supervision Bureau; National OHSMS Guidance Committee	OHSMS Trial Standard by the Safe Production Bureau	Guidance material by the Bureau and the Guidance Committee	Accreditation Organization Certification and Auditor Registration Committees of the Guidance Committee
Hong Kong	Labour Department; Government developers	(Legislative framework for OSH-MS)	Guidance through OSH Council and government developers	Safety audit schemes through OSHC
India	Ministry of Labour, Directorate General Factory Advice Service and State Inspectorates	(General OSH standards)	Not available	None at national level
Indonesia	Ministry of Manpower and	Ministry Regulation on	Guidance on OSH-MS and	Three-category

Risk assessment	X	X	X	X	X	X	X	X
Risk control	X	X	X	X	X	X	X	X
Emergency preparedness	X	X	X	X		X		X
Documentation and records	X	X	X	X		X	X	X
Auditing	X	X	X	X	X	X	X	X
Continual improvement	X		X	X	X	X		X
Management review	X	X	X		X	X		X
(Note)	Many with OHSMS meet the certification standard	Special emphasis on state function	Audit criteria different by company size	Used as model for industry-specific OSH-MS	Mutual recognition agreement with BSI, BVQI and DNV	SIRIM (national standard organization) as the main player	Mandatory audits by third party auditing company/auditors	Voluntary standard intended for certification system

The ILO guidelines on OSH-MS outline the OSH management system comprising the elements for (1) OSH policy, (2) worker participation, (3) responsibility and accountability, (4) competence³ and training, (5) documentation, (6) communication, (7) initial review, (8) system planning, development and implementation, (9) OSH objectives, (10) hazard prevention, (11) performance³ monitoring and measurement, (12) Investigation of work-related injuries, diseases, incidents and their impact, (13) audit, (14) management review, (15) preventive and corrective action and (16) continual improvement. We should note that these elements are listed to ensure stable management functions of the system in relation to the overall management cycle consisting of (a) OSH policy (1-2), (b) organizing (3-6), (c) planning and implementation (7-10), (d) evaluation (11-14) and (e) action for improvement (15-16). The core management cycle by the ILO guidelines is well reflected in all the OSH-MS standards being applied in the countries surveyed.

Whereas the ILO guidelines are comprehensive and pay due attention to flexibility, worker participation, contracting and management of change, these national standards seem to concentrate more on core self-regulatory functions by management. A closer review of their compatibility with the ILO guidelines seems important.

The ILO guidelines also recognize the need to develop both national and the ILO guidelines. The generally adjustable nature of the national standards and models of these countries seems important in this respect. The industry-specific models explored

in Japan and Singapore may give us some guidance in creating the ILO guidelines based on national-level standards and guidelines.

4. Support programmes for enterprise-level action

The collected reports with respect to certification systems in the surveyed countries are summarized in Table 5. National or semi-national certification or accreditation systems are available in the majority of these countries except for India, Japan and Malaysia. In Hong Kong, there is a registration mechanism for safety auditors to ensure their competency in practice. The adopted certification schemes reflect the different national approaches mentioned above.

All the countries adopting the first approach (mandatory OSH-MS) or the second approach (nationally applicable voluntary OSH-MS standards) have established corresponding certification schemes. In Indonesia, certificates are accorded to companies recommended by an independent audit body according to a Ministry Decree. In Singapore, accreditation criteria for safety auditing of the companies carrying out mandatory OSH-MS are formulated by the OSH Division of the Manpower Ministry. In the case of the countries taking the second approach with national standards, including Australia and New Zealand, China and Thailand, certification bodies require to be accredited by a body created or designated for that purpose. Such a certification system seems to be realistic in view of the voluntary nature of the OSH-MS implementation. The experiences of the on-going systems that can well function in these countries are particularly useful as they directly relate to nationally applicable standards.

The certification system in progress in Korea where the third approach is adopted also seems very interesting. KOSHA issues certification to enterprises having established OSH-MS components of KOSHA 2000 Programme. In this case, KOSHA serves as an accreditation body and private organizations are expected to carry out certification services in the future. KOSHA assists workplaces with training and technical guidance to establish self-regulated OSH-MS. A certificate and a plaque of “KOSHA 2000 Programme” are awarded to a workplace that has conducted an excellent performance of safety and health. Active participation of both the management and employees as well as performance and continual improvements are important requisites. An application is submitted to an area office that reviews the workplace and refers to a relevant regional head office for final decision through an evaluation committee. The certification is valid for three years and can be extended up to nine years when all requirements are met.

The progress in these certification systems for OSH-MS appears to raise the awareness of the need to strengthen the self-regulation approach in OSH action at both national and enterprise levels. On the other hand, the existing diversity of certification systems might make it difficult to harmonize these systems in accordance with the application of the ILO guidelines. Since the ILO guidelines do not clearly specify this aspect, the examination of the certification criteria at different levels seem necessary.

As already mentioned, the impact of OSH-MS implementation in association with a variety of private or commercial systems is significant in most these countries. The extent of such purely voluntary systems is not readily available except for Australia and New Zealand where a fairly large number of companies have qualified for OSH-MS standards.

Two issues arising from the wide application of OSH-MS standards or models seem particularly important. First, the ILO the system to each organization and to the actual risk exposure is a critical issue. While the ILO guidelines give some guidance about the ILO guidelines, it is essential to design the requirements and support measures for each OSH-MS reflecting the specific conditions and needs of the organization or the group of organizations.

Second, the step-wise progress is indispensable for smaller organizations and there is a strong need to take a more flexible approach considering the size and infrastructure of each organization or each group of small organizations. While the scope of existing OSH-MS programmes reported does not exclude smaller organizations, it is not clear from the submitted reports about how to cope with these issues.

Table 5. Types of OSH-MS certification systems in the countries covered.

Reported from:	National or semi-national system	Private systems
Australia- New Zealand	Joint Accreditation System of Australia and New Zealand (JAS-ANZ) acts as joint accreditation body for organizations that certify management systems. Numbers of certified organizations and of certified auditors are increasing for AS/NZS 4801.	Not all organizations have shifted over to AS 4801 type systems; commercial and other certification systems (such as NSCA 5-Star) are also prominent in Australia.
China	OHSMS Accreditation Organization Certification Committee certifies accreditation organizations that accredit OHSMS under the supervision of the Safe Production Bureau of the State Commission of Economy and Trade.	Foreign accreditation organizations such as BSI, DNV, NQA etc. develop OHSAS18001 accreditation.
Hong Kong	Not available (the implementation of OSHC-MS is recommended widely by OSHC)	OHSAS 18001 and other management systems are applied by some organizations.
India	Not available	Some organizations receive certification for various OSH-MS schemes.
Indonesia	Ministry of Manpower and	Not common.

	Transmigration issues certificates to companies recommended by an independent audit body under the Ministry Decree No.KEP 19/M/BW/97. Audit criteria are different for small, medium or large companies.	
Japan	Not available	JACO, JQA and other auditing agencies certify OSHMS following BS8800 or OHSAS18001.
Korea	KOSHA issues certification, based on mutual recognition agreement with BSI, BVQI and DNV, to enterprises having OSH-MS components of KOSHA 2000 Programme. The certification is valid for 3 years.	BSI, BVQI, DNV and others provide certification such as BS8800, OHSAS 18000.
Malaysia	Not available	SIRIM Berhad through SIRIM QAS Sdn Bhd certifies OHSAS 18001. Auditing agencies use other systems.
Singapore	Accreditation criteria are formulated by OSH Division of the Ministry of Manpower for safety auditing companies carrying out mandatory OSH-MS auditing for shipyards, construction worksites and factories.	Singapore Productivity and Standard Board, the Building and Construction Authority carry out certification to OHSAS 18001. BVQI, DNV and others carry out voluntary certification schemes.
Thailand	TISI serves as accreditation body for TIS18001 and provides general rules on certification. Management System Certification Institute (MASCI) issues certification for TIS 18000 while any certification body requires accreditation by TISI	Relatively few organizations apply for certification of other OSH-MS.

5. Future directions for OSH-MS and the role of the ILO OSH-MS guidelines

Comments from the country papers based on the implementation in recent years are summarized in Table 6 as to the future directions of OSH-MS. It is clear from these comments that there is a general awareness about the significant advantages of national application of OSH-MS. As common needs in pursuing the commented future directions, the following five points may be mentioned.

First, all the countries surveyed seem to recognize the need to make the established standards, models and guidelines widely applicable. The need to emphasize OSH-MS as an important management tool and incorporate safety and health management as part of overall business management is recognized. On the other hand, the need to develop practical guidelines for applying OSH-MS models effectively in various industries and in different high risk situations is also mentioned.

Second, the need to develop OSH-MS performance audit criteria is pointed out. In view of the voluntary nature of the management systems, the gained experiences should be utilized to show the close link between OSH-MS and risk management.

Table 6. Future directions of OSH-MS in the countries covered.

Reported from:	Future directions of OSH-MS
Australia-New Zealand	NOHSC should pursue a systematic approach to OHSMS. Focus on high-risk sectors and smaller firms is important. Developing certification infrastructure and performance audit criteria is important.
China	Under the conditions that government supervision is insufficient, with the relations between workers and enterprises changing, developing OSH-MS can renew self management of OSH.
Hong Kong	For supporting OSH-MS, it is necessary to organize OSH-MS award scheme and develop practical guidelines for applying national safety management model into various industries. Promoting a safety culture is essential.
India	Labour laws need to incorporate all aspects of OSH-MS and relevant standards including those for agriculture and construction. There is a need to establish an accrediting agency and involve insurance schemes.
Indonesia	A serious attention should be given to overcoming problems in developing OSH-MS. There is a basic need to revise the regulation and involve private sectors and SMEs.
Japan	It is necessary to reduce hidden dangers successfully. The key role of OSH-MS is to systematize all OSH activities. OSH-MS will be effective when employed with other business systems.
Korea	It is necessary to make the Programme applicable widely. OSH-MS should be incorporated not only for enhancing productivity but also for systematic prevention.
Malaysia	DOSH is moving toward management auditing, and the development of good OSH-MS will play a crucial role.
Singapore	OSH-MS as an important management tool has important roles in the OSH framework. It helps management direct the safety effort to setting achievable goals and to a sustainable business. Mandatory requirements on OSH-MS will be progressively extended.
Thailand	Government functions will change from the controlling and

	operating role to the directing and supporting role. New provisions on self-regulation by OSH-MS will be included in the Labour Protection Act. This will require all types and sizes of enterprises to establish OSH-MS.
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Third, strengthening certification infrastructure is similarly commonly recognized as an urgent need. While the conditions for further developing certification systems are considerably different between the countries, it seems necessary to harmonize these systems.

Fourth, it is commonly felt essential to involve small and medium-sized enterprises in the OSH-MS programmes. The experiences in this direction seem still very limited in all the countries covered. New developments in this regard seem necessary.

Fifth, training in OSH-MS remains to be an important task for all the countries. Training of managers and workers in systematic OSH activities linked with OSH-MS seems particularly important.

Table 7. Comments on the role of THE ILO guidelines on OSH-MS in the countries covered.

Reported from:	Role of the ILO guidelines
Australia-New Zealand	<ol style="list-style-type: none"> 1) There are not major gaps between THE ILO guidelines and existing OHSMS systems and audit tools. 2) THE ILO guidelines help promote wider adoption of systematic approaches to OHS risk management.
China	<ol style="list-style-type: none"> 1) THE ILO guidelines provide the framework for China OHSMS. 2) The guidelines can direct enterprise-level OSH-MS. 3) They can be the basis for training and technical services
Hong Kong	<ol style="list-style-type: none"> 1) The Hong Kong framework is similar to that of THE ILO guidelines. Sharing information and technologies is important. 2) Seminars help internationalize OSH-MS more effectively.
India	<ol style="list-style-type: none"> 1) THE ILO guidelines will help establish a comprehensive national policy. 2) The guidelines help prepare sector specific guidelines on OSH-MS. 3) A certification and competency training system could be set up.
Indonesia	<ol style="list-style-type: none"> 1) THE ILO guidelines help establish a national framework for OSH-MS. 2) The guidelines can help bridge the gaps in viewing OSH not only at national level but internationally.
Japan	<ol style="list-style-type: none"> 1) THE ILO guidelines could draw attention to OSH activities. 2) The guidelines inspire businesses to take voluntary action in safety and health.
Korea	<ol style="list-style-type: none"> 1) KOSHA will incorporate THE ILO guidelines into KOSHA

	2000 Programme. 2) KOSHA wishes to contribute by providing good practices.
Malaysia	1) THE ILO guidelines could be used for establishing a national framework. 2) The guidelines provide guidance for organizational level OSH-MS. 3) The ILO guidelines are flexible enough for use in the country.
Singapore	1) THE ILO guidelines should provide general guidance for a national OSH-MS framework. 2) The guidelines are adequate in coverage with particular emphasis on worker participation, periodic audits. 3) Not prescribing certification process is adequate.
Thailand	1) THE ILO guidelines can be referred to as guidance document for OSH-MS framework, in particular for self-regulation approach. 2) THE ILO guidelines give sufficient flexibility, emphasize worker participation. 3) THE ILO assistance in advice and training is sought.

Comments on the role of the ILO guidelines on OSH-MS in the countries covered are summarized in Table 7. These comments show that there is a general consensus about the leading role of the ILO guidelines. Some country papers mention the differences seen between the existing national programmes and the ILO guidelines. For example, on the one hand, the lack of some elements of the ILO guidelines within the national programmes is mentioned such as worker participation and the need to the ILO the management systems according to local needs. On the other, the lack in the ILO guidelines of national infrastructure, certification systems, concrete guidance for SMEs and technical guides is mentioned. Some countries also commented that the latter aspects related to the flexibility of the ILO guidelines and may be seen as advantages.

These comments may be summed up as follows:

First, almost all countries surveyed feel that the ILO guidelines can help establish the national framework for OSH-MS programmes in each country. The flexibility of the provisions including the emphasis on the ILO guidelines is appreciated. Some authors also feel that the ILO guidelines will greatly help draw attention to OSH activities and to the self-regulation approach in general.

Second, the role of the ILO guidelines as guidance document in establishing enterprise-level OSH-MS programmes is frequently mentioned. The guidelines are felt adequate in coverage of main elements with a particular emphasis on worker participation, periodic audits and continual improvement.

Third, the ILO guidelines can be used an important reference material for training and technical services.

Fourth, the authors of the country papers also hope that the ILO guidelines will give us a valuable opportunity to strengthen inter-country cooperation for exchanging experiences and information and for bridging the gaps that exist.

6. Advancing OSH-MS in the Asian Pacific region

This brief overview of the current OSH-MS policies and structures in some countries in the Asian-Pacific region gives us some important clues for further advancing OSH-MS programmes nationally and internationally.

1) *(Harmonization of national standards and guidelines)*

Fairly diversified national approaches are taken toward building a national framework of OSH-MS among the countries in this region. It is therefore important to exchange positive experiences and know how to expedite the development of OSH-MS in all workplaces. Our aim should be to harmonize the national standards and guidelines so as to facilitate this exchange and international cooperation. A strong need is felt to “the ILO” OSH-MS recognizing the particular local needs. This is better facilitated by making the performance audit criteria compatible with each other.

2) *(Worker participation)*

The country papers showed the need to strengthen worker participation in developing and improving OSH-MS. As provided in the ILO guidelines, it is important to make arrangements for workers and their safety and health representatives to have the time and resources to actively participate in the processes of organizing, planning and implementation, evaluation and action for improvement of the OSH management system. Special effort is necessary to incorporate this aspect in national standards, models and guidelines as well as in enterprise-level programmes. The exchange of positive experiences seems particularly useful.

3) *(Certification infrastructure)*

The close link between the development of OSH-MS and the certification infrastructure has been clearly revealed by this review. The ILO guidelines do not specifically refer to certification issues and leave flexibility in this respect. Both these points are pointed out by the country papers. It appears useful to explore the ways and means of harmonizing the certification criteria and procedures among the countries in the region.

4) *(Practical risk management procedures in high-risk workplaces)*

As recent experiences reported in the country papers show, there is an urgent need to apply OSH-MS effectively in as many high-risk workplaces as possible. We need to the ILO the relevant management systems so as to make appropriate risk assessment and control in these workplaces. The experiences so far gained in the countries surveyed do not seem sufficient. We need to spread practical risk management procedures with the active participation of managers and workers.

5) *(The ILO OSH-MS procedures for SMEs)*

A special need is felt for establishing effective OSH-MS in small and medium-sized enterprises in different industries. There are limited but useful developments in this regard in the countries surveyed. The most important step is to offer OSH-MS

procedures the ILO in accordance with the specific features and needs of these enterprises. The best practice approach seems particularly relevant.

6) *(Support measures including action-oriented training)*

The country papers pointed out the importance of support measures including training in management systems and auditing. There are a large variety of experiences in such support measures among the countries in the region. The ILO guidelines can serve as effective guidance material. Action-oriented training programmes and materials should be developed by joining available resources.

7) *(Networking mechanisms for regional cooperation)*

Finally, the country papers revealed a mixed picture of OSH-MS programmes among these countries. Diverse approaches are taken in developing these programmers, while there is a consensus about the basic elements of the management systems and about the need for the ILO guidelines. There are thus ample opportunities for regional cooperation. We need to develop networking mechanisms for this regional cooperation. Such mechanisms will be useful for developing effective

(5) OSH-MS standards commonly applied:										
a. National OSH-MS standards	yes	yes			yes				partly	yes
b. Governmental/national OSH-MS guidelines	yes	yes	Yes		yes	yes	yes	yes	yes	yes
c. Others (OHSAS18000, ISO14000 related, etc.)	yes	yes	Yes	yes		yes	yes	yes	yes	yes
(6) Certification system:										
a. National or semi-national system	yes	yes			yes		yes	yes		yes
b. Private systems	yes					yes	yes	yes	yes	yes
(7) Number of enterprises receiving certificates:	228+	40	Some		214	some	83	17	35	21
(8) Small and medium enterprises with OSH-MS	many	few	Some	few	few	few	some	few	some	few