

***Guidelines  
on occupational  
safety and health  
management  
systems  
ILO-OSH 2001***



INTERNATIONAL LABOUR OFFICE · GENEVA

---

For further information on ILO-OSH 2001, please contact:

SafeWork-ILO InFocus Programme on Safety and Health at Work and the  
Environment

International Labour Office (ILO)

4, route des Morillons

CH-1211 Geneva 22

Switzerland

Tel.: (+41 22) 799 6715

Fax: (+41 22) 799 6878

Email: [safework@ilo.org](mailto:safework@ilo.org)

---

*Guidelines  
on occupational  
safety and health  
management  
systems*

*ILO-OSH 2001*



***Guidelines  
on occupational  
safety and health  
management  
systems***

***ILO-OSH 2001***

Copyright © International Labour Organization 2001  
First published 2001

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to the Publications Bureau (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered in the United Kingdom with the Copyright Licensing Agency, 90 Tottenham Court Road, London W1T 4LP [Fax: (+44) (0)20 7631 5500; email: cla@cla.co.uk], in the United States with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923 [Fax: (+1) (978) 750 4470; email: info@copyright.com] or in other countries with associated Reproduction Rights Organizations, may make photocopies in accordance with the licences issued to them for this purpose.

ILO

*Guidelines on occupational safety and health management systems, ILO-OSH 2001*  
Geneva, International Labour Office, 2001

Guide: occupational safety, occupational health, national level, enterprise level,  
technical aspect. 13.04.2

ISBN 92-2-111634-4

Also published in French: *Principes directeurs concernant les systèmes de gestion de la sécurité et de la santé au travail, ILO-OSH 2001* (ISBN 92-2-211634-8, Geneva, 2002); and in Spanish: *Directrices relativas a los sistemas de gestión de la seguridad y la salud en el trabajo, ILO-OSH 2001* (ISBN 92-2311634-1, Geneva, 2002).

ILO Cataloguing in Publication Data

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

ILO publications can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. Catalogues or lists of new publications are available free of charge from the above address, or by email: pubvente@ilo.org.

## Foreword

The protection of workers against work-related sickness, disease and injury forms part of the historical mandate of the ILO. Disease and injury do not go with the job nor can poverty justify disregard for workers' safety and health. The ILO's primary goal is to promote opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity. We have summarized this as "decent work". Decent work is safe work. And safe work is also a positive factor for productivity and economic growth.

Today, technological progress and intense competitive pressures bring rapid change in working conditions, work processes and organization. Legislation is essential but insufficient on its own to address these changes or to keep pace with new hazards and risks. Organizations must also be able to tackle occupational safety and health challenges continuously and to build effective responses into dynamic management strategies. These *Guidelines on occupational safety and health management systems* will support this effort.

The *Guidelines* were prepared on the basis of a broad-based approach involving the ILO and its tripartite constituents and other stakeholders. They have also been shaped by internationally agreed occupational safety and health principles as defined in relevant international labour standards. Consequently, they provide a unique and powerful instrument for the development of a sustainable safety culture within enterprises and beyond. Workers, organizations, safety and health systems and the environment all stand to benefit.

The ILO is pleased to have led the exercise of drawing up these *Guidelines*. I am confident that they will become an invaluable tool for employers and workers and their organizations, national institutions and all those who have a role in ensuring that workplaces are also safe and healthy places.

Juan Somavia  
Director-General





## Contents

<b>Foreword .....</b>	<b>V</b>
<b>Introduction .....</b>	<b>IX</b>
<b>1. Objectives .....</b>	<b>1</b>
<b>2. A national framework for occupational safety and health management systems.....</b>	<b>3</b>
2.1. National policy .....	3
2.2. National guidelines.....	4
2.3. Tailored guidelines.....	4
<b>3. The occupational safety and health management system in the organization.....</b>	<b>5</b>
<b>Policy .....</b>	<b>6</b>
3.1. Occupational safety and health policy.....	6
3.2. Worker participation .....	6
<b>Organizing .....</b>	<b>7</b>
3.3. Responsibility and accountability .....	7
3.4. Competence and training.....	8
3.5. Occupational safety and health management system documentation.....	8
3.6. Communication .....	9
<b>Planning and implementation .....</b>	<b>10</b>
3.7. Initial review .....	10
3.8. System planning, development and implementation.....	10
3.9. Occupational safety and health objectives .....	11
3.10. Hazard prevention .....	11
3.10.1. Prevention and control measures .....	11
3.10.2. Management of change.....	12
3.10.3. Emergency prevention, preparedness and response.....	12
3.10.4. Procurement.....	12
3.10.5. Contracting .....	13
<b>Evaluation .....</b>	<b>13</b>
3.11. Performance monitoring and measurement.....	13
3.12. Investigation of work-related injuries, ill health, diseases and incidents, and their impact on safety and health performance.....	15
3.13. Audit.....	15
3.14. Management review .....	16
<b>Action for improvement.....</b>	<b>17</b>
3.15. Preventive and corrective action .....	17
3.16. Continual improvement.....	18
<b>Glossary .....</b>	<b>19</b>
<b>Bibliography.....</b>	<b>21</b>
<b>Annex .....</b>	<b>23</b>
<b>List of participants and observers at the Meeting of Experts on ILO Guidelines on Occupational Safety and Health Management Systems, Geneva, 19-27 April 2001.....</b>	<b>23</b>



## Introduction

The positive impact of introducing occupational safety and health (OSH) management systems at the *organization*<sup>1</sup> level, both on the reduction of hazards and risks and on productivity, is now recognized by governments, employers and workers.

These guidelines on OSH management systems have been developed by the International Labour Organization (ILO) according to internationally agreed principles defined by the ILO's tripartite constituents. This tripartite approach provides the strength, flexibility and appropriate basis for the development of a sustainable safety culture in the *organization*. The ILO has therefore developed voluntary guidelines on OSH management systems which reflect ILO values and instruments relevant to the protection of workers' safety and health.

The practical recommendations of these guidelines are intended for use by all those who have responsibility for occupational safety and health management. They are not legally binding and are not intended to replace national laws, regulations or accepted standards. Their application does not require certification.

The employer is accountable for and has a duty to organize occupational safety and health. The implementation of an OSH management system is one useful approach to fulfilling this duty. The ILO has designed these guidelines as a practical tool for assisting *organizations* and competent institutions as a means of achieving continual improvement in OSH performance.

---

<sup>1</sup> See glossary for definition.



# 1 Objectives

1.1. These guidelines should contribute to the protection of workers from hazards and to the elimination of work-related injuries, ill health, diseases, incidents and deaths.

1.2. At national level, the guidelines should:

- (a) be used to establish a national framework for OSH management systems, preferably supported by national laws and regulations;
- (b) provide guidance for the development of voluntary arrangements to strengthen compliance with regulations and standards leading to continual improvement in OSH performance; and
- (c) provide guidance on the development of both national and tailored guidelines on OSH management systems to respond appropriately to the real needs of *organizations*, according to their size and the nature of their activities.

1.3. At the level of the *organization*, the guidelines are intended to:

- (a) provide guidance regarding the integration of OSH management system elements in the *organization* as a component of policy and management arrangements; and
- (b) 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.



## 2 A national framework for occupational safety and health management systems

### 2.1. National policy

2.1.1. A competent institution or institutions should be nominated, as appropriate, to formulate, implement and periodically review a coherent national policy for the establishment and promotion of OSH management systems in *organizations*. This should be done in consultation with the most representative organizations of employers and workers, and with other bodies as appropriate.

2.1.2. The national policy on OSH management systems should establish general principles and procedures to:

- (a) promote the implementation and integration of OSH management systems as part of the overall management of an *organization*;
- (b) facilitate and improve voluntary arrangements for the systematic identification, planning, implementation and improvement of OSH activities at national and *organization* levels;
- (c) promote the participation of workers and their representatives at *organization* level;
- (d) implement continual improvement while avoiding unnecessary bureaucracy, administration and costs;
- (e) promote collaborative and support arrangements for OSH management systems at the *organization* level by labour inspectorates, occupational safety and health services and other services, and channel their activities into a consistent framework for OSH management;
- (f) evaluate the effectiveness of the national policy and framework at appropriate intervals;
- (g) evaluate and publicize the effectiveness of OSH management systems and practice by suitable means; and
- (h) ensure that the same level of safety and health requirements applies to contractors and their workers as to the workers, including temporary workers, employed directly by the *organization*.

2.1.3. With a view to ensuring the coherence of the national policy and of arrangements for its implementation, the competent institution should establish a national framework for OSH management systems to:

- (a) identify and establish the respective functions and responsibilities of the various institutions called upon to implement the national policy, and make appropriate arrangements to ensure the necessary coordination between them;
- (b) publish and periodically review national guidelines on the voluntary application and systematic implementation of OSH management systems in *organizations*;

- (c) establish criteria, as appropriate, for the designation and respective duties of the institutions responsible for the preparation and promotion of tailored guidelines on OSH management systems; and
- (d) ensure that guidance is available to employers, workers and their representatives to take advantage of the national policy.

2.1.4. The competent institution should make arrangements and provide technically sound guidance to labour inspectorates, OSH services and other public or private services, agencies and institutions dealing with OSH, including health-care providers, to encourage and help *organizations* to implement OSH management systems.

## 2.2. National guidelines

2.2.1. National guidelines on the voluntary application and systematic implementation of OSH management systems should be elaborated based on the model provided in Chapter 3, taking into consideration national conditions and practice.

2.2.2. There should be consistency between the ILO guidelines, the national guidelines and the tailored guidelines, with sufficient flexibility to permit direct application or tailored application at the *organization* level.

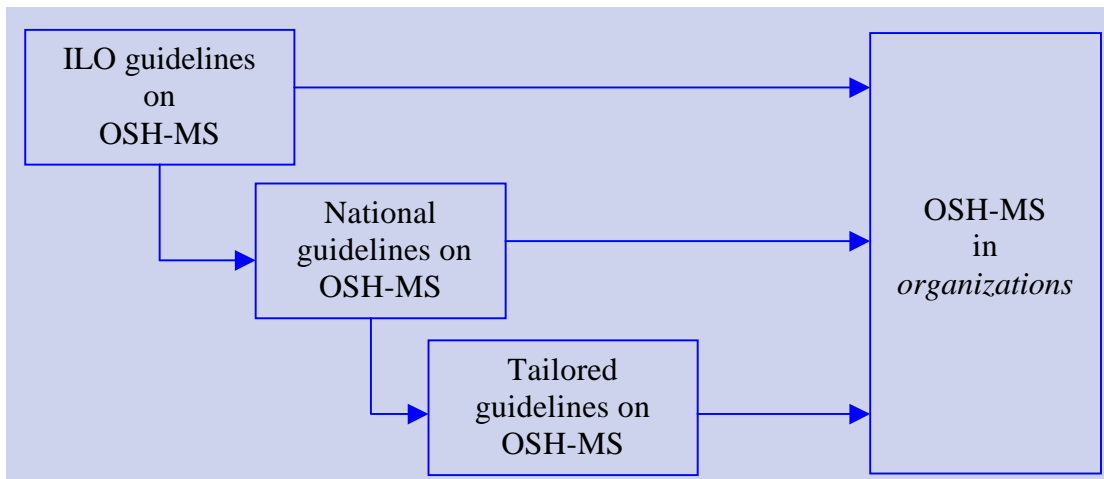
## 2.3. Tailored guidelines

2.3.1. Tailored guidelines, reflecting the overall objectives of the ILO guidelines, should contain the generic elements of the national guidelines and should be designed to reflect the specific conditions and needs of *organizations* or groups of *organizations*, taking into consideration particularly:

- (a) their size (large, medium and small) and infrastructure; and
- (b) the types of hazards and degree of risks.

2.3.2. The links between the national framework for OSH management systems (OSH-MS) and its essential elements are illustrated in figure 1.

**Figure 1. Elements of the national framework for OSH management systems**

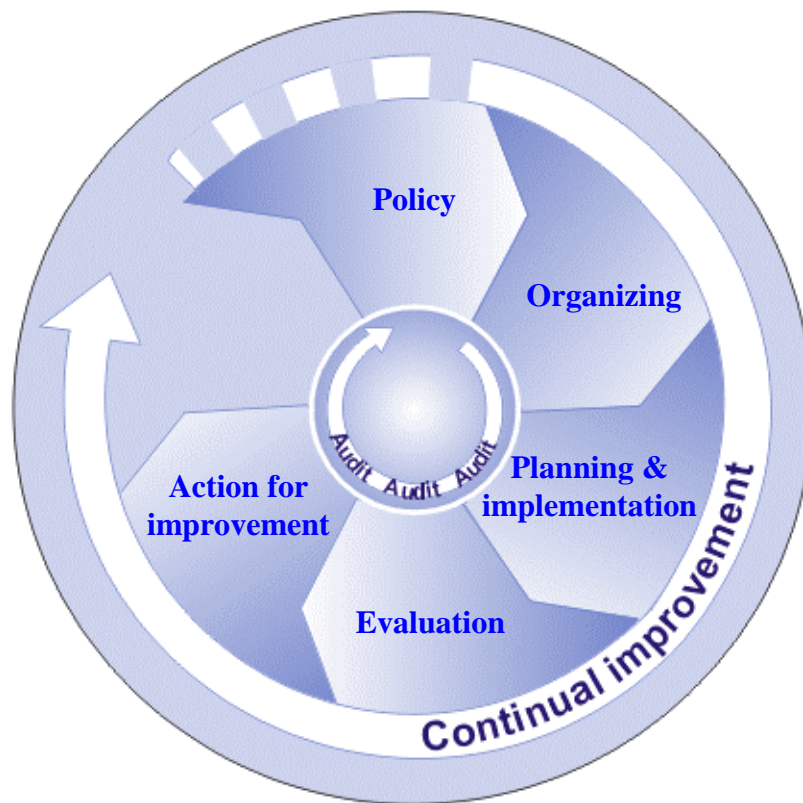




### 3 The occupational safety and health management system in the organization

Occupational safety and health, including compliance with the OSH requirements pursuant to national laws and regulations, are the responsibility and duty of the employer. The employer should show strong leadership and commitment to OSH activities in the *organization*, and make appropriate arrangements for the establishment of an OSH management system. The system should contain the main elements of policy, organizing, planning and implementation, evaluation and action for improvement, as shown in figure 2.

**Figure 2. Main elements of the OSH management system**





## Policy

### 3.1. Occupational safety and health policy

3.1.1. The employer, in consultation with workers and their representatives, should set out in writing an OSH policy, which should be:

- (a) specific to the *organization* and appropriate to its size and the nature of its activities;
- (b) concise, clearly written, dated and made effective by the signature or endorsement of the employer or the most senior accountable person in the *organization*;
- (c) communicated and readily accessible to all persons at their place of work;
- (d) reviewed for continuing suitability; and
- (e) made available to relevant external interested parties, as appropriate.

3.1.2. The OSH policy should include, as a minimum, the following key principles and objectives to which the *organization is* committed:

- (a) protecting the safety and health of all members of the *organization* by preventing work-related injuries, ill health, diseases and incidents;
- (b) complying with relevant OSH national laws and regulations, voluntary programmes, collective agreements on OSH and other requirements to which the *organization* subscribes;
- (c) ensuring that workers and their representatives are consulted and encouraged to participate actively in all elements of the OSH management system; and
- (d) continually improving the performance of the OSH management system.

3.1.3. The OSH management system should be compatible with or integrated in other management systems in the *organization*.

### 3.2. Worker participation

3.2.1. Worker participation is an essential element of the OSH management system in the *organization*.

3.2.2. The employer should ensure that workers and their safety and health representatives are consulted, informed and trained on all aspects of OSH, including emergency arrangements, associated with their work.

3.2.3. The employer should make arrangements for workers and their safety and health representatives to have the time and resources to participate actively in the

processes of organizing, planning and implementation, evaluation and action for improvement of the OSH management system.

3.2.4. The employer should ensure, as appropriate, the establishment and efficient functioning of a safety and health committee and the recognition of workers' safety and health representatives, in accordance with national laws and practice.



## Organizing

### 3.3. Responsibility and accountability

3.3.1. The employer should have overall responsibility for the protection of workers' safety and health, and provide leadership for OSH activities in the organization.

3.3.2. The employer and senior management should allocate responsibility, accountability and authority for the development, implementation and performance of the OSH management system and the achievement of the relevant OSH objectives. Structures and processes should be established which:

- (a) ensure that OSH is a line-management responsibility which is known and accepted at all levels;
- (b) define and communicate to the members of the *organization* the responsibility, accountability and authority of persons who identify, evaluate or control OSH hazards and risks;
- (c) provide effective supervision, as necessary, to ensure the protection of workers' safety and health;
- (d) promote cooperation and communication among members of the *organization*, including workers and their representatives, to implement the elements of the *organization's* OSH management system;
- (e) fulfil the principles of OSH management systems contained in relevant national guidelines, tailored guidelines or voluntary programmes, as appropriate, to which the *organization* subscribes;
- (f) establish and implement a clear OSH policy and measurable objectives;
- (g) establish effective arrangements to identify and eliminate or control work-related hazards and risks, and promote health at work;
- (h) establish prevention and health promotion programmes;
- (i) ensure effective arrangements for the full participation of workers and their representatives in the fulfilment of the OSH policy;

- (j) provide appropriate resources to ensure that persons responsible for OSH, including the safety and health committee, can perform their functions properly; and
- (k) ensure effective arrangements for the full participation of workers and their representatives in safety and health committees, where they exist.

3.3.3. A person or persons at the senior management level should be appointed, where appropriate, with responsibility, accountability and authority for:

- (a) the development, implementation, periodic review and evaluation of the OSH management system;
- (b) periodic reporting to the senior management on the performance of the OSH management system; and
- (c) promoting the participation of all members of the *organization*.

### 3.4. Competence<sup>2</sup> and training

3.4.1. The necessary OSH competence requirements should be defined by the employer, and arrangements established and maintained to ensure that all persons are competent to carry out the safety and health aspects of their duties and responsibilities.

3.4.2. The employer should have, or should have access to, sufficient OSH competence to identify and eliminate or control work-related hazards and risks, and to implement the OSH management system.

3.4.3. Under the arrangements referred to in paragraph 3.4.1, training programmes should:

- (a) cover all members of the *organization*, as appropriate;
- (b) be conducted by competent persons;
- (c) provide effective and timely initial and refresher training at appropriate intervals;
- (d) include participants' evaluation of their comprehension and retention of the training;
- (e) be reviewed periodically. The review should include the safety and health committee, where it exists, and the training programmes, modified as necessary to ensure their relevance and effectiveness; and
- (f) be documented, as appropriate and according to the size and nature of activity of the *organization*.

3.4.4. Training should be provided to all participants at no cost and should take place during working hours, if possible.

### 3.5. Occupational safety and health management system documentation

3.5.1. According to the size and nature of activity of the *organization*, OSH management system documentation should be established and maintained, and may cover:

- (a) the OSH policy and objectives of the *organization*;

---

<sup>2</sup> OSH competence includes education, work experience and training, or a combination of these.

- (b) the allocated key OSH management roles and responsibilities for the implementation of the OSH management system;
- (c) the significant OSH hazards/risks arising from the *organization's* activities, and the arrangements for their prevention and control; and
- (d) arrangements, procedures, instructions or other internal documents used within the framework of the OSH management system.

3.5.2. The OSH management system documentation should be:

- (a) clearly written and presented in a way that is understood by those who have to use it; and
- (b) periodically reviewed, revised as necessary, communicated and readily accessible to all appropriate or affected members of the *organization*.

3.5.3. OSH records should be established, managed and maintained locally and according to the needs of the *organization*. They should be identifiable and traceable, and their retention times should be specified.

3.5.4. Workers should have the right to access records relevant to their working environment and health, while respecting the need for confidentiality.

3.5.5. OSH records may include:

- (a) records arising from the implementation of the OSH management system;
- (b) records of work-related injuries, ill health, diseases and incidents;
- (c) records arising from national laws or regulations dealing with OSH;
- (d) records of workers' exposures, surveillance of the working environment and workers' health; and
- (e) the results of both active and reactive monitoring.

## 3.6. Communication

3.6.1. Arrangements and procedures should be established and maintained for:

- (a) receiving, documenting and responding appropriately to internal and external communications related to OSH;
- (b) ensuring the internal communication of OSH information between relevant levels and functions of the *organization*; and
- (c) ensuring that the concerns, ideas and inputs of workers and their representatives on OSH matters are received, considered and responded to.



## Planning and implementation

### 3.7. Initial review

3.7.1. The *organization's* existing OSH management system and relevant arrangements should be evaluated by an initial review, as appropriate. In the case where no OSH management system exists, or if the *organization* is newly established, the initial review should serve as a basis for establishing an OSH management system.

3.7.2. The initial review should be carried out by competent persons, in consultation with workers and/or their representatives, as appropriate. It should:

- (a) identify the current applicable national laws and regulations, national guidelines, tailored guidelines, voluntary programmes and other requirements to which the *organization* subscribes;
- (b) identify, anticipate and assess hazards and risks to safety and health arising from the existing or proposed work environment and work organization; and
- (c) determine whether planned or existing controls are adequate to eliminate hazards or control risks; and
- (d) analyse the data provided from workers' health surveillance.

3.7.3. The result of the initial review should:

- (a) be documented;
- (b) become the basis for making decisions regarding the implementation of the OSH management system; and
- (c) provide a baseline from which continual improvement of the *organization's* OSH management system can be measured.

### 3.8. System planning, development and implementation

3.8.1. The purpose of planning should be to create an OSH management system that supports:

- (a) as the minimum, compliance with national laws and regulations;
- (b) the elements of the *organization's* OSH management system; and
- (c) continual improvement in OSH performance.

3.8.2. Arrangements should be made for adequate and appropriate OSH planning, based on the results of the initial review, subsequent reviews or other available data. These planning arrangements should contribute to the protection of safety and health at work, and should include:

- (a) a clear definition, priority setting and quantification, where appropriate, of the *organization's* OSH objectives;
- (b) the preparation of a plan for achieving each objective, with defined responsibility and clear performance criteria indicating what is to be done by whom and when;
- (c) the selection of measurement criteria for confirming that the objectives are achieved; and
- (d) the provision of adequate resources, including human and financial resources and technical support, as appropriate.

3.8.3. The OSH planning arrangements of the *organization* should cover the development and implementation of all the OSH management system elements, as described in Chapter 3 of these guidelines and illustrated in figure 2.

### 3.9. Occupational safety and health objectives

3.9.1. Consistent with the OSH policy and based on the initial or subsequent reviews, measurable OSH objectives should be established, which are:

- (a) specific to the *organization*, and appropriate to and according to its size and nature of activity;
- (b) consistent with the relevant and applicable national laws and regulations, and the technical and business obligations of the *organization* with regard to OSH;
- (c) focused towards continually improving workers' OSH protection to achieve the best OSH performance;
- (d) realistic and achievable;
- (e) documented, and communicated to all relevant functions and levels of the *organization*; and
- (f) periodically evaluated and if necessary updated.

### 3.10. Hazard prevention

#### 3.10.1. Prevention and control measures

3.10.1.1. Hazards and risks to workers' safety and health should be identified and assessed on an ongoing basis. Preventive and protective measures should be implemented in the following order of priority:

- (a) eliminate the hazard/risk;
- (b) control the hazard/risk at source, through the use of engineering controls or organizational measures;
- (c) minimize the hazard/risk by the design of safe work systems, which include administrative control measures; and
- (d) where residual hazards/risks cannot be controlled by collective measures, the employer should provide for appropriate personal protective equipment, including clothing, at no cost, and should implement measures to ensure its use and maintenance.

3.10.1.2. Hazard prevention and control procedures or arrangements should be established and should:



- (a) be adapted to the hazards and risks encountered by the *organization*;
- (b) be reviewed and modified if necessary on a regular basis;
- (c) comply with national laws and regulations, and reflect good practice; and
- (d) consider the current state of knowledge, including information or reports from *organizations*, such as labour inspectorates, occupational safety and health services, and other services as appropriate.

### 3.10.2. Management of change

3.10.2.1. The impact on OSH of internal changes (such as those in staffing or due to new processes, working procedures, organizational structures or acquisitions) and of external changes (for example, as a result of amendments of national laws and regulations, organizational mergers, and developments in OSH knowledge and technology) should be evaluated and appropriate preventive steps taken prior to the introduction of changes.

3.10.2.2. A workplace hazard identification and risk assessment should be carried out before any modification or introduction of new work methods, materials, processes or machinery. Such assessment should be done in consultation with and involving workers and their representatives, and the safety and health committee, where appropriate.

3.10.2.3. The implementation of a "decision to change" should ensure that all affected members of the *organization* are properly informed and trained.

### 3.10.3. Emergency prevention, preparedness and response

3.10.3.1. Emergency prevention, preparedness and response arrangements should be established and maintained. These arrangements should identify the potential for accidents and emergency situations, and address the prevention of OSH risks associated with them. The arrangements should be made according to the size and nature of activity of the *organization*. They should:

- (a) ensure that the necessary information, internal communication and coordination are provided to protect all people in the event of an emergency at the worksite;
- (b) provide information to, and communication with, the relevant competent authorities, and the neighbourhood and emergency response services;
- (c) address first-aid and medical assistance, firefighting and evacuation of all people at the worksite; and
- (d) provide relevant information and training to all members of the *organization*, at all levels, including regular exercises in emergency prevention, preparedness and response procedures.

3.10.3.2. Emergency prevention, preparedness and response arrangements should be established in cooperation with external emergency services and other bodies where applicable.

### 3.10.4. Procurement

3.10.4.1. Procedures should be established and maintained to ensure that:



- (a) compliance with safety and health requirements for the *organization is* identified, evaluated and incorporated into purchasing and leasing specifications;
- (b) national laws and regulations and the *organization's* own OSH requirements are identified prior to the procurement of goods and services; and
- (c) arrangements are made to achieve conformance to the requirements prior to their use.

### 3.10.5. Contracting

3.10.5.1. Arrangements should be established and maintained for ensuring that the *organization's* safety and health requirements, or at least the equivalent, are applied to contractors and their workers.

3.10.5.2. Arrangements for contractors working on site should:

- (a) include OSH criteria in procedures for evaluating and selecting contractors;
- (b) establish effective ongoing communication and coordination between appropriate levels of the *organization* and the contractor prior to commencing work. This should include provisions for communicating hazards and the measures to prevent and control them;
- (c) include arrangements for reporting of work-related injuries, ill health, diseases and incidents among the contractors' workers while performing work for the *organization*;
- (d) provide relevant workplace safety and health hazard awareness and training to contractors or their workers prior to commencing work and as work progresses, as necessary;
- (e) regularly monitor OSH performance of contractor activities on site; and
- (f) ensure that on-site OSH procedures and arrangements are followed by the contractor(s).



## Evaluation

### 3.11. Performance monitoring and measurement

3.11.1. Procedures to monitor, measure and record OSH performance on a regular basis should be developed, established and periodically reviewed. Responsibility, accountability and authority for monitoring at different levels in the management structure should be allocated.

3.11.2. The selection of performance indicators should be according to the size and nature of activity of the *organization* and the OSH objectives.

3.11.3. Both qualitative and quantitative measures appropriate to the needs of the *organization* should be considered. These should:

- (a) be based on the *organization's* identified hazards and risks, the commitments in the OSH policy and the OSH objectives; and
- (b) support the *organization's* evaluation process, including the management review.

3.11.4. Performance monitoring and measurement should:

- (a) be used as a means of determining the extent to which OSH policy and objectives are being implemented and risks are controlled;
- (b) include both active and reactive monitoring, and not be based only upon work-related injury, ill health, disease and incident statistics; and
- (c) be recorded.

3.11.5. Monitoring should provide:

- (a) feedback on OSH performance;
- (b) information to determine whether the day-to-day arrangements for hazard and risk identification, prevention and control are in place and operating effectively; and
- (c) the basis for decisions about improvement in hazard identification and risk control, and the OSH management system.

3.11.6. Active monitoring should contain the elements necessary to have a proactive system and should include:

- (a) monitoring of the achievement of specific plans, established performance criteria and objectives;
- (b) the systematic inspection of work systems, premises, plant and equipment;
- (c) surveillance of the working environment, including work organization;
- (d) surveillance of workers' health, where appropriate, through suitable medical monitoring or follow-up of workers for early detection of signs and symptoms of harm to health in order to determine the effectiveness of prevention and control measures; and
- (e) compliance with applicable national laws and regulations, collective agreements and other commitments on OSH to which the *organization* subscribes.

3.11.7. Reactive monitoring should include the identification, reporting and investigation of:

- (a) work-related injuries, ill health (including monitoring of aggregate sickness absence records), diseases and incidents;
- (b) other losses, such as damage to property;
- (c) deficient safety and health performance, and OSH management system failures; and
- (d) workers' rehabilitation and health-restoration programmes.

### 3.12. Investigation of work-related injuries, ill health, diseases and incidents, and their impact on safety and health performance

3.12.1. The investigation of the origin and underlying causes of work-related injuries, ill health, diseases and incidents should identify any failures in the OSH management system and should be documented.

3.12.2. Such investigations should be carried out by competent persons, with the appropriate participation of workers and their representatives.

3.12.3. The results of such investigations should be communicated to the safety and health committee, where it exists, and the committee should make appropriate recommendations.

3.12.4. The results of investigations, in addition to any recommendations from the safety and health committee, should be communicated to appropriate persons for corrective action, included in the management review and considered for continual improvement activities.

3.12.5. The corrective action resulting from such investigations should be implemented in order to avoid repetition of work-related injuries, ill health, diseases and incidents.

3.12.6. Reports produced by external investigative agencies, such as inspectorates and social insurance institutions, should be acted upon in the same manner as internal investigations, taking into account issues of confidentiality.

### 3.13. Audit

3.13.1. Arrangements to conduct periodic audits are to be established in order to determine whether the OSH management system and its elements are in place, adequate, and effective in protecting the safety and health of workers and preventing incidents.

3.13.2. An audit policy and programme should be developed, which includes a designation of auditor competency, the audit scope, the frequency of audits, audit methodology and reporting.

3.13.3. The audit includes an evaluation of the *organization's* OSH management system elements or a subset of these, as appropriate. The audit should cover:

- (a) OSH policy;
- (b) worker participation;
- (c) responsibility and accountability;
- (d) competence and training;
- (e) OSH management system documentation;
- (f) communication;
- (g) system planning, development and implementation;
- (h) prevention and control measures;
- (i) management of change;
- (j) emergency prevention, preparedness and response;

- (k) procurement;
- (l) contracting;
- (m) performance monitoring and measurement;
- (n) investigation of work-related injuries, ill health, diseases and incidents, and their impact on safety and health performance;
- (o) audit;
- (p) management review;
- (q) preventive and corrective action;
- (r) continual improvement; and
- (s) any other audit criteria or elements that may be appropriate.

3.13.4. The audit conclusion should determine whether the implemented OSH management system elements or a subset of these:

- (a) are effective in meeting the *organization's* OSH policy and objectives;
- (b) are effective in promoting full worker participation;
- (c) respond to the results of OSH performance evaluation and previous audits;
- (d) enable the *organization* to achieve compliance with relevant national laws and regulations; and
- (e) fulfil the goals of continual improvement and best OSH practice.

3.13.5. Audits should be conducted by competent persons internal or external to the *organization* who are independent of the activity being audited.

3.13.6. The audit results and audit conclusions should be communicated to those responsible for corrective action.

3.13.7. Consultation on selection of the auditor and all stages of the workplace audit, including analysis of results, are subject to worker participation, as appropriate.

### 3.14. Management review

3.14.1. Management reviews should:

- (a) evaluate the overall strategy of the OSH management system to determine whether it meets planned performance objectives;
- (b) evaluate the OSH management system's ability to meet the overall needs of the *organization* and its stakeholders, including its workers and the regulatory authorities;
- (c) evaluate the need for changes to the OSH management system, including OSH policy and objectives;
- (d) identify what action is necessary to remedy any deficiencies in a timely manner, including adaptations of other aspects of the *organization's* management structure and performance measurement;
- (e) provide the feedback direction, including the determination of priorities, for meaningful planning and continual improvement;
- (f) evaluate progress towards the *organization's* OSH objectives and corrective action activities; and

(g) evaluate the effectiveness of follow-up actions from earlier management reviews.

3.14.2. The frequency and scope of periodic reviews of the OSH management system by the employer or the most senior accountable person should be defined according to the *organization's* needs and conditions.

3.14.3. The management review should consider:

- (a) the results of work-related injuries, ill health, diseases and incident investigations; performance monitoring and measurement; and audit activities; and
- (b) additional internal and external inputs as well as changes, including organizational changes, that could affect the OSH management system.

3.14.4. The findings of the management review should be recorded and formally communicated to:

- (a) the persons responsible for the relevant element(s) of the OSH management system so that they may take appropriate action; and
- (b) the safety and health committee, workers and their representatives.



Action for improvement

### 3.15. Preventive and corrective action

3.15.1. Arrangements should be established and maintained for preventive and corrective action resulting from OSH management system performance monitoring and measurement, OSH management system audits and management reviews. These arrangements should include:

- (a) identifying and analysing the root causes of any non-conformities with relevant OSH regulations and/or OSH management systems arrangements; and
- (b) initiating, planning, implementing, checking the effectiveness of and documenting corrective and preventive action, including changes to the OSH management system itself.

3.15.2. When the evaluation of the OSH management system or other sources show that preventive and protective measures for hazards and risks are inadequate or likely to become inadequate, the measures should be addressed according to the recognized hierarchy of prevention and control measures, and completed and documented, as appropriate and in a timely manner.

### 3.16. Continual improvement

3.16.1. Arrangements should be established and maintained for the continual improvement of the relevant elements of the OSH management system and the system as a whole. These arrangements should take into account:

- (a) the OSH objectives of the *organization*;
- (b) the results of hazard and risk identifications and assessments;
- (c) the results of performance monitoring and measurements;
- (d) the investigation of work-related injuries, diseases, ill health and incidents, and the results and recommendations of audits;
- (e) the outcomes of the management review;
- (f) the recommendations for improvement from all members of the *organization*, including the safety and health committee, where it exists;
- (g) changes in national laws and regulations, voluntary programmes and collective agreements;
- (h) new relevant information; and
- (i) the results of health protection and promotion programmes.

3.16.2. The safety and health processes and performance of the *organization* should be compared with others in order to improve health and safety performance.

## Glossary

In these guidelines, the following terms have the meanings hereby assigned to them:

*Active monitoring:* The ongoing activities which check that hazard and risk preventive and protective measures, as well as the arrangements to implement the OSH management system, conform to defined criteria.

*Audit:* A systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which defined criteria are fulfilled. This does not necessarily mean an independent external audit (an auditor or auditors from outside the *organization*).

*Competent institution:* A government department or other body with the responsibility to establish a national policy and develop a national framework for OSH management systems in *organizations*, and to provide relevant guidance.

*Competent person:* A person with suitable training, and sufficient knowledge, experience and skill, for the performance of the specific work.

*Continual improvement:* Iterative process of enhancing the OSH management system to achieve improvements in overall OSH performance.

*Contractor:* A person or an *organization* providing services to an employer at the employer's worksite in accordance with agreed specifications, terms and conditions.

*Employer:* Any physical or legal person that employs one or more workers.

*Hazard:* The inherent potential to cause injury or damage to people's health.

*Hazard assessment:* A systematic evaluation of hazards.

*Incident:* An unsafe occurrence arising out of or in the course of work where no personal injury is caused.

*Organization:* A company, operation, firm, undertaking, establishment, enterprise, institution or association, or part of it, whether incorporated or not, public or private, that has its own functions and administration. For *organizations* with more than one operating unit, a single operating unit may be defined as an *organization*.

*OSH management system:* A set of interrelated or interacting elements to establish OSH policy and objectives, and to achieve those objectives.

*Reactive monitoring:* Checks that failures in the hazard and risk prevention and protection control measures, and the OSH management system, as demonstrated by the occurrence of injuries, ill health, diseases and incidents, are identified and acted upon.

*Risk:* A combination of the likelihood of an occurrence of a hazardous event and the severity of injury or damage to the health of people caused by this event.

*Risk assessment:* The process of evaluating the risks to safety and health arising from hazards at work.

*Safety and health committee:* A committee with representation of workers' safety and health representatives and employers' representatives established and functioning at *organization* level according to national laws, regulations and practice.

*Surveillance of the working environment:* A generic term which includes the identification and evaluation of environmental factors that may affect workers' health. It covers assessments of sanitary and occupational hygiene conditions, factors in the organization of work which may pose risks to the health of workers, collective and personal protective equipment, exposure of workers to hazardous agents, and control systems designed to eliminate and reduce them. From the standpoint of workers' health, the surveillance of the working environment may focus on, but not be limited to, ergonomics, accident and disease prevention, occupational hygiene in the workplace, work organization, and psychosocial factors in the workplace.

*Worker:* Any person who performs work, either regularly or temporarily, for an employer.

*Workers' health surveillance:* A generic term which covers procedures and investigations to assess workers' health in order to detect and identify any abnormality. The results of surveillance should be used to protect and promote the health of the individual, collective health at the workplace, and the health of the exposed working population. Health assessment procedures may include, but are not limited to, medical examinations, biological monitoring, radiological examinations, questionnaires or a review of health records.

*Workers and their representatives:* Where reference is made in these guidelines to workers and their representatives, the intention is that, where representatives exist, they should be consulted as the means to achieving appropriate worker participation. In some instances it may be appropriate to involve all workers and all representatives.

*Workers' representative:* In accordance with the Workers' Representatives Convention, 1971 (No. 135), any person who is recognized as such by national law or practice, whether they are:

- (a) trade union representatives, namely, representatives designated or elected by trade unions or by members of such unions; or
- (b) elected representatives, namely, representatives who are freely elected by the workers of the [organization] in accordance with provisions of national laws or regulations or of collective agreements and whose functions do not include activities which are recognized as the exclusive prerogative of trade unions in the country concerned.

*Workers' safety and health representative:* Workers' representative elected or appointed in accordance with national laws, regulations and practice to represent workers' interests in OSH issues at the workplace.

*Work-related injuries, ill health and diseases:* Negative impacts on health arising from exposure to chemical, biological, physical, work-organizational and psychosocial factors at work.

*Worksite:* Physical area where workers need to be or to go due to their work which is under the control of an employer.



## Bibliography

Since its foundation in 1919, the ILO has elaborated and adopted a large number of international labour Conventions (and accompanying Recommendations) directly concerned with OSH issues, as well as many codes of practice and technical publications on various aspects of the subject. They represent a formidable body of definitions, principles, obligations, duties and rights, as well as technical guidance reflecting the consensual views of the ILO's tripartite constituents from its 175 member States<sup>3</sup> on most aspects of occupational safety and health.

## Relevant ILO Conventions and Recommendations

### Conventions

<i>No.</i>	<i>Title</i>
115	Radiation Protection, 1960
135	Workers' Representatives, 1971
136	Benzene, 1971
139	Occupational Cancer, 1974
148	Working Environment (Air Pollution, Noise and Vibration), 1977
155	Occupational Safety and Health, 1981
161	Occupational Health Services, 1985
162	Asbestos, 1986
167	Safety and Health in Construction, 1988
170	Chemicals, 1990
174	Prevention of Major Industrial Accidents, 1993
176	Safety and Health in Mines, 1995

### Recommendations

<i>No.</i>	<i>Title</i>
114	Radiation Protection, 1960
144	Benzene, 1971
147	Occupational Cancer, 1974
156	Working Environment (Air Pollution, Noise and Vibration), 1977
164	Occupational Safety and Health, 1981
171	Occupational Health Services, 1985
172	Asbestos, 1986
175	Safety and Health in Construction, 1988
177	Chemicals, 1990
181	Prevention of Major Industrial Accidents, 1993
183	Safety and Health in Mines, 1995

---

<sup>3</sup> As of June 2001.

## Selected ILO codes of practice

- Prevention of major industrial accidents* (Geneva, 1991).  
*Safety and health in opencast mines* (Geneva, 1991).  
*Safety and health in construction* (Geneva, 1992).  
*Safety in the use of chemicals at work* (Geneva, 1993).  
*Accident prevention on board ship at sea and in port* (Geneva, 2nd edition, 1996).  
*Management of alcohol and drug-related issues in the workplace* (Geneva, 1996).  
*Recording and notification of occupational accidents and diseases* (Geneva, 1996).  
*Protection of workers' personal data* (Geneva, 1997).  
*Safety and health in forestry work* (Geneva, 2nd edition, 1998).  
*Ambient factors in the workplace* (Geneva, 2001).

## Relevant publications

- ILO: Declaration on Fundamental Principles and Rights at Work and its Follow-up, adopted by the International Labour Conference at its 86th Session, 1998.* Geneva, 1998.
- : *Encyclopaedia of occupational health and safety*, edited by Jeanne Mager Stellman. Geneva, 4th edition, 1998; 4-volume print version and CD-ROM.
- : *Technical and ethical guidelines for workers' health surveillance*, Occupational Safety and Health Series, No. 72. Geneva, 1998.
- United Nations Conference on Environment and Development (UNCED): *Agenda 21* (Chapter 19 on environmentally sound management of chemicals). Rio de Janeiro, Brazil, 1992.

## Annex

### List of participants and observers at the Meeting of Experts on ILO Guidelines on Occupational Safety and Health Management Systems, Geneva, 19-27 April 2001

#### Experts appointed after consultations with governments

Mr. G.D. Cahalane, Manager, Strategic Policy, Occupational Safety and Health Service, Department of Labour, Wellington (New Zealand).

Mr. N. Diallo, National Director of Employment and Labour Regulation, Ministry of Employment and the Public Service, Conakry (Republic of Guinea).

Dr. J.A. Legaspi Velasco, Director General, Secretariat of Labour and Social Protection, General Directorate of Occupational Safety and Health, Federal District (Mexico).

Dr. D. Podgórski, Deputy Director for Management Systems and Certification, Central Institute for Labour Protection, Warsaw (Poland).

Dr. K.E. Poppendick, Federal Institute for Occupational Safety and Health, Dortmund (Germany).

Mr. R.L.M. Puiatti, Fiscal Auditor of Labour, Ministry of Labour and Employment, Regional Delegation of Labour and Employment, Porto Alegre (Brazil).

Mr. M. Sasaki, Director, International Office, Ministry of Health, Labour and Welfare, Tokyo (Japan).

#### Experts appointed after consultation with the Employers' group

Dr. J. Asherson, Head of Environmental Affairs, Confederation of British Industry (CBI), London (United Kingdom).

Dr. S. Böhm, Head, Occupational Health and Safety Department, Management Systems and Auditing, Bayer AG, Leverkusen (Germany).

Dr. L. Greco, Member of the Technical Group on Occupational Safety and Health, National Confederation of Industry (CNI), Rio de Janeiro (Brazil).

Mr. T. Jepsen, Danish Employers' Confederation, Copenhagen (Denmark).

Mr. L.A. Mazhar, Executive Director, Federation of Egyptian Industries (FEI), Cairo (Egypt).

Mr. T. Ott, Senior Corporate Manager, Environment, Health and Safety, Motorola Labs., Tempe, Arizona (United States).

Mr. S. Tanaka, General Manager, Safety and Health Administration Section, Nissan Motor Co. Ltd., Yokohama City (Japan).

### Experts appointed after consultation with the Workers' group

Dr. D. Bennett, National Director, Health, Safety and Environment, Canadian Labour Congress, Ottawa, Ontario (Canada).

Ms. C. Ching, Director, Economic and Social Policy Department, International Confederation of Free Trade Unions (ICFTU) Asian and Pacific Regional Organization, Singapore (Singapore).

Mr. B. Erikson, Industrial Hygienist, Norwegian Confederation of Trade Unions, Oslo (Norway).

Mr. P. Goguet-Chapuis, Technical Adviser in Health, Safety and Working Conditions (HSWC) and responsible for trade union training in HSWC, Trade Union Training Institute of the French Confederation of Christian Workers (CFTC), Paris (France).

Mr. T. Mellish, Trades Union Congress, London (United Kingdom).

Ms. F. Murie, Director of Occupational Health and Safety, International Federation of Building and Woodworkers (IFBWW), Carouge (Switzerland).

Ms. R. Rigotto, Professor, Federal University of Ceará (UFC), Fortaleza, Ceará (Brazil).

### International governmental and non-governmental organizations represented

World Health Organization (WHO)

(Dr. D. Nelson, Occupational and Environmental Health Unit)

European Union

(Mr. D.R. Carruthers, DG Employment and Social Affairs, European Commission)

World Confederation of Labour (WCL)

(Ms. B. Fauchère, Permanent Representative)

International Confederation of Free Trade Unions (ICFTU)

(Mr. D. Cunniah, Director, ICFTU Geneva)

(Ms. A. Biondi, Assistant Director, ICFTU Geneva)

International Organisation of Employers (IOE)

(Ms. B. Perkins, Assistant to the Secretary General)

International Social Security Association (ISSA)

(Mr. R. David, Representative)

International Commission on Occupational Health (ICOH)

(Professor Alain Cantineau, Representative)

(Ms. J. Fanchette, Representative)

International Occupational Hygiene Association (IOHA)

(Mr. H.G.E. Wilson, Representative)

International Metalworkers' Federation (IMF)

(Mr. L. Powell, Director of Occupational Health and Safety)

International Council of Nurses (ICN)

(Dr. M. Kingma, Representative)

International Construction Institute (ICI) and International Commission on Occupational Safety and Health (ICOSH)

(Dr. B. Goelzer, Representative)

American Industrial Hygiene Association (AIHA)

(Dr. C. Redinger, Representative)

(Dr. Z. Mansdorf, Representative)

Occupational Safety and Health Administration (OSHA), US Department of Labor

(Mr. Z. Bagdy, Deputy Director of Federal State)

Institution of Occupational Safety and Health (OSH), United Kingdom

(Mr. I. Waldram, Representative)

Korea Occupational Safety and Health Agency (KOSHA)

(Mr. B.-N. Choi, Representative)

International High College of Experts (IHCE)

(Ms. M.J. Canizarès, Representative)

#### [ILO secretariat](#)

Dr. J. Takala, Director, SafeWork – InFocus Programme on Safety and Health at Work and the Environment.

Dr. J. Serbitzer, Coordinator, Occupational Safety Cluster, SafeWork – InFocus Programme on Safety and Health at Work and the Environment.

Mr. S. Machida, Chemical Safety Engineer, Occupational Safety Cluster, SafeWork – InFocus Programme on Safety and Health at Work and the Environment.

Mr. P. Baichoo, Technical Specialist, Occupational Safety Cluster, SafeWork – InFocus Programme on Safety and Health at Work and the Environment.

Ms. Johanna Boixader, Administrative Coordinator, SafeWork – InFocus Programme on Safety and Health at Work and the Environment.

Dr. N. Byrom, ILO Consultant, H. M. Principal Inspector, Health and Safety Executive, Bootle, United Kingdom.



---

## **The International Labour Organization**

The *International Labour Organization* was founded in 1919 to promote social justice and, thereby, to contribute to universal and lasting peace. Its tripartite structure is unique among agencies affiliated to the United Nations; the ILO's Governing Body includes representatives of government and of employers' and workers' organizations. These three constituencies are active participants in regional and other meetings sponsored by the ILO, as well as in the International Labour Conference – a world forum which meets annually to discuss social and labour questions.

Over the years, the ILO has issued for adoption by member States a widely respected code of international labour Conventions and Recommendations on freedom of association, employment, social policy, conditions of work, social security, industrial relations and labour administration, among others.

The ILO provides expert advice and technical assistance to member States through a network of offices and multidisciplinary teams in over 40 countries. This assistance takes the form of labour rights and industrial relations counselling, employment promotion, training in small business development, project management, advice on social security, workplace safety and working conditions, the compiling and dissemination of labour statistics, and workers' education.

### **ILO Publications**

The *International Labour Office* is the Organization's secretariat, research body and publishing house. The *Publications Bureau* produces and distributes material on major social and economic trends. It publishes policy studies on issues affecting labour around the world, reference works, technical guides, research-based books and monographs, codes of practice on safety and health prepared by experts, and training and workers' education manuals. It also produces the *International Labour Review* in English, French and Spanish, which publishes the results of original research, perspectives on emerging issues, and book reviews.

You may purchase ILO publications and other resources securely online at <http://www.ilo.org/publns>; or request a free catalogue by writing to the Publications Bureau, International Labour Office, CH-1211 Geneva 22, Switzerland; fax (41 22) 799 6938; email: [pubvente@ilo.org](mailto:pubvente@ilo.org).

---

## *Guidelines on occupational safety and health management systems*

### *ILO-OSH 2001*

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, preferably supported by national laws and regulations. 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.

Employers and competent national institutions are accountable for and have a duty to organize measures designed to ensure occupational safety and health. The implementation of these ILO *Guidelines* is one useful approach to fulfilling this responsibility.