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Occupational health and safety management systems — Requirements with guidance for use

Systèmes de management de la santé et de la sécurité au travail — Exigences et lignes directrices pour son utilisation

ICS: 13.100

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Project Committee ISO/PC 283, *Occupational health and safety management systems*.

NOTE TO THIS DRAFT (which will not be included in the published International Standard):

This text has been prepared using the “high-level structure” (i.e. clause sequence, common text and terminology) provided in Annex SL, Appendix 2 of the ISO/IEC Directives, Part 1, Consolidated ISO Supplement, 2014. This is intended to enhance alignment among ISO's management system standards, and to facilitate their implementation for organizations that need to meet the requirements of two or more such standards simultaneously.

The text of Annex SL is highlighted in the main body of the text (clauses 1 to 10) by the use of **blue font**. This is only to facilitate analysis and will not be incorporated in the final version of ISO 45001.

This new harmonized approach allows for the addition of discipline-specific (in this case OH&S specific) text which has been applied by including the following:

- a) specific OH&S management system requirements considered essential to meet the scope of the ISO 45001 standard;
- b) requirements and notes to clarify and ensure consistent interpretation and implementation of the common text in the context of an OH&S management system.

Where text from Annex SL has not been applied, this is indicated in **blue font with strikeout**.

Introduction

0.1 Background

An organization is responsible for the health and safety of workers and others who may be affected by its activities, including promoting and protecting their physical, psychological and mental health.

The adoption of an occupational health and safety (OH&S) management system is intended to enable an organization to improve its OH&S performance to prevent work-related injury and/or ill health to workers and to provide safe and healthy workplaces.

0.2 Aim of an OH&S management system

The purpose of an OH&S management system is to provide a framework for managing OH&S risks. The intended outcomes of the OH&S management system are to prevent injury and/or ill health to workers and to provide safe and healthy workplaces; consequently, it is critically important for the organization to eliminate or minimize OH&S risks by taking effective preventive and protective measures.

When these measures are applied by the organization through its OH&S management system, they improve its OH&S performance. It can be more effective and efficient to take early action to address opportunities for improvement of OH&S performance.

An OH&S management system enables an organization to improve its OH&S performance by implementing the requirements of this document.

An OH&S management system can assist an organization to fulfil its legal requirements and other requirements.

This document, like other International Standards, is not intended to increase or change an organization's legal requirements.

0.3 Success factors

The implementation of an OH&S management system is a strategic and operational decision for an organization. The success of the OH&S management system depends on leadership, commitment and participation from all levels and functions of the organization.

The implementation and sustainability of an OH&S management system, its effectiveness and its ability to achieve its intended outcomes are dependent on a number of key factors which can include:

- a) top management leadership, commitment, responsibilities and accountability;
- b) top management developing, leading and promoting a culture in the organization that supports the intended outcomes of the OH&S management system;
- c) communication;
- d) consultation and participation of workers, and where they exist, workers' representatives;

- 212 e) allocation of the necessary resources to maintain it;
- 213 f) clear OH&S policies, which are compatible with the overall strategic objectives and direction of the
214 organization;
- 215 g) effective process(es) for identification of hazards, control of the OH&S risks and taking advantage of
216 OH&S opportunities;
- 217 h) the continual performance evaluation and monitoring of the OH&S management system to improve
218 OH&S performance;
- 219 i) the integration of the OH&S management system into the organization's business processes;
- 220 j) OH&S objectives that align with the OH&S policies and take into account the organization's hazards,
221 OH&S risks and OH&S opportunities;
- 222 k) compliance with its legal requirements and other requirements.

223 Demonstration of successful implementation of this document can be used by an organization to give
224 assurance to workers and other interested parties that an effective OH&S management system is in
225 place. Adoption of this document, however, will not in itself guarantee optimal prevention of work-
226 related injury and/or ill health to workers and optimal provision of safe and healthy workplaces.

227 The level of detail, the complexity, the extent of documented information, and the resources needed to
228 ensure the success of an organization's OH&S management system will depend on a number of factors,
229 such as:

- 230 — the organization's context (e.g. number of workers, size, geography, culture, social conditions, legal
231 requirements and other requirements);
- 232 — the scope of the organization's OH&S management system;
- 233 — the nature of the organization's activities and the related OH&S risks.

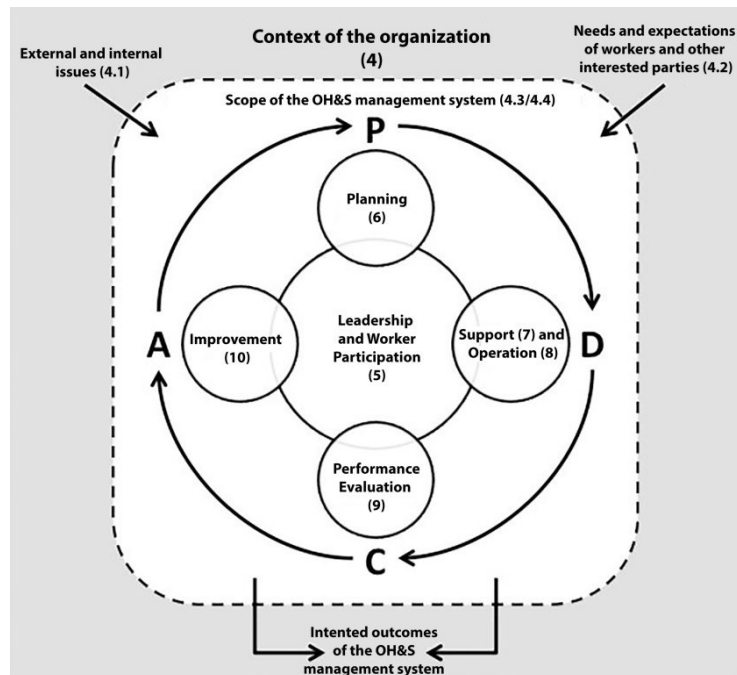
234 **0.4 Plan-Do-Check-Act cycle**

235 The OH&S management system approach applied in this document is founded on the concept of Plan-
236 Do-Check-Act (PDCA).

237 The PDCA concept is an iterative process used by organizations to achieve continual improvement. It
238 can be applied to a management system and to each of its individual elements, as follows:

- 239 — Plan: identify risks and opportunities, establish OH&S objectives and processes necessary to deliver
240 results in accordance with the organization's OH&S policy;
- 241 — Do: implement the processes as planned;
- 242 — Check: monitor and measure activities and processes with regard to the OH&S policy and objectives,
243 and report the results;
- 244 — Act: take actions to continually improve the OH&S performance to achieve the intended outcomes.

245 This document incorporates the PDCA concept into a new framework, as shown in Figure 1.



NOTE The numbers given in brackets refer to the clause numbers in this document

Figure 1 — Relationship between PDCA and the framework in this document

0.5 Contents of this International Standard

This document conforms to ISO's requirements for management system standards. These requirements include a high level structure, identical core text, and common terms with core definitions, designed to benefit users implementing multiple ISO management system standards.

This document does not include requirements specific to other management systems, such as those for quality, social responsibility, environmental, security, or financial management, though its elements can be aligned or integrated with those of other management systems.

This document contains the requirements used to assess conformity. An organization that wishes to demonstrate conformity with this document can do so by:

- making a self-determination and self-declaration, or
- seeking confirmation of its conformance by parties having an interest in the organization, such as customers, or
- seeking confirmation of its self-declaration by a party external to the organization, or
- seeking certification/registration of its OH&S management system by an external organization

Clauses 4 to 10 contain the requirements that can be used to assess conformity with this standard.

Annex A provides informative explanations to assist in the interpretation of those requirements.

In this document, the following verbal forms are used:

267 — “shall” indicates a requirement;

268 — “should” indicates a recommendation;

269 — “may” indicates a permission;

270 — “can” indicates a possibility or a capability.

271 Information marked as "NOTE" is for guidance in understanding or clarifying the associated
272 requirement. “Notes to entry” used in Clause 3 provide additional information that supplements the
273 terminological data and can contain provisions relating to the use of a term.

274 The terms and definitions in Clause 3 are arranged in conceptual order, with an alphabetical index
275 provided at the end of the document.

Occupational health and safety management systems — Requirements with guidance for use

1 Scope

This document specifies requirements for an occupational health and safety (OH&S) management system, with guidance for its use, to enable an organization to provide a safe and healthy workplace(s), by preventing work-related injury and/or ill health, as well as by proactively improving its OH&S performance.

This document is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities.

This document helps an organization achieve the intended outcomes of its OH&S management system. Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include:

- a) continual improvement of OH&S performance;
- b) fulfilment of legal requirements and other requirements;
- c) achievement of OH&S objectives.

This document is applicable to any organization regardless of its size, type and activities and applies to the OH&S risks under the organization's control, taking into account factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties.

This document does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system.

This document enables an organization, through its OH&S management system, to integrate other aspects of health and safety, such as worker wellness/wellbeing.

This document does not address issues such as product safety, property damage or environmental impacts, beyond the risks they provide to workers and other relevant interested parties.

This document can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization's OH&S management system and fulfilled without exclusion.

NOTE For further guidance on the intent of the requirements in this document, see Annex A.

2 Normative references

There are no normative references.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.16)

Note 1 to entry: The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

3.2

interested party (preferred term)

stakeholder (admitted term)

person or *organization* (3.1) that can affect, be affected by, or perceive itself to be affected by a decision or activity

3.3

worker

person performing work or work-related activities that are under the control of the *organization* (3.1)

Note 1 to entry: Persons perform work or work-related activities under various arrangements, paid or unpaid, such as regularly or temporarily, intermittently or seasonally, casually or on a part-time basis.

Note 2 to entry: Workers include *top management* (3.12), managerial and non-managerial persons.

Note 3 to entry: The work or work-related activities performed under the control of the organization may be performed by workers employed by the organization, or other persons, including workers from external providers, contractors, individuals, and agency workers.

3.4

participation

involvement in decision-making

Note 1 to entry: Participation includes engaging health and safety committees and workers' representatives, where they exist.

3.5

consultation

seeking views before making a decision

Note 1 to entry: Consultation includes engaging health and safety committees and workers' representatives, where they exist.

3.6

workplace

place under the control of the *organization* (3.1) where a person needs to be or to go by reason of work

346 Note 1 to entry: The organization's responsibilities under the *OH&S management system* (3.11) for the workplace
 347 depends on the degree of control over the workplace.

348 3.7

349 contractor

350 external *organization* (3.1) providing services to the organization in accordance with agreed
 351 specifications, terms and conditions

352 Note 1 to entry: Services may include construction activities.

353 3.8

354 requirement

355 need or expectation that is stated, generally implied or obligatory

356 Note 1 to entry: "Generally implied" means that it is custom or common practice for the *organization* (3.1) and
 357 *interested parties* (3.2) that the need or expectation under consideration is implied.

358 Note 2 to entry: A specified requirement is one that is stated, for example in *documented information* (3.24).

359 3.9

360 legal requirements and other requirements

361 legal requirements that an *organization* (3.1) has to comply with and other *requirements* (3.8) that an
 362 organization has to or chooses to comply with

363 Note 1 to entry: For the purposes of this document, legal requirements and other requirements are those relevant
 364 to the *OH&S management system* (3.11).

365 Note 2 to entry: Legal requirements and other requirements may include the provisions in collective agreements.

366 Note 3 to entry: Legal requirements and other requirements include those that determine the persons who are
 367 *workers'* (3.3) representatives in accordance with laws, regulations, collective agreements and practice.

368 3.10

369 management system

370 set of interrelated or interacting elements of an *organization* (3.1) to establish *policies* (3.14) and
 371 *objectives* (3.16) and *processes* (3.25) to achieve those *objectives*

372 Note 1 to entry: A management system can address a single discipline or several disciplines.

373 Note 2 to entry: The system elements include the *organization's* structure, roles and responsibilities, planning,
 374 ~~and~~ operation, performance evaluation and improvement.

375 Note 3 to entry: The scope of a management system may include the whole of the *organization*, specific and
 376 identified functions of the *organization*, specific and identified sections of the *organization*, or one or more
 377 functions across a group of *organizations*.

378 3.11

379 occupational health and safety management system

380 OH&S management system

381 *management system* (3.10) or part of a *management system* used to achieve the *OH&S policy* (3.15).

382 Note 1 to entry: The intended outcomes of the *OH&S management system* are to prevent *injury and/or ill health*
 383 (3.18) to *workers* (3.3) and to provide safe and healthy *workplace(s)* (3.6).

384 Note 2 to entry: The terms “occupational health and safety” (OH&S) and “occupational safety and health” (OSH)
 385 have the same meaning.

386 3.12

387 top management

388 person or group of people who directs and controls an *organization* (3.1) at the highest level

389 Note 1 to entry: *Top management* has the power to delegate authority and provide resources within the
 390 *organization* provided ultimate responsibility for the *OH&S management system* (3.11) is retained.

391 Note 2 to entry: If the scope of the *management system* (3.10) covers only part of an *organization*, then *top*
 392 *management* refers to those who direct and control that part of the *organization*.

393 3.13

394 effectiveness

395 extent to which planned activities are realized and planned results achieved

396 3.14

397 policy

398 intentions and direction of an *organization* (3.1), as formally expressed by its *top management* (3.12)

399 3.15

400 occupational health and safety policy

401 OH&S policy

402 *policy* (3.14) to prevent work-related *injury and/or ill health* (3.18) to *worker(s)* (3.3) and to provide a
 403 safe and healthy *workplace(s)* (3.6)

404 3.16

405 objective

406 result to be achieved

407 Note 1 to entry: An objective can be strategic, tactical, or operational.

408 Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and
 409 environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and
 410 *process* (3.25)).

411 Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an
 412 operational criterion, as an *OH&S objective* (3.17), or by the use of other words with similar meaning (e.g. aim,
 413 goal, or target).

414 ~~Note 4 to entry: In the context of XXX management systems, XXX objectives are set by the organization, consistent~~
 415 ~~with the XXX policy, to achieve specific results.~~

416 3.17

417 occupational health and safety objective

418 OH&S objective

419 *objective* (3.16) set by the *organization* (3.1) to achieve specific results consistent with the *OH&S policy*
 420 (3.15)

421 3.18

422 injury and/or ill health

423 adverse effect on the physical, mental or cognitive condition of a person

424 Note 1 to entry: These adverse effects include occupational disease, illness and death.

3.19**hazard**

source with a potential to cause *injury and/or ill health* (3.18)

Note 1 to entry: Hazards can include sources with the potential to cause harm, hazardous situations and circumstances with the potential for exposure leading to injury or ill-health.

3.20**risk**

effect of uncertainty

Note 1 to entry: An effect is a deviation from the expected — positive or negative.

Note 2 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

Note 3 to entry: Risk is often characterized by reference to potential "events" (as defined in ISO Guide 73:2009, 3.5.1.3) and "consequences" (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated "likelihood" (as defined in ISO Guide 73:2009, 3.6.1.1) of occurrence.

Note 5 to entry: In this document, where the terms risks and opportunities are used together this means OH&S risks, OH&S opportunities and other risks and opportunities to the management system

3.21**occupational health and safety risk****OH&S risk**

combination of the likelihood of occurrence of a work-related hazardous event or exposure(s) and the severity of *injury and/or ill health* (3.18) that can be caused by the event or exposure(s)

3.22**occupational health and safety opportunity****OH&S opportunity**

circumstance or set of circumstances that can lead to improvement of *OH&S performance* (3.28)

3.23**competence**

ability to apply knowledge and skills to achieve intended results

3.24**documented information**

information required to be controlled and maintained by an *organization* (3.1) and the medium on which it is contained

Note 1 to entry: Documented information can be in any format and media, and from any source.

Note 2 to entry: Documented information can refer to:

- a) the *management system* (3.10), including related *processes* (3.25);
- b) information created in order for the organization to operate (documentation);
- c) evidence of results achieved (records).

3.25**process**

set of interrelated or interacting activities which transforms inputs into outputs

3.26**procedure**

specified way to carry out an activity or a *process* (3.25)

Note 1 to entry: Procedures may be documented or not.

3.27**performance**

measurable result

Note 1 to entry: Performance can relate either to quantitative or qualitative findings. Results can be determined and evaluated by qualitative or quantitative methods.

Note 2 to entry: Performance can relate to the management of activities, *processes* (3.25), products (including services), systems or *organizations* (3.1).

3.28**occupational health and safety performance****OH&S performance**

performance (3.27) related to the *effectiveness* (3.13) of the prevention of *injury and/or ill health* (3.18) to *workers* (3.3) and the provision of safe and healthy *workplace(s)* (3.6)

3.29**outsource (verb)**

make an arrangement where an external *organization* (3.1) performs part of an organization's function or *process* (3.25)

Note 1 to entry: An external *organization* is outside the scope of the *management system* (3.10), although the outsourced function or *process* is within the scope.

Note 2 to entry: An outsourced process is considered a voluntary binding legal arrangement where an external organization performs part of the organization's function or process that is not performed by the organization itself.

3.30**monitoring**

determining the status of a system, a *process* (3.25) or an activity

Note 1 to entry: To determine the status, there may be a need to check, supervise or critically observe.

3.31**measurement**

process (3.25) to determine a value

3.32**audit**

systematic, independent and documented *process* (3.25) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Note 1 to entry: An audit can be an internal audit (first party) or an external audit (second party or third party), and it can be a combined audit (combining two or more disciplines).

504 Note 2 to entry: An internal audit is conducted by the organization (3.1) itself, or by an external party on its
505 behalf.

506 Note 3 to entry: “Audit evidence and “audit criteria” are defined in ISO 19011.

507 **3.33**
508 **conformity**
509 fulfilment of a *requirement* (3.8)

510 **3.34**
511 **nonconformity**
512 non-fulfilment of a *requirement* (3.8)

513 Note 1 to entry: Nonconformity relates to *requirements* in this document and additional *OH&S management*
514 *system* (3.11) *requirements* that an *organization* (3.1) establishes for itself.

515 **3.35**
516 **incident**
517 occurrence(s) arising out of, or in the course of, work that could or does result in *injury and/or ill health*
518 (3.18)

519 Note 1 to entry: An incident where injury and/or ill health occurs is referred to by some as an “accident.”

520 Note 2 to entry: An incident where no injury and/or ill health occurs but has the potential to do so may be
521 referred to as a “near-miss”, “near-hit”, “close call”.

522 Note 3 to entry: Although there can be one or more *nonconformities* (3.34) related to an incident, an incident
523 can also occur where there is no *nonconformity*.

524 **3.36**
525 **corrective action**
526 action to eliminate the cause(s) of a *nonconformity* (3.34) or an *incident* (3.35) and to prevent
527 recurrence

528 **3.37**
529 **continual improvement**
530 recurring activity to enhance *performance* (3.27)

531 Note 1 to entry: Enhancing *performance* relates to the use of the *OH&S management system* (3.11) in order to
532 achieve improvement in overall *OH&S performance* (3.28) consistent with the *OH&S policy* (3.15) and *OH&S*
533 *objectives* (3.17).

534 Note 2 to entry: Continual does not mean continuous so the activity does not need to take place in all areas
535 simultaneously.

536 **4 Context of the organization**

537 **4.1 Understanding the organization and its context**

538 The organization shall determine external and internal issues that are relevant to its purpose and that
539 affect its ability to achieve the intended outcome(s) of its OH&S management system.

540 **4.2 Understanding the needs and expectations of workers and other interested parties**

541 The organization shall determine:

- a) the other interested parties, in addition to workers, that are relevant to the OH&S management system;
- b) the relevant needs and expectations (i.e. requirements) of workers and other these interested parties;
- c) which of these needs and expectations are or could become legal requirements and other requirements.

4.3 Determining the scope of the OH&S management system

The organization shall determine the boundaries and applicability of the OH&S management system to establish its scope.

When determining this scope, the organization shall consider:

- a) consider the external and internal issues referred to in 4.1;
- b) take into account the requirements referred to in 4.2;
- c) take into account the planned or performed work related activities.

The OH&S management system shall include the activities, products and services within the organization's control or influence that can impact the organization's OH&S performance.

The scope shall be available as documented information.

4.4 OH&S management system

The organization shall establish, implement, maintain and continually improve an OH&S management system, including the processes needed and their interactions, in accordance with the requirements of this International Standard document.

5 Leadership and worker participation

5.1 Leadership and commitment

Top management shall demonstrate leadership and commitment with respect to the OH&S management system by:

- a) taking overall responsibility and accountability for the prevention of work-related injury and/or ill health as well as the provision of a safe and healthy workplace(s) and activities;
- b) ensuring that the OH&S policy and related OH&S objectives are established and are compatible with the strategic direction of the organization;
- c) ensuring the integration of the OH&S management system requirements into the organization's business processes;
- d) ensuring that the resources needed for to establish, implement, maintain and improve the OH&S management system are available;
- e) communicating the importance of effective OH&S management and of conforming to the OH&S management system requirements;

- 576 f) ensuring that the OH&S management system achieves its intended outcomes(s);
- 577 g) directing and supporting persons to contribute to the effectiveness of the OH&S management
578 system;
- 579 h) ensuring and promoting continual improvement;
- 580 i) supporting other relevant management roles to demonstrate their leadership as it applies to their
581 areas of responsibility;
- 582 j) developing, leading and promoting a culture in the organization that supports the intended
583 outcomes of the OH&S management system;
- 584 k) protecting workers from reprisals when reporting incidents, hazards, risks and opportunities;
- 585 l) ensuring the organization establishes and implements a process(es) for consultation and
586 participation of workers (see 5.4);
- 587 m) considering the need to establish health and safety committees, together with providing support for
588 their functioning.

589 NOTE Reference to “business” in this ~~International Standard~~ document can be interpreted broadly to mean
590 those activities that are core to the purposes of the organization’s existence.

591 5.2 OH&S policy

592 Top management shall establish, implement and maintain an OH&S policy that:

- 593 a) includes a commitment to provide safe and healthy working conditions for the prevention of work-
594 related injury and/or ill health and is appropriate to the purpose, the size and context of the
595 organization and to the specific nature of its OH&S risks and OH&S opportunities;
- 596 b) provides a framework for setting the OH&S objectives;
- 597 c) includes a commitment to ~~satisfy applicable~~ fulfil legal requirements and other requirements;
- 598 d) includes a commitment to eliminate hazards and reduce OH&S risks (see 8.1.2);
- 599 e) includes a commitment to continual improvement of the OH&S management system;
- 600 f) includes a commitment to consultation and participation of workers, and where they exist,
601 workers’ representatives.

602 The OH&S policy shall:

- 603 — be available as documented information;
- 604 — be communicated within the organization;
- 605 — be available to interested parties, as appropriate;
- 606 — be relevant and appropriate.

5.3 Organizational roles, responsibilities and authorities

Top management shall ensure that the responsibilities and authorities for relevant roles within the OH&S management system are assigned and communicated at all levels within the organization and maintained as documented information. Workers at each level of the organization shall assume responsibility for those aspects of OH&S management system over which they have control.

NOTE While responsibility and authority can be assigned, ultimately, top management is still accountable for the functioning of the OH&S management system.

Top management shall assign the responsibility and authority for:

- a) ensuring that the OH&S management system conforms to the requirements of this International Standard document;
- b) reporting on the performance of the OH&S management system to top management.

5.4 Consultation and participation of workers

The organization shall establish, implement and maintain a process(es) for consultation and participation of workers at all applicable levels and functions, and where they exist, workers' representatives in the development, planning, implementation, performance evaluation and actions for improvement of the OH&S management system.

The organization shall:

- a) provide mechanisms, time, training and resources necessary for consultation and participation;

NOTE 1 Worker representation can be a mechanism for consultation and participation.

- b) provide timely access to clear, understandable and relevant information about the OH&S management system;
- c) determine and remove obstacles or barriers to participation and minimize those that cannot be removed;

NOTE 2 Obstacles and barriers can include failure to respond to worker inputs or suggestions, language or literacy barriers, reprisals or threats of reprisals and policies or practices that discourage or penalize worker participation.

- d) emphasize the consultation of non-managerial workers, in the following:

- 1) determining the needs and expectations of interested parties (see 4.2);
- 2) establishing the OH&S policy (see 5.2);
- 3) assigning organizational roles, responsibilities and authorities as applicable (see 5.3);
- 4) determining how to fulfil legal requirements and other requirements (see 6.1.3);
- 5) establishing OH&S objectives and planning to achieve them (see 6.2);
- 6) determining applicable controls for outsourcing, procurement and contractors (see 8.1.4, 8.1.5, and 8.1.6);
- 7) determining what needs to be monitored, measured and evaluated (see 9.1.1);

- 8) planning, establishing, implementing and maintaining an audit programme(s) (see 9.2.2);
- 9) establishing a continual improvement process(es) (see 10.2.2);
- e) emphasize the participation of non-managerial workers in the following:
 - 1) determining the mechanisms for their consultation and participation;
 - 2) hazard identification and assessment of risks and opportunities (see 6.1.1, and 6.1.2);
 - 3) actions to eliminate hazards and reduce OH&S risks (see 6.1.4);
 - 4) identification of competency requirements, training needs, training and evaluation of training (see 7.2);
 - 5) determining what needs to be communicated and how this shall be done (see 7.4);
 - 6) determining control measures and their effective implementation and use (see 8.1, 8.1.3, and 8.2);
 - 7) investigating incidents and nonconformities and determining corrective actions (see 10.1).

NOTE 3 This reference to emphasize the consultation and participation of non-managerial workers is intended to apply to persons carrying out the work activities, but is not intended to exclude, for example, managers who are impacted by work activities or other factors in the organization.

NOTE 4 It is recognised that the provision of training at no cost to workers and the provision of training during working hours, where possible, can remove significant barriers to worker participation.

6 Planning

6.1 Actions to address risks and opportunities

6.1.1 General

When planning for the OH&S management system, the organization shall consider the issues referred to in 4.1 (context), the requirements referred to in 4.2 (interested parties) and 4.3 (the scope of its OH&S management system) and determine the risks and opportunities that need to be addressed to:

- a) give assurance that the OH&S management system can achieve its intended outcome(s);
- b) prevent, or reduce, undesired effects;
- c) achieve continual improvement.

~~The organization shall plan:~~

~~—actions to address these risks and opportunities;~~

~~—how to:~~

- ~~1) integrate and implement the actions in its OH&S management system processes;~~
- ~~2) evaluate the effectiveness of these actions.~~

673 [Drafting note: this text has been moved to 6.1.4.]

674 In addressing “risks and opportunities”, the organization shall take into account OH&S risks, OH&S
675 opportunities and other risks and opportunities to the OH&S management system.

676 When determining the risks and opportunities that need to be addressed, the organization shall take
677 into account:

678 — hazards, risks and opportunities;

679 — legal requirements and other requirements (see 6.1.3);

680 — risks (see 6.1.2.2) and opportunities (see 6.1.2.3) related to the operation of the OH&S management
681 system that can affect the achievement of the intended outcomes.

682 The organization, in its planning process(es), shall assess the risks and determine the opportunities that
683 are relevant to the intended outcome of the OH&S management system associated with changes in the
684 organization, its processes, or the OH&S management system. In the case of planned changes,
685 permanent or temporary, this assessment shall be undertaken before the change is implemented (see
686 8.1.3).

687 The organization shall maintain documented information on: OH&S risks and opportunities; the
688 process(es) and actions needed to determine and address its risks and opportunities (see 6.1.2 to 6.1.4),
689 to the extent necessary to have confidence that they are carried out as planned.

690 **6.1.2 Hazard identification and assessment of risks and opportunities**

691 **6.1.2.1 Hazard identification**

692 The organization shall establish, implement and maintain a process(es) for hazard identification that is
693 on-going and proactive. The process(es) shall take into account but not be limited to:

694 a) past relevant incidents, internal or external to the organization, including emergencies, and their
695 causes;

696 b) how work is organized, social factors (including workload, work hours, victimization, harassment
697 and bullying), leadership and the culture in the organization;

698 c) routine and non-routine activities and situations, including consideration of:

699 1) infrastructure, equipment, materials, substances and the physical conditions of the workplace;

700 2) product and service design, research, development, testing, production, assembly, construction,
701 service delivery, maintenance or disposal;

702 3) human factors;

703 4) how the work is actually done;

704 d) emergency situations;

705 e) people, including consideration of:

- 1) those with access to the workplace and their activities, including workers, contractors, visitors and other persons;
- 2) those in the vicinity of the workplace who can be affected by the activities of the organization;
- 3) workers at a location not under the direct control of the organization;
- f) other issues, including consideration of:
 - 1) the design of work areas, processes, installations, machinery/equipment, operating procedures and work organization, including their adaptation to the needs and capabilities of the workers involved;
 - 2) situations occurring in the vicinity of the workplace caused by work-related activities under the control of the organization;
 - 3) situations not controlled by the organization and occurring in the vicinity of the workplace that can cause injury and/or ill health to persons in the workplace;
- e) actual or proposed changes in the organization, its operations, processes, activities and OH&S management system (see 8.1.3);
- f) changes in knowledge of, and information about, hazards.

6.1.2.2 Assessment of OH&S risks and other risks to the OH&S management system

The organization shall establish, implement and maintain a process(es) to:

- a) assess OH&S risks from the identified hazards, while taking into account legal requirements and other requirements and the effectiveness of existing controls;
- b) identify and assess the risks related to the establishment, implementation, operation and maintenance of the OH&S management system that can occur from the issues identified in 4.1 and the needs and expectations identified in 4.2.

The organization's methodology(ies) and criteria for the assessment of OH&S risks shall be defined with respect to their scope, nature and timing, to ensure they are proactive rather than reactive and are used in a systematic way. Documented information shall be maintained and retained on the methodology(ies) and criteria.

6.1.2.3 Assessment of OH&S opportunities and other opportunities

The organization shall establish, implement and maintain a process(es) to assess:

- a) opportunities to enhance OH&S performance, while taking into account:
 - 1) opportunities to adapt work, work organization and work environment to workers;
 - 2) opportunities to eliminate hazards and reduce OH&S risks;
 - 3) planned changes to the organization, its policies, processes or its activities;
- b) opportunities for improving the OH&S management system.

739 NOTE OH&S risks and opportunities can result in risks and opportunities to the organization.

740 6.1.3 Determination of legal requirements and other requirements

741 The organization shall establish, implement and maintain a process(es) to:

- 742 a) determine and have access to up-to-date legal requirements and other requirements that are
743 applicable to its hazards, OH&S risks and OH&S management system;
- 744 b) determine how these legal requirements and other requirements apply to the organization and
745 what needs to be communicated;
- 746 c) take these legal requirements and other requirements into account when establishing,
747 implementing, maintaining and continually improving its OH&S management system.

748 The organization shall maintain and retain documented information on its legal requirements and other
749 requirements and shall ensure that it is updated to reflect any changes.

750 NOTE Legal requirements and other requirements can result in risks and opportunities to the organization.

751 6.1.4 Planning action

752 The organization shall plan:

753 a) actions to:

- 754 1) address these risks and opportunities (see 6.1.2.2 and 6.1.2.3);
- 755 2) address legal requirements and other requirements (see 6.1.3);
- 756 3) prepare for and respond to emergency situations (see 8.2);

757 b) how to:

- 758 1) integrate and implement the actions into its OH&S management system processes or other
759 business processes;
- 760 2) evaluate the effectiveness of these actions.

761 The organization shall take into account the hierarchy of controls (see 8.1.2) and outputs from the
762 OH&S management system when planning to take action.

763 When planning its actions, the organization shall consider best practices, technological options,
764 financial, operational and business requirements.

765 6.2 OH&S objectives and planning to achieve them

766 6.2.1 OH&S objectives

767 The organization shall establish OH&S objectives at relevant functions and levels in order to maintain
768 and improve the OH&S management system and to achieve continual improvement in OH&S
769 performance (see 10.2):

770 The OH&S objectives shall:

- 771 a) be consistent with the OH&S policy;
- 772 b) be measurable (if practicable) or capable of performance evaluation;
- 773 c) take into account ~~applicable~~ legal requirements and other requirements;
- 774 d) take into account the results of the assessment of risks and opportunities (see 6.1.2.2 and 6.1.2.3);
- 775 e) take into account the result of consultation with workers (see 5.4), and where they exist, workers'
- 776 representatives;
- 777 f) be monitored;
- 778 g) be communicated;
- 779 h) be updated as appropriate.

780 ~~The organization shall retain documented information on the XXX objectives.~~ [Drafting note: this text
781 has been moved to the end of 6.2.2]

782 6.2.2 Planning to achieve OH&S objectives

783 When planning how to achieve its OH&S objectives, the organization shall determine:

- 784 a) what will be done;
- 785 b) what resources will be required;
- 786 c) who will be responsible;
- 787 d) when it will be completed;
- 788 e) how the results will be evaluated, including indicators for monitoring progress toward
- 789 achievement of its measurable OH&S objectives;
- 790 f) how the actions to achieve OH&S objectives will be integrated into the organization's business
- 791 processes.

792 The organization shall maintain and retain documented information on the OH&S objectives and plans
793 to achieve them.

794 7 Support

795 7.1 Resources

796 The organization shall determine and provide the resources needed for the establishment,
797 implementation, maintenance and continual improvement of the OH&S management system.

798 7.2 Competence

799 The organization shall:

- 800 a) determine the necessary competence of ~~person(s) doing work under its control~~ workers that
801 affects or can affect its OH&S performance;

b) ensure that ~~these~~ workers ~~persons~~ are competent (including the ability to identify hazards) on the basis of appropriate education, training, or experience;

c) where applicable, take actions to acquire and maintain the necessary competence, and evaluate the effectiveness of the actions taken;

d) retain appropriate documented information as evidence of competence.

NOTE Applicable actions can include, for example: the provision of training to, the mentoring of, or the re-assignment of currently employed persons; or the hiring or contracting of competent persons.

7.3 Awareness

Workers ~~Persons doing work under the organization's control~~ shall be made aware of:

a) the OH&S policy and OH&S objectives;

b) their contribution to the effectiveness of the OH&S management system, including the benefits of improved OH&S performance;

c) the implications and potential consequences of not conforming with the OH&S management system requirements;

d) incidents, and the outcomes of their investigation, that are relevant to them;

e) hazards, OH&S risks and actions determined, that are relevant to them;

f) arrangements providing workers the ability to remove themselves from work situations that they believe present an imminent and serious danger to their life or health, as well as protecting them from undue consequences for doing so.

7.4 Communication

7.4.1 General

The organization shall ~~determine~~ establish, implement and maintain the process(es) needed for the internal and external communications relevant to the OH&S management system, including determining:

a) on what it will communicate;

b) when to communicate;

c) with whom to communicate:

1) internally among the various levels and functions of the organization;

2) among contractors and visitors to the workplace;

3) among other interested parties;

d) how to communicate.

833 The organization shall take into account diversity aspects (for example gender, language, culture,
834 literacy, disability), when considering its communication needs.

835 The organization shall ensure that the views of external interested parties are considered in
836 establishing its communication process(es).

837 When establishing its communication process(es), the organisation shall:

838 — take into account its legal requirements and other requirements;

839 — ensure that OH&S information to be communicated is consistent with information generated within
840 the OH&S management system, and is reliable.

841 The organization shall respond to relevant communications on its OH&S management system.

842 The organization shall retain documented information as evidence of its communications, as
843 appropriate.

844 **7.4.2 Internal communication**

845 The organization shall:

846 a) internally communicate information relevant to the OH&S management system among the various
847 levels and functions of the organisation, including changes to the OH&S management system, as
848 appropriate;

849 b) ensure its communication process(es) enables workers to contribute to continual improvement.

850 **7.4.3 External communication**

851 The organization shall externally communicate information relevant to the OH&S management system,
852 as established by the organization's communication process(es) and as required by its legal
853 requirements and other requirements.

854 **7.5 Documented information**

855 **7.5.1 General**

856 The organization's OH&S management system shall include:

857 a) documented information required by this ~~International Standard~~ document;

858 b) documented information determined by the organization as being necessary for the effectiveness of
859 the OH&S management system;

860 c) documented information required by legal requirements and other requirements.

861 **NOTE** The extent of documented information for an OH&S management system can differ from one
862 organization to another due to:

863 — the size of organization and its type of activities, processes, products and services;

864 — the need to demonstrate fulfilment of legal requirements and other requirements;

- the complexity of processes and their interactions;
- the competence of ~~persons~~ workers.

7.5.2 Creating and updating

When creating and updating documented information the organization shall ensure appropriate:

- a) identification and description (e.g. a title, date, author, or reference number);
- b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- c) review and approval for suitability and adequacy.

7.5.3 Control of documented information

Documented information required by the OH&S management system and by this ~~International Standard~~ document shall be controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, the organization shall address the following activities, as applicable:

- distribution, access, retrieval and use;
- storage and preservation, including preservation of legibility;
- control of changes (e.g. version control);
- retention and disposition.

Documented information of external origin determined by the organization to be necessary for the planning and operation of the OH&S management system shall be identified, as appropriate, and controlled.

NOTE 1 Access can imply a decision regarding the permission to view the documented information only, or the permission and authority to view and change the documented information.

NOTE 2 Access to relevant documented information includes access by workers, and where they exist, workers' representatives.

8 Operation

8.1 Operational planning and control

8.1.1 General

The organization shall plan, implement, ~~and~~ control and maintain the processes needed to meet requirements of the OH&S management system, and to implement the actions determined in ~~6.1~~ Clause 6, by:

- a) establishing criteria for the processes;

- 897 b) implementing control of the processes in accordance with the criteria;
- 898 c) maintaining and retaining ~~keeping~~ documented information to the extent necessary to have
- 899 confidence that the processes have been carried out as planned;
- 900 d) adapting work to workers.

901 ~~The organization shall control planned changes and review the consequences of unintended changes,~~
 902 ~~taking action to mitigate any adverse effects, as necessary. [Drafting note: this text has been moved to~~
 903 ~~8.1.3.]~~

904 ~~The organization shall ensure outsourced processes are controlled. [Drafting note: this text has been~~
 905 ~~moved to 8.1.4.]~~

906 At multi-employer workplaces, the organization shall coordinate the relevant parts of the OH&S
 907 management system with the other organizations.

908 **8.1.2 Eliminating hazards and reducing OH&S risks**

909 The organization shall establish, implement and maintain a process(es) for the elimination of hazards
 910 and reduction of OH&S risks using the following hierarchy of control:

- 911 a) eliminate the hazard;
- 912 b) substitute with less hazardous materials, processes, operations or equipment;
- 913 c) use engineering controls and/or reorganization of work;
- 914 d) use of administrative controls, including training;
- 915 e) use of adequate personal protective equipment.

916 NOTE 1: In many countries, legal requirements and other requirements include the requirement that personal
 917 protective equipment (PPE) is provided at no cost to workers.

918 **8.1.3 Management of change**

919 ~~The organization shall~~ establish a process(es) for the implementation and ~~control~~ of ~~planned~~ temporary
 920 and permanent ~~changes~~ that impact OH&S performance including:

- 921 a) new or changes to products, services and processes, including:
 - 922 — working conditions;
 - 923 — workplace locations and surroundings;
 - 924 — equipment;
 - 925 — work organization;
 - 926 — work force;
- 927 b) changes to legal requirements and other requirements;
- 928 c) changes in knowledge or information about hazards and related OH&S risks;

929 d) developments in knowledge and technology.

930 The organization shall ~~and~~ review the consequences of unintended changes, taking action to mitigate
931 any adverse effects, as necessary.

932 NOTE Changes can result in potential OH&S opportunities.

933 8.1.4 Outsourcing

934 The organization shall ensure that outsourced processes are controlled. The type and degree of control
935 to be applied to these processes shall be defined within the OH&S management system.

936 NOTE Consultation with external providers can assist an organization to address any impact outsourcing has
937 on its OH&S performance.

938 8.1.5 Procurement

939 The organization shall establish, implement and maintain a process(es) to control the procurement of
940 products and services in order to ensure their conformance with its OH&S management system.

941 8.1.6 Contractors

942 The organization shall establish a process(es), in coordination with its contractor(s), for hazard
943 identification and to assess and control the OH&S risks, arising from the:

- 944 a) contractors' activities and operations that impact the organization;
- 945 b) organization's activities and operations that impact contractors' workers;
- 946 c) contractors' activities and operations that impact other interested parties in the workplace.

947 The organization shall establish and maintain a process(es) to ensure that the requirements of the
948 organization's OH&S management system are met by contractors and their workers. This process(es)
949 shall define and apply occupational health and safety criteria for the selection of contractors.

950 NOTE It can be helpful to include the occupational health and safety criteria for the selection of contractors
951 in the contractual documents.

952 8.2 Emergency preparedness and response

953 The organization shall establish, implement and maintain a process(es) needed to prepare for and
954 respond to potential emergency situations, as identified in 6.1.2.1, including:

- 955 a) the establishment of a planned response to emergency situations, including the provision of first
956 aid;
- 957 b) the periodic testing and exercise of planned response capability;
- 958 c) the performance evaluation and, as necessary, revision of the planned response, including after
959 testing and in particular after the occurrence of emergency situations;
- 960 d) the communication and provision of relevant information to all workers on their duties and
961 responsibilities;
- 962 e) the provision of training for the planned response;

- f) the communication of relevant information to contractors, visitors, emergency response services, government authorities and, as appropriate, the local community;
- g) taking into account the needs and capabilities of all relevant interested parties and ensuring their involvement, as appropriate, in the development of the planned response.

The organization shall maintain and retain documented information on the process(es) and on the plans for responding to potential emergency situations.

9 Performance evaluation

9.1 Monitoring, measurement, analysis and performance evaluation

9.1.1 General

The organization shall establish, implement and maintain a process(es) for monitoring, measurement, analysis and performance evaluation.

The organization shall determine:

- a) what needs to be monitored and measured, including:
 - 1) the extent to which legal requirements and other requirements are fulfilled;
 - 2) its activities and operations related to identified hazards, risks and opportunities;
 - 3) progress towards achievement of the organization's OH&S objectives;
 - 4) effectiveness of operational and other controls;
- b) the methods for monitoring, measurement, analysis and performance evaluation, as applicable, to ensure valid results;
- c) the criteria against which the organization will evaluate its OH&S performance;
- d) when the monitoring and measuring shall be performed;
- e) when the results from monitoring and measurement shall be analyzed, and evaluated and communicated.

~~The organization shall retain appropriate documented information as evidence of the results~~ [Drafting note: moved to become the last paragraph in this clause]

The organization shall evaluate the OH&S performance, and determine the effectiveness of the OH&S management system.

The organization shall ensure that monitoring and measurement equipment is calibrated or verified as applicable, and is used and maintained as appropriate.

NOTE There can be legal requirements or other requirements (e.g. national or international standards) concerning the calibration or verification of monitoring and measuring equipment.

The organization shall retain appropriate documented information:

- 997 — as evidence of the results of monitoring, measurement, analysis and performance evaluation;
- 998 — on the maintenance, calibration or verification of measurement of equipment.

999 9.1.2 Evaluation of compliance

1000 The organization shall establish, implement and maintain a process(es) for evaluating compliance with
1001 legal requirements and other requirements (see 6.1.3).

1002 The organization shall:

- 1003 a) determine the frequency and method(s) for the evaluation of compliance; evaluate compliance;
- 1004 b) take action if needed (see 10.1);
- 1005 c) maintain knowledge and understanding of its compliance status with legal requirements and other
1006 requirements;
- 1007 d) retain documented information of the compliance evaluation result(s).

1008 9.2 Internal audit

1009 9.2.1 General

1010 The organization shall conduct internal audits at planned intervals to provide information on whether
1011 the OH&S management system:

- 1012 a) conforms to:
 - 1013 1) the organization's own requirements for its OH&S management system, including the OH&S
1014 policy and OH&S objectives;
 - 1015 2) the requirements of this International Standard document;
- 1016 b) is effectively implemented and maintained.

1017 9.2.2 Internal audit programme

1018 The organization, shall:

- 1019 a) plan, establish, implement and maintain an audit programme(s) including the frequency, methods,
1020 responsibilities, consultation, planning requirements and reporting, which shall take into
1021 consideration the importance of the processes concerned and the results of previous audits.
- 1022 b) define the audit criteria and scope for each audit;
- 1023 c) select competent auditors and conduct audits to ensure objectivity and the impartiality of the audit
1024 process;
- 1025 d) ensure that the results of the audits are reported to relevant management managers; ensure that
1026 relevant audit results are reported to workers, and where they exist, workers' representatives, and
1027 other relevant interested parties;

1028 e) take action to address nonconformities and continually improve its OH&S performance (see Clause
1029 10);

1030 f) retain documented information as evidence of the implementation of the audit programme and the
1031 audit results.

1032 NOTE For more information on auditing, refer to ISO 19011 Guidelines for auditing management systems.

1033 9.3 Management review

1034 Top management shall review the organization's OH&S management system, at planned intervals, to
1035 ensure its continuing suitability, adequacy and effectiveness.

1036 The management review shall include consideration of:

1037 a) the status of actions from previous management reviews;

1038 b) changes in external and internal issues that are relevant to the OH&S management system
1039 including:

1040 1) the needs and expectations of interested parties;

1041 2) legal requirements and other requirements;

1042 3) the organization's risks and opportunities;

1043 c) the extent to which the OH&S policy and the OH&S objectives have been met;

1044 d) information on the OH&S performance, including trends in:

1045 1) incidents, nonconformities, ~~and~~ corrective actions and continual improvement;

1046 2) monitoring and measurement results;

1047 3) results of evaluation of compliance with legal requirements and other requirements;

1048 4) audit results;

1049 5) consultation and participation of workers;

1050 6) risks and opportunities;

1051 e) adequacy of resources for maintaining an effective OH&S management system;

1052 f) relevant communication(s) with interested parties;

1053 g) opportunities for continual improvement.

1054 The outputs of the management review shall include decisions related to:

1055 — continuing suitability, adequacy and effectiveness of the OH&S management system in achieving its
1056 intended outcomes;

1057 — continual improvement opportunities ~~and~~;

- 1059 — any need for changes to the OH&S management system,
- 1060 — resources needed;
- 1061 — actions if needed;
- 1062 — opportunities to improve integration of the OHS management system with other business
- 1063 processes;
- 1064 — any implications for the strategic direction of the organization.

1065 The top management shall communicate the relevant outputs of management reviews to its workers,

1066 and where they exist, workers' representatives (see 7.4.).

1067 The organization shall retain documented information as evidence of the results of management

1068 reviews.

1069 **10 Improvement**

1070 **10.1 General**

1071 The organization shall determine opportunities for improvement (see 9.1, 9.2 and 9.3) and implement

1072 necessary actions to achieve the intended outcomes of its OH&S management system.

1073 **10.2 Incident, nonconformity and corrective action**

1074 The organization shall establish, implement and maintain a process(es), that include(s) reporting,

1075 investigating and taking action, to determine and manage incidents, and nonconformities.

1076 When an incident or a nonconformity occurs, the organization shall:

1077 a) react in a timely manner to the incident or nonconformity, and, as applicable:

1078 1) take action to control and correct it;

1079 2) deal with the consequences;

1080 b) evaluate, with the participation of workers (see 5.4) and the involvement of other relevant

1081 interested parties, the need for corrective action to eliminate the root cause(s) of the incident or

1082 nonconformity, in order that it does not recur or occur elsewhere, by:

1083 1) investigating the incident or reviewing the nonconformity;

1084 2) determining the cause(s) of the incident or nonconformity;

1085 3) determining if similar incidents have occurred, nonconformities exist, or if either could

1086 potentially occur;

1087 c) review existing assessments of OH&S risks and other risks, as appropriate (see 6.1);

1088 d) determine and implement any action needed, including corrective action, in accordance with the

1089 hierarchy of controls (see 8.1.2) and the management of change (see 8.1.3);

1090 e) assess OH&S risks prior to taking action that can result in new or changed hazards;

- 1091
1092 f) review the effectiveness of any action taken, including corrective action taken;
1093 g) make changes to the OH&S management system, if necessary.
- 1094 Corrective actions shall be appropriate to the effects or potential effects of the incidents or
1095 nonconformities encountered.
- 1096 The organization shall retain documented information as evidence of:
- 1097 — the nature of the incidents or nonconformities and any subsequent actions taken;
1098 — the results of any action and corrective action, including their effectiveness.
- 1099 The organization shall communicate this documented information to relevant workers, and where they
1100 exist, workers' representatives, and relevant interested parties.
- 1101 NOTE The reporting and investigation of incidents without undue delay can enable hazards to be
1102 eliminated and associated OH&S risks to be minimized as soon as possible.
- 1103 **10.3 Continual improvement**
- 1104 The organization shall continually improve the suitability, adequacy and effectiveness of the OH&S
1105 management system, by:
- 1106 a) enhancing OH&S performance;
1107
1108 b) promoting a culture that supports an OH&S management system.
1109
1110 c) promoting the participation of workers in implementation of actions for continual improvement of
1111 the OH&S management system.
- 1112 d) communicating the relevant results of continual improvement to workers, and where they exist,
1113 workers' representatives.
- 1114 e) maintaining and retaining documented information as evidence of the results of continual
1115 improvement.

Annex A (informative)

Guidance on the use of this document

A.1 General

The explanatory information given in this annex is intended to prevent misinterpretation of the requirements contained in this document. While this information addresses and is consistent with these requirements, it is not intended to add to, subtract from, or in any way modify them.

The requirements in this document need to be viewed from a systems perspective and should not be taken in isolation, i.e. there can be an interrelationship between the requirements in a clause with the requirements in other clauses.

A.2 Normative references

There are no normative references in this document. Users can refer to the documents listed in the Bibliography for further information.

A.3 Terms and definitions

In addition to the terms and definitions given in Clause 3, and in order to avoid misunderstanding, clarifications of selected concepts are provided below.

- a) "Continual" indicates duration that occurs over a period of time, but with intervals of interruption (unlike "continuous" which indicates duration without interruption). 'Continual' is therefore the appropriate word to use in the context of improvement.
- b) The word "consider" means it is necessary to think about but can be excluded, whereas "take into account" means it is necessary to think about but cannot be excluded.
- c) The words "appropriate" and "applicable" are not interchangeable. "Appropriate" means suitable (for, to) and implies some degree of freedom, while "applicable" means relevant or possible to apply and implies that if it can be done, it shall be done.
- d) This document uses the term "interested party", the term "stakeholder" is a synonym as it represents the same concept.
- e) The word "ensure" means the responsibility can be delegated, but not the accountability to make sure that it is performed.
- f) "Documented information" is used to include both documents and records. This document uses the phrase "retain documented information as evidence of..." to mean records, and 'shall be maintained as documented information' to mean documents, including procedures. The phrase "to retain documented information as evidence of..." is not intended to require that the information retained will meet legal evidentiary requirements. Instead, it is intended to define the type of records that need to be retained.

1151 Organizations can be subject to requirements related to the OH&S management system that mandate
 1152 the use of specific terms and their meaning. If these other terms are used, conformity to this document
 1153 is still required.

1154 **A.4 Context of the organization**

1155 **A.4.1 Understanding the context of the organization**

1156 An understanding of the context of an organization is used to establish, implement, maintain and
 1157 continually improve its OH&S management system. Internal and external issues can be positive or
 1158 negative and include conditions, characteristics or changing circumstances that can affect the OH&S
 1159 management system, for example:

1160 a) external issues, such as:

- 1161 1) the cultural, social, political, legal, financial, technological, economic and natural surroundings
 1162 and market competition, whether international, national, regional or local;
- 1163 2) introduction of new competitors, contractors, subcontractors, suppliers, partners and providers,
 1164 new technologies, new laws and the emergence of new occupations;
- 1165 3) new knowledge on products and organizational modes and their effect on health and safety;
- 1166 4) key drivers and trends relevant to the industry or sector having impact on the organization;
- 1167 5) relationships with, and perceptions and values of, its external interested parties;
- 1168 6) changes in relation to any of the above;

1169 b) internal issues, such as:

- 1170 1) governance, organizational structure, roles and accountabilities;
- 1171 2) policies, objectives and the strategies that are in place to achieve them;
- 1172 3) the capabilities, understood in terms of resources, knowledge and competence (for example
 1173 capital, time, human resources, processes, systems and technologies);
- 1174 4) information systems, information flows and decision-making processes (both formal and
 1175 informal);
- 1176 5) introduction of new products, materials, services, tools, software, premises and equipment;
- 1177 6) relationships with, and perceptions and values of workers;
- 1178 7) the culture in the organization;
- 1179 8) standards, guidelines and models adopted by the organization;
- 1180 9) the form and extent of contractual relationships, including for example outsourced activities;
- 1181 10) working time arrangements;
- 1182 11) working conditions;

12) changes in relation to any of the above.

A.4.2 Understanding the needs and expectations of workers and other interested parties

Interested parties in addition to workers (see 3.3) can include:

- a) legal and regulatory authorities (local, regional, state/provincial, national or international);
- b) parent organizations;
- c) suppliers, contractors and subcontractors;
- d) workers' representatives,
- e) workers' organizations (trade unions) and employers' organizations;
- f) owners, shareholders, clients, visitors, local community and neighbours of the organization and the general public;
- g) customers, medical and other community services, media, academia, business associations and non-governmental organizations (NGOs);
- h) occupational health and safety organizations and occupational safety and health-care professionals.

Some needs and expectations are mandatory, e.g. because they have been incorporated into laws and regulations. The organization may also decide to voluntarily agree to, or adopt, other needs and expectations (e.g. abiding by the collective agreements or subscribing to a voluntary initiative). Once the organization adopts them they are to be addressed when planning and establishing the OH&S management system.

A.4.3 Scope of the OH&S management system

An organization has the freedom and flexibility to define the boundaries and applicability of the OH&S management system. The boundaries and applicability may include the whole organization, or (a) specific part(s) of the organization, as long as the top management of that part of the organization has its own functions, responsibilities and authorities for establishing an OH&S management system.

The credibility of the organization's OH&S management system will depend upon the choice of the boundaries. Scoping should not be used to exclude activities, products and services that have or can impact the organization's OH&S performance, or to evade its legal requirements and other requirements. The scope is a factual and representative statement of the organization's operations included within its OH&S management system boundaries that should not mislead interested parties.

A.4.4 OH&S management system

The organization retains authority, accountability, and autonomy, to decide how it will fulfil the requirements of this document, including the level of detail and extent to which it:

- a) establishes one or more processes to have confidence that it (they) is (are) controlled, carried out as planned and achieve the intended outcomes of the OH&S management system;
- b) integrate requirements of the OH&S management system into its various business processes, such as design and development, procurement, human resources, sales and marketing, etc.

1218 If this document is implemented for a specific part(s) of an organization, the policies and processes
 1219 developed by other parts of the organization can be used to meet the requirements of this document,
 1220 provided that they are applicable to the specific part(s) that will be subject to them and that they
 1221 comply with the requirements of this document. Examples of these could be corporate OH&S policies,
 1222 education, training and competency programmes, procurement controls etc.

1223 **A.5 Leadership and worker participation**

1224 **A.5.1 Leadership and commitment**

1225 Leadership and commitment, including awareness, responsiveness, active support and feedback, from
 1226 the organization's top management, are critical for the success of the OH&S management system and
 1227 achievement of its intended outcomes; therefore, top management has specific responsibilities for
 1228 which they need to be personally involved or which they need to direct.

1229 A culture that supports an organization's OH&S management system is largely determined by top
 1230 management and is the product of individual and group values, attitudes, managerial practices,
 1231 perceptions, competencies and patterns of activities that determine the commitment to, and the style
 1232 and proficiency of, its OH&S management system. It is characterized by, but not limited to, active
 1233 participation of workers, cooperation and communications founded on mutual trust, shared
 1234 perceptions of the importance of the OH&S management system by active involvement in detection of
 1235 OH&S opportunities and confidence in the effectiveness of preventive and protective measures. An
 1236 important way top management demonstrates leadership, is by encouraging workers to report
 1237 incidents, hazards, risks and opportunities and by protecting workers against reprisals such as threat of
 1238 dismissal or disciplinary action, when they do so.

1239 **A.5.2 OH&S policy**

1240 The OH&S policy is a set of principles stated as commitments in which top management outlines the
 1241 long-term direction of the organization to support and continually improve its OH&S performance. The
 1242 OH&S policy provides an overall sense of direction, provides a framework for the organization to set its
 1243 objectives and take actions to achieve the intended outcomes of the OH&S management system.

1244 These commitments are then reflected in the processes an organization establishes to ensure a robust,
 1245 credible and reliable OH&S management system (including addressing the specific requirements in this
 1246 document).

1247 In developing its OH&S policy, an organization should consider its consistency and coordination with
 1248 other policies.

1249 **A.5.3 Organizational roles, responsibilities and authorities**

1250 Those involved in the organization's OH&S management system should have a clear understanding of
 1251 their role, responsibility(ies) and authority(ies) for achieving the intended outcomes of the OH&S
 1252 management system.

1253 While top management has overall responsibility and authority for the OH&S management system,
 1254 every person in the workplace needs to take account not only of their own health and safety, but also
 1255 the health and safety of others.

1256 Top management being accountable, means being answerable for decisions and activities to the
 1257 organization's governing bodies, legal authorities and, more broadly, its stakeholders. It means having

1258 ultimate responsibility and relates to the person who is held to account if something is not done, is not
 1259 done properly, does not work or fails to achieve its objective.

1260 Workers should be entitled to report about hazardous situations so that action can be taken. They
 1261 should be able to report concerns to responsible authorities as required without the threat of dismissal,
 1262 disciplinary action or other such reprisals.

1263 The specific roles and responsibilities identified in 5.3 may be assigned to an individual, shared by
 1264 several individuals, or assigned to a member of top management.

1265 **A.5.4 Consultation and participation of workers**

1266 The consultation and participation of workers, and where they exist, workers' representatives, can be
 1267 key factors of success for an OH&S management system and should be encouraged through the
 1268 processes established by the organization.

1269 The process of consultation (see 3.5) implies a two-way communication involving dialogue and
 1270 exchanges. Consultation is based on a process involving the timely provision of the information
 1271 necessary for workers, and where they exist, workers' representatives, to give informed feedback to be
 1272 considered by the organization before taking a decision.

1273 Participation is a process of cooperation in order to contribute to decision-making processes on OH&S
 1274 performance measures and proposed changes.

1275 Feedback in the OH&S management system is dependent upon worker participation. The organization
 1276 should ensure workers at all levels are encouraged to report hazardous situations, so that preventive
 1277 measures can be put in place and corrective action taken.

1278 Processes for the receipt of suggestions can be more effective if workers do not fear the threat of
 1279 dismissal, disciplinary action, or other such reprisals, when making them.

1280 **A.6 Planning**

1281 **A.6.1 Actions to address risks and opportunities**

1282 **A.6.1.1 General**

1283 Planning is not a single event but an on-going process, anticipating changing circumstances and
 1284 continually determining risks and opportunities, both for the workers and for the OH&S management
 1285 system. Undesired effects can include work related injury and/or ill health, non-compliance with legal
 1286 requirements and other requirements or damage to reputation.

1287 Planning considers the relationships and interactions between the activities and requirements for the
 1288 management system as a whole.

1289 Examples of OH&S opportunities to improve OH&S performance:

1290 a) integrating occupational health and safety requirements at the earliest stage of the lifecycle of
 1291 facilities, equipment or process planning for facilities relocation, process re-design or replacement
 1292 of machinery and plant;

1293 b) integrating occupational health and safety requirements at the earliest stage of planning for
 1294 facilities relocation, process re-design or replacement of machinery and plant;

- 1295 c) improving OH&S performance by alleviating monotonous work or work at a potentially hazardous
1296 pre-determined work rate;
- 1297 d) using new technologies to improve OH&S performance;
- 1298 e) improving the occupational health and safety culture by extending competence related to
1299 occupational health and safety beyond requirements or encouraging workers to report incidents in
1300 a timely manner.

1301 Examples of opportunities to improve the OH&S management system:

- 1302 — improving the visibility of top management's support for the OH&S management system;
- 1303 — enhancing the incident investigation process(es);
- 1304 — improving the process(es) for worker participation;
- 1305 — benchmarking, including consideration of both the organization's own past performance and that of
1306 other organizations;
- 1307 — collaborating in forums which focus on topics dealing with occupational health and safety.

1308 **A.6.1.2 Hazard identification and assessment of risks and opportunities**

1309 **A.6.1.2.1 Hazard identification**

1310 The on-going proactive identification of hazard begins at the conceptual design stage of any new
1311 workplace, facility, product or organization. It should continue as design is detailed and then comes into
1312 operation, as well as being on-going during its full lifecycle to reflect current, changing and future
1313 activities.

1314 While this document does not address product safety (that is, safety to end-users of products), however,
1315 hazards to workers occurring during manufacture, construction, assembly or testing of products should
1316 be considered.

1317 Hazard identification helps the organization recognize and understand the hazards in the workplace
1318 and to workers, in order to assess, prioritize, and eliminate hazards or reduce OH&S risks.

1319 Hazards can be physical, chemical, biological, psychosocial, physiological, mechanical, electrical, or
1320 based on movement and energy.

1321 The list of hazards given in 6.1.2.1 is not exhaustive.

1322 NOTE The numbering of the following list items does not correspond exactly to the numbering of the
1323 list items given in 6.1.2.1.

1324 The organization's hazard identification process(es) should consider:

- 1325 a) routine and non-routine activities and situations:
- 1326 1) routine activities and situations create hazards through day-to-day operations and normal
1327 work activities; non-routine activities and situations are occasional or unplanned; short-term
1328 or long-term activities can create different hazards;

- 1329 2) human factors are about human abilities, limitations, and other characteristics; human factors
 1330 information should be applied to tools, machines, systems, activities and environment for safe,
 1331 comfortable human use; human factors should address three aspects: the activity, the worker
 1332 and the organization, and how these interact and impact occupational health and safety;
- 1333 3) new or changed hazards can arise when work processes are deteriorated, modified, adapted or
 1334 evolved as a result of familiarity or changing circumstances; understanding how work is
 1335 actually performed, e.g. observing and discussing hazards with workers, can identify if OH&S
 1336 risks are increased or reduced;
- 1337 b) emergency situations:
- 1338 These are unplanned or unscheduled situations that require an immediate response, for example a
 1339 machine catching fire in the workplace, or a natural disaster in the vicinity of the workplace or at
 1340 another location where workers are performing work-related activities. It also includes situations
 1341 such as civil unrest at a location at which workers are performing work-related activities, which
 1342 requires their urgent evacuation;
- 1343 c) people:
- 1344 Examples of people in the vicinity of the workplace are passers-by, contractors, or immediate
 1345 neighbours, who could be affected by the activities of the organization; workers at a location not
 1346 under the direct control of the organization refer to mobile workers or workers who travel to
 1347 perform work-related activities at another location (for example postal workers, bus drivers,
 1348 service personnel travelling to and working at a customer's site); home-based workers, or those
 1349 who work alone;
- 1350 d) changes in knowledge of, and information about hazards:
- 1351 Sources of knowledge, information and new understanding about hazards can include published
 1352 literature, research and development, feedback from workers, and review of the organization's own
 1353 operational experience. These sources can provide new information about the hazards and OH&S
 1354 risks.

1355 **A.6.1.2.2 Assessment of OH&S risks and other risks to the OH&S management system**

- 1356 An organization can use different methods to assess OH&S risks as part of its overall strategy for
 1357 addressing different hazards or activities. The method and complexity of assessment does not depend
 1358 on the size of the organization but on the hazards associated with the activities of the organization.
- 1359 Other risks to the OH&S management system should also be assessed using appropriate methods.
- 1360 Processes for the assessment of risk to the OH&S management system should consider day-to-day
 1361 operations and decisions (e.g. peaks in work flow, or restructuring) as well as external issues such as
 1362 economic change. Methodologies can include on-going consultation of workers affected by day-to-day
 1363 activities (such as changes in work load), monitoring and communication of new legal requirements
 1364 and other requirements (such as regulatory reform or revision to collective agreements regarding
 1365 occupational health and safety), and ensuring resources meet existing and changing needs, such as
 1366 training on, or procurement of, new improved equipment or supplies.

1367 **A.6.1.2.3 Assessment of OH&S opportunities and other opportunities**

1368 The process for assessment should consider the opportunities determined, their benefits and potential
1369 to improve OH&S performance.

1370 **A.6.1.3 Determination of legal requirements and other requirements**

1371 Legal requirements and other requirements can include:

1372 a) legal requirements, such as:

1373 1) legislation (national, regional or international), including statutes and regulations;

1374 2) decrees and directives;

1375 3) orders issued by regulators;

1376 4) permits, licences or other forms of authorization;

1377 5) judgements of courts or administrative tribunals;

1378 6) treaties, conventions, protocols;

1379 7) collective bargaining agreements;

1380 b) other requirements, such as:

1381 1) the organization's requirements;

1382 2) contractual conditions;

1383 3) employment agreements;

1384 4) agreements with interested parties;

1385 5) agreements with health authorities;

1386 6) non-regulatory standards, consensus standards and guidelines;

1387 7) voluntary principles, codes of practice, technical specifications, charters;

1388 8) public commitments of the organization or its parent organization.

1389 **A.6.1.4 Planning action**

1390 The actions planned should primarily be managed through the OH&S management system and can
1391 involve integration with other business processes such as those established for the management of
1392 environment, quality, business continuity, risk, financial or human resources. The implementation of
1393 the actions taken is expected to achieve the intended outcomes of the OH&S management system.

1394 When the assessment of OH&S risks has identified the need for controls, the planning activity
1395 determines how these are implemented in operation (see Clause 8); for example, determining whether
1396 to incorporate these controls into work instructions or into actions to improve competence. Other
1397 controls can take the form of measuring or monitoring (see Clause 9).

1398 Actions to address risks and opportunities can also be considered under the management of change
1399 (see 8.1.3), to ensure there are no resulting unintended consequences.

1400 **A.6.2 OH&S objectives and planning to achieve them**

1401 **A.6.2.1 OH&S objectives**

1402 Objectives are established to maintain and improve OH&S performance. The objectives should be linked
1403 to risks and opportunities and performance criteria which the organization has identified as being
1404 necessary for the achievement of the intended outcomes of the OH&S management system.

1405 OH&S objectives can be integrated with other business objectives and should be set at relevant
1406 functions and levels. Objectives can be strategic, tactical or operational:

- 1407 a) strategic objectives can be set to improve the overall performance of the OH&S management
1408 system, for example to eliminate noise exposure;
- 1409 b) tactical objectives can be set at facility, project or process level, for example reduce noise at source;
- 1410 c) operational objectives can be set at the activity level, for example enclosure of individual machines
1411 to reduce noise.

1412 The measurement of OH&S objectives can be qualitative or quantitative. Qualitative measures can be
1413 approximations such as those obtained from surveys, interviews and observations. The organization is
1414 not required to establish OH&S objectives for each of the risk and opportunity it determines or
1415 identifies.

1416 **A.6.2.2 Planning to achieve OH&S objectives**

1417 The organization can plan to achieve objectives individually or collectively. Plans can be developed for
1418 multiple objectives where necessary.

1419 The organization should examine the resources required (financial, human, equipment, infrastructure)
1420 to achieve its objectives.

1421 When practicable, each objective should be associated with an indicator which can be strategic, tactical
1422 or operational.

1423 **A.7 Support**

1424 **A.7.1 Resources**

1425 Resources include for example human resources, natural resources, infrastructure, technology, and
1426 financial resources.

1427 Infrastructure includes the organization's buildings, plant, equipment, utilities, information technology
1428 and communications systems, emergency containment systems, etc.

1429 **A.7.2 Competence**

1430 The competence of workers should include the knowledge and skills needed to appropriately address
1431 the hazards and OH&S risks associated with their work and workplace.

1432 In determining the competence for each role, the organization should take into account such things as:

- 1433 a) the education, training, qualification and experience necessary to undertake the role and re-
1434 training necessary to maintain competence;
- 1435 b) the work environment;
- 1436 c) the hazards identified and associated OH&S risks;
- 1437 d) the preventive and control measures resulting from the risk assessment process(es);
- 1438 e) the requirements applicable to the OH&S management system;
- 1439 f) legal requirements and other requirements;
- 1440 g) the OH&S policy;
- 1441 h) the potential consequences of compliance and noncompliance, including the impact on the worker's
1442 health and safety;
- 1443 i) the value of participation of workers in the OH&S management system based on their knowledge
1444 and skill;
- 1445 j) the duties and responsibilities associated with the roles;
- 1446 k) individual capabilities, including experience, language skills, literacy and diversity;
- 1447 l) the relevant updating of the competencies made necessary by context or work changes.

1448 Workers can assist the organization in determining competencies needed for roles.

1449 In many countries, it is legal requirement to provide training at no cost to workers.

1450 Workers should have the necessary competency to remove themselves from situations of imminent and
1451 serious danger. For this purpose, it is important that workers are provided sufficient training on
1452 hazards and risks associated with their work.

1453 As appropriate, workers should receive the training required to enable them to carry out their
1454 representative functions for occupational health and safety effectively.

1455 **A.7.3 Awareness**

1456 Contractors and visitors, etc., as well as workers (especially temporary workers), should be aware of
1457 the OH&S risks to which they are exposed.

1458 **A.7.4 Communication**

1459 The communication process(es) established by the organization should provide for both the gathering,
1460 updating and the dissemination of information. It should ensure that relevant information is provided,
1461 received and is understandable to all relevant workers and interested parties.

1462 **A.7.5 Documented information**

1463 It is important to keep the level of complexity of the documented information at the minimum level
1464 possible to ensure effectiveness, efficiency and simplicity at the same time.

1465 This should include documented information regarding planning to address legal requirements and
 1466 other requirements and on evaluations of the effectiveness of these actions.

1467 The actions described in 7.5.3 are particularly aimed at preventing unintended use of obsolete
 1468 documented information.

1469 Examples of confidential information include personal and medical information.

1470 **A.8 Operation**

1471 **A.8.1 Operational planning and control**

1472 **A.8.1.1 General**

1473 Operational planning and controls need to be established and implemented as necessary to enhance occupational
 1474 health and safety, eliminate hazards or, if impossible, to reduce the OH&S risks to levels as low as reasonably
 1475 practicable for operational areas and activities.

1476 Examples of operational controls are:

- 1477 a) the use of procedures and systems of work;
- 1478 b) ensuring the competency of workers;
- 1479 c) establishing preventive or predictive maintenance and inspection programmes;
- 1480 d) specifications for the procurement of goods and services;
- 1481 e) application of legal requirements and other requirements, or manufacturers' instructions for
 1482 equipment;
- 1483 f) engineering and administrative controls;
- 1484 g) adapt work to workers, for example, by:
 - 1485 1) defining, or redefining, how the work is organized;
 - 1486 2) the induction of new workers;
 - 1487 3) defining, or redefining, processes and working environments;
 - 1488 4) designing a new workplace and new equipment by using ergonomic approaches, etc.

1489 **A.8.1.2 Eliminating hazards and reducing OH&S risks**

1490 The hierarchy of controls is intended to provide a systematic approach to enhance occupational health
 1491 and safety, eliminate hazards, and reduce or control OH&S risks. Each control is considered less
 1492 effective than the one before it. It is usual to combine several controls in order to succeed in reducing
 1493 the OH&S risks to a level that is as low as reasonably practicable.

1494 The following examples are given to illustrate measures that can be implemented at each level:

- 1495 a) hazard elimination: avoiding OH&S risks, e.g. applying ergonomics approaches when planning new
 1496 workplaces; create physical separation of traffic between pedestrians and vehicles;

- 1497 b) substitution: replacing the dangerous by the non-dangerous, or the less dangerous; combating the
 1498 OH&S risks at source; adapting to technical progress, e.g. replacing solvent based paint by water
 1499 based paint;
- 1500 c) engineering controls: implement collective protective measures, e.g. isolation; machine guarding;
 1501 ventilation systems; mechanical handling; noise reduction; protecting against falls from height by
 1502 using guard rails;
- 1503 d) administrative controls: giving appropriate instructions to workers, e.g.: entry control processes;
 1504 periodical safety equipment inspections; health and safety coordination with subcontractors'
 1505 activities; induction; forklift driving licenses; changing the work patterns, e.g. shifts, of workers;
 1506 introduction of a health or medical surveillance programme for workers who have been identified
 1507 as at risk (e.g. hearing, hand arm vibration, respiratory disorders, skin disorders, exposure);
- 1508 e) personal protective equipment (PPE): provide adequate PPE, including clothing and instructions
 1509 for PPE utilization and maintenance, e.g. safety shoes; safety glasses; hearing protection; gloves.

1510 **A.8.1.3 Management of change**

1511 The objective of a management of change process is to enhance occupational health and safety at work,
 1512 by minimizing the introduction of new hazards and OH&S risks into the work environment as changes
 1513 occur, such as in technology, equipment, facilities, work practices and procedures, design specifications,
 1514 raw materials, staffing changes, and standards or regulations. Depending on the nature of an expected
 1515 change, the organization can use an appropriate methodology(ies), such as design review, for assessing
 1516 the OH&S risks and the OH&S opportunities of the change. The need to manage change can be an
 1517 outcome of planning (see 6.1.4).

1518 **A.8.1.4 Outsourcing**

1519 When outsourcing the organisation needs to have control of the outsourced process(es) to achieve the
 1520 intended outcome(s) of the OH&S management system. It is important to note that outsourcing in this
 1521 context only concerns processes essential for the OH&S management system, not other business
 1522 processes in the organization.

1523 The organization should establish the extent of control over outsourced process(es) or function(s)
 1524 based upon factors such as:

- 1525 — the ability of the external organization to meet the organization's OH&S management system
 1526 requirements;
- 1527 — the technical competence of the organization to define appropriate controls or assess the adequacy
 1528 of controls;
- 1529 — the potential effect the outsourced process or function will have on the organization's ability to
 1530 achieve the intended outcome of its OH&S management system;
- 1531 — the extent to which the outsourced process or function is shared;
- 1532 — the capability of the organization to achieve the necessary control through the application of its
 1533 procurement process;
- 1534 — opportunities for improvement.

1535 **A.8.1.5 Procurement**

1536 The procurement process(es) can be used to determine, assess and eliminate potential hazards and
 1537 reduce OH&S risks associated with e.g. products, hazardous materials or substances, raw materials,
 1538 equipment, or services, before their introduction into the workplace.

1539 The organizations' procurement process(es) should address requirements for e.g. supplies, equipment,
 1540 raw materials, and other goods and related services purchased by the organization to conform to the
 1541 organization's OH&S management system. The process should also address any needs for consultation
 1542 (see 5.4) and communication (see 7.4).

1543 The organization should verify that equipment, installations and materials are safe for use by workers
 1544 by ensuring:

- 1545 a) equipment is delivered according to specification and is tested to ensure it works as intended;
- 1546 b) installations are commissioned to ensure they function as designed;
- 1547 c) materials are delivered according to their specifications;
- 1548 d) any usage requirements, precautions or other protective measures are communicated and made
 1549 available.

1550 **A.8.1.6 Contractors**

1551 This process recognizes that some contractors (i.e. external providers) possess specialized knowledge,
 1552 skills, methods, and means.

1553 Examples of contractor activities and operations can be maintenance, construction, operations, security,
 1554 cleaning, and a number of other functions. Contractors can also include consultants or specialists in
 1555 administrative, accounting, and other functions. Assignment of activities to contractors does not
 1556 eliminate the organization's responsibility for the occupational health and safety of workers.

1557 An organization can achieve coordination of its contractors' activities through the use of contracts that
 1558 clearly define the responsibilities of the parties involved. An organization can use a variety of tools for
 1559 ensuring contractors' OH&S performance in the workplace, including contract award mechanisms or
 1560 pre-qualification criteria which consider past health and safety performance, safety training, or health
 1561 and safety capabilities, as well as direct contract requirements.

1562 When coordinating with contractors, the organization can give consideration to the reporting of
 1563 hazards between itself and its contractors, controlling worker access to hazardous areas, and
 1564 procedures to follow in emergencies. The organization can specify how the contractor will coordinate
 1565 its activities with the organization's own OH&S management system processes (such as those used for
 1566 controlling entry, for confined space entry, exposure assessment, and process safety management), and
 1567 for the reporting of incidents.

1568 The organization should verify that contractors are capable of performing their tasks before being
 1569 allowed to proceed with their work, e.g. by verifying that:

- 1570 a) OH&S performance records are satisfactory;
- 1571 b) qualification, experience and competence criteria for workers are specified and have been met (e.g.
 1572 through training);

1573 c) resources, equipment and work preparations are adequate and ready for the work to proceed.

1574 **A.8.2 Emergency preparedness and response**

1575 Emergency preparedness plans can include both natural, technical, and man-made events that occur
1576 inside and outside normal working hours.

1577 **A.9 Performance evaluation**

1578 **A.9.1 Monitoring, measurement, analysis and performance evaluation**

1579 **A.9.1.1 General**

1580 In order to achieve the intended outcomes of the OH&S management system, the processes should be
1581 monitored, measured and analyzed:

1582 a) Examples of what could be monitored and measured can include, but are not limited to:

1583 1) occupational health complaints, health surveillance of workers and work environment
1584 monitoring;

1585 2) work related incidents, injuries and ill health, and complaints, including trends;

1586 3) the effectiveness of operational controls and emergency exercises, or to evaluate the need to
1587 modify or introduce new controls;

1588 4) competence;

1589 b) Examples of what could be monitored and measured to evaluate the fulfilment of legal
1590 requirements can include, but are not limited to:

1591 1) identified legal requirements (have all legal requirements been determined, and are the
1592 organization's documented information of them kept up-to-date);

1593 2) the status of identified gaps in compliance;

1594 c) Examples of what could be monitored and measured to evaluate the fulfilment of other
1595 requirements can include, but are not limited to:

1596 1) union-employer agreements;

1597 2) standards and codes;

1598 3) corporate and other policies, rules and regulations;

1599 4) insurance requirements;

1600 d) Criteria are what the organization can use to compare its performance against:

1601 1) Examples are benchmarks against:

1602 i) other organizations;

1603 ii) standards and codes;

- 1604 iii) the organization's own codes and objectives;
- 1605 iv) OH&S statistics;
- 1606 2) To measure criteria, indicators are typically used, for example:
 - 1607 i) If the criterion is a comparison of incidents, the organization may choose to look at
 - 1608 frequency, type, severity, or number of incidents; then the indicator could be the
 - 1609 determined rate within each one of these criteria;
 - 1610 ii) If the criterion is a comparison of completions of corrective actions, then the indicator could
 - 1611 be the percentage completed on time.

1612 Monitoring can involve continual checking, supervising, critically observing or determining the status in
 1613 order to identify change from the performance level required or expected. Monitoring can be applied to
 1614 the OH&S management system, to processes or to controls. Examples include the use of interviews,
 1615 reviews of documented information and observations of work being performed.

1616 Measurement generally involves the assignment of numbers to objects or events. It is the basis for
 1617 quantitative data and is generally associated with the performance evaluation of safety programmes
 1618 and health surveillance. Examples include the use of calibrated or verified equipment to measure
 1619 exposure to a hazardous substance or the counting of the required safe distance from a hazard.

1620 Analysis is the process of examining data to reveal relationships, patterns and trends. This can mean the
 1621 use of statistical operations, including information from other similar organizations, to help draw
 1622 conclusions from the data. This process is most often associated with measurement activities.

1623 Performance evaluation is an activity undertaken to determine the suitability, adequacy and
 1624 effectiveness of the subject matter to achieve the established objectives of the OH&S management
 1625 system.

1626 **A.9.1.2 Evaluation of compliance**

1627 The frequency and timing of compliance evaluations can vary depending on the importance of the
 1628 requirement, variations in operating conditions, changes in legal requirements and other requirements
 1629 and the organization's past performance. An organization can use a variety of methods to maintain its
 1630 knowledge and understanding of its compliance status.

1631 **A.9.2 Internal audit**

1632 The extent of the audit programme should be based on the complexity and level of maturity of the OH&S
 1633 management system.

1634 An organization can establish objectivity and impartiality of the internal audit by creating a process(es)
 1635 that separate auditors' roles as internal auditors from their normal assigned duties or the organization
 1636 can also use external people for this function.

1637 **A.9.3 Management review**

1638 The terms used in relation to management review should be understood as:

- 1639 a) 'suitability' refers to how the OH&S management system fits the organization, its operation, its
- 1640 culture and business systems;

- 1641 b) 'adequacy' refers to if the OH&S management system is implemented appropriately;
- 1642 c) 'effectiveness' refers to whether the OH&S management system is achieving the intended outcome.
- 1643 The management review topics listed in 9.3 a) to g) need not be addressed all at once; the organization
1644 should determine when and how the management review topics are addressed.

1645 **A.10 Improvement**

1646 **A.10.1 General**

1647 The organization should consider the results from analysis and evaluation of OH&S performance,
1648 evaluation of compliance, internal audits and management review when taking action to improve.

1649 Examples of improvement include corrective action, continual improvement, breakthrough change,
1650 innovation and re-organization.
1651

1652 **A.10.2 Incident, nonconformity and corrective action**

1653 Separate processes may exist for incident investigations and nonconformities reviews, or may be
1654 combined as a single process, depending on the organization's requirements.

1655 Examples of incidents, nonconformities and corrective actions can include but are not limited to:

- 1656 a) incidents: same level fall with or without injury; broken leg; asbestosis; hearing loss; damage to
1657 buildings or vehicles where they can lead to OH&S risks;
- 1658 b) nonconformities: protective equipment not functioning properly; failure to fulfil legal requirements
1659 and other requirements; or prescribed procedures not being followed;
- 1660 c) corrective actions: (as indicated by the hierarchy of controls; see 8.1.2) elimination of hazards;
1661 substitution of unsafe to safer materials; design or modification to equipment or tools;
1662 development of procedures; improving the competence of affected workers; changes in frequency
1663 of use; or use of personal protective equipment.

1664 Root cause analysis refers to the practice of exploring all the possible factors associated with an
1665 incident or nonconformity by asking what happened, how, and why it happened, to provide the input
1666 for what can be done to prevent it from happening again.

1667 When determining the root cause of an incident or nonconformity, the organization should use methods
1668 appropriate to the nature of the incident or nonconformity being analysed. The focus of root cause
1669 analysis is prevention. This analysis can identify multiple system failures including factors related to
1670 communication, competence, fatigue, equipment or procedures.

1671 Reviewing the effectiveness of corrective actions (see 10.1e) refers to the extent the implemented
1672 corrective actions adequately control the root cause(s).

1673 **A.10.3 Continual improvement**

1674 Examples of continual improvement opportunities include, but are not limited to:

- 1675 a) new technology;
- 1676 b) good practices, both internal and external to the organization's;

- 1677 c) suggestions and recommendations from interested parties;
- 1678 d) new knowledge and understanding of occupational health and safety related issues;
- 1679 e) new or improved materials;
- 1680 f) changes in worker capabilities or competence;
- 1681 g) achieving improved performance with fewer resources (i.e. simplification, streamlining etc.).

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