



ISO 45001 – short description of the new standard and its requirements

Foreword and Introduction

In this section, you will find some general information about the intention of the standard as well as success factors, the PDCA cycle and the content of the document. Please note the definitions of “shall”, “should”, “may” and “can”. All “shall” clauses must be implemented!

1. Scope

The scope tells you the applicability of the standard. It is not giving you any specific criteria for OH&S performance nor does it give you a prescriptive design for your OH&S management system. The focus of the standard is on a management system and it does not address issues like product safety, property damage, or environmental impacts. The focus is on risks to workers and other interested parties.

Comparison to OHSAS 18001: The scope is more elaborated e.g. gives you more details.

2. Normative references

There are no normative references.

Comparison to OHSAS 18001: Reference to 18002 and ILO Guidelines deleted

3. Terms and definitions

There are 37 definitions for terms used in this document. Here some of the new definitions are for the worker, workplace, risk, risks and opportunities, participation and consultation, and interested parties. The standard makes it very clear that the work performed is under the control of the organization (worker, workplace). Risks are not limited to OH&S risks but extended to business risks associated with OH&S. The standard differentiates between OH&S risks, OH&S opportunities, and other risks and opportunities. Participation and consultation are separately defined and interested parties are more elaborated.



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Comparison to OHSAS 18001: There have been only 23 definitions. So please check the new definitions carefully when implementing ISO 45001.

4. Context of the organization

4.1 Understanding the organization and its context

To achieve the intended outcome of the management system the organization needs to ensure that the OH&S management system is suitable to address issues that are relevant to the external and internal issues.

External factors could be the business environment, competition, partners, suppliers, new technologies or laws, new information about products, etc. Internal factors could be objectives, processes for information flow and processes, the introduction of new technologies/products, culture, human resources, relationship to workers, etc. Annex A.4.1 gives you some ideas on what you should look at.

Comparison to OHSAS 18001: Not part

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

Organizations must identify the needs and expectations of workers and other interested parties that can influence the management system. They also must determine which of these needs and expectations are or could become legal or other requirements.

Workers in this context mean all employees regardless if they are directly employed or working on behalf of the company.

Interested parties cover a wide range. They can include authorities, suppliers, parent organizations, shareholders, customers, media, insurance companies, workmen's compensation board, etc. More ideas you can find in Annex A.4.2.

Comparison to OHSAS 18001: Not part

4.3 Determining the scope of the OH&S management system

Organizations must define the boundaries and applicability of the OH&S management system e.g. is it applicable just for one site of a multi-site



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organization, for the whole site, or just parts of the organization. Top management is responsible for the introduction of an OH&S management system. Once you have identified your scope areas that can have an impact on the OH&S performance cannot be excluded.

When determining the scope, you must consider the context as well as the interested parties and their needs and expectations.

The statement of the scope must be clear and exact and shall not be misleading about the boundaries.

The scope must be documented and shall include activities, products, and services under its control/influence.

Further information can be found in Annex A.4.3

Comparison to OHSAS 18001: The scope had already been determined but now the definition is much wider.

4.4 OH&S management system

Organizations have to establish, implement, maintain and continually improve the OH&S management systems. This must include the processes and their interaction.

Annex A.4.4 gives some more details.

Comparison to OHSAS 18001: The focus on processes and their interaction is stronger

5. Leadership and worker participation

5.1. Leadership and commitment

The standard makes it clear the top management has to take a leading role in successfully implementing an OH&S management system and the overall responsibility and accountability for the prevention of work-related injury and ill health lie with them. In total there are 13 subclauses defining the responsibilities of top management. The role of top management is enhanced substantially. It is made clear that top management must demonstrate leadership e.g. by encouraging workers to report incidents, hazards, risks, and opportunities, and by implementing a system that protects against reprisals / disciplinary actions.



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Annex A.5.1 gives you further details.

Comparison to OHSAS 18001: Though the role to top management had been described ISO 45001 is more specific and detailed about the role and responsibilities. Check your existing documents carefully against the new requirements. There is no more reference

management appointee. So, you have to define if there should be one in your organization and what his/her responsibility will be.

5.2 OH&S policy

The policy shall be established, implemented, and maintain as well as communicated, available to interested parties, relevant and appropriate, and documented. It must also include a commitment to consultation and participation of workers and worker's representatives (if applicable). The standard details what is to be included.

Some information gives Annex A.5.2.

Comparison to OHSAS 18001: Some additions to be made

5.3 Organizational roles, responsibilities, and authorities

Top management shall ensure that responsibilities and authorities for relevant roles are defined and communicated at all levels. The definitions shall be documented e.g. as role description, in the management system. And it is defined that workers shall take over responsibility for those aspects of the OH&S management system over which they have control. This demonstrates clearly that everybody is responsible for health and safety. Reporting lines shall also be defined, and responsibility and authority have been given.

Again, in Annex A.5.3 some details can be found.

Comparison to OHSAS 18001: The assigning of responsibilities and authorities is a new element. It is made clear that top management while ultimately be accountable for OH&S MS.

5.4 Consultation and participation of workers



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There shall be a process for consultation and participation of workers at all applicable levels and functions. The process shall include development, planning, implementation, performance evaluation, and actions for improvement of the OH&S management system. The subclauses a-e define clearly what the process shall cover. It is also made clear that non-managerial workers shall be part of the consultation process. Furthermore, it is stated that it is a two-way communication meaning that workers also have to communicate actively. The standard puts a lot of emphasis on the participation of workers and how that consultation can improve the system.

The engagement and participation of workers is important to succeed. Kiwa recommends that workers and their representatives participate in the decision to implement the OH&S management system.

See also Annex A.5.4.

Comparison to OHSAS 18001: Participation and consultation are part of the leadership. Some new elements are added e.g. access to information, removing obstacles in participation.

6 Planning

6.1 Actions to address risks and opportunities

Determination of risks is the key element as in ISO 9001:2015 and ISO 14001:2015. And please make sure that all actions in this clause must be ongoing. Annex A.6.xx gives you several examples of what to do and how to do it.

There are 4 subclauses to this topic.

6.1.1 General

just defines what needs to be considered when planning the OH&S management systems and when determining the risks and opportunities. It is also stated that prior to changes potential risks and opportunities should be considered. You have to provide documented information on the risks and opportunities as well as on the process defined to determine them.

6.1.2 Hazard identification and assessment of risks and opportunities



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You need to establish and document a process for hazard identification that is ongoing and proactive. 6.1.2.1 points a-h show what should be considered. It basically starts from how work is organized, looks at routine and non-routine activities, analysis of past incidents, potential emergency situations, people, changes in the organization, knowledge about hazards, etc.

Comparison to OHSAS 18001: Emergencies, people, possible changes, and previous incidents as well as the work organization and social factors need to be considered. Requirements for inputs and basics for hazard identification are well defined. There are some new factors e.g. hazards related to product & design including R&D, workers at locations not under direct control, changes in the knowledge, new factors including workload, work hours, victimization, harassment bullying, company culture.

When looking at risks the organization should have a process to assess OH&S risks related to incidents as well as other risks to the OH&S management system (9.1.2.2). The same goes for opportunities (9.1.2.3).

Comparison to OHSAS 18001: Identification of opportunities was not addressed. Improvements in the company culture, new technologies, training and knowledge, more employee participation are some opportunities.

6.1.3 Determination of legal requirements and other requirements

Basically, the organization must have a process describing how they will identify legal and other requirements either related to their hazards, OH&S risks, and the OH&S management system or related to the organization. Furthermore, communication must be identified.

Organizations must maintain and retain documented evidence on legal and other requirements.

A.6.1.3 shows a list of legal and other requirements.

Comparison to OHSAS 18001: No changes

6.1.4 Planning Action

The organization shall plan actions to address risks and opportunities, legal and other requirements plus prepare for and respond to emergency situations. They



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must also plan how they will integrate this into the OH&S and how they will evaluate the effectiveness.

practices shall be considered as well as technological options, financial, operational and business requirements.

Comparison to OHSAS 18001: There are new requirements and a strong emphasis on a good planning process

6.2 OH&S objectives and planning to achieve them

Objectives must be set at relevant functions and levels and they should be linked to risks and opportunities as well as improvement criteria. It should be clear that not for every risk etc. an objective must be set. Objectives can be strategical (e.g. eliminate noise), tactical (e.g. reduce noise at a source) or operational (e.g. enclosure of individual machines to reduce noise). They must concentrate on maintaining and continually improving the OH&S management system and OH&S performance. Objectives must be consistent with the policy. The organization shall maintain and retain documented information on the OH&S objectives and the plan for how to achieve them.

Measurement can be qualitative or quantitative. When planning how to achieve the objectives the organization should identify resources required e.g. financial, human, equipment, infrastructure, etc. Indicators should be set where practical.

Comparison to OHSAS 18001: The clause for planning is more structured and there is a concept of a program. The documented evidence of objectives and their plan how to achieve them is new.

7 Support

7.1 Resources

Resources needed to establish, implement, maintain and continually improve the OH&S management system must be determined and provided for. Examples for resources are hum, natural, infrastructure e.g. buildings, plants, equipment, information technology, communication systems, etc., technology, financial.

Comparison to OHSAS 18001: No changes

7.2 Competence



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In order to make the OH&S management system work, you have to identify the competencies of workers that affect or can affect the OH&S management system. The ability to identify hazards is one competence they must have.

Competence can be achieved by training, education, or experience. If needed organizations have to train people and check the effectiveness of the training. Documented information must be available.

Comparison to OHSAS 18001: The focus is now on achieving and maintaining competence instead of training. And the competence to identify hazards is new.

7.3 Awareness

Workers shall be made aware of OH&S policy and OH&S objectives, their contribution to the effectiveness of the OH&S management system as well as the benefits of the improved OH&S performance. They should also know what consequences there are if they are not conforming to the OH&S management system requirements. Incidents and investigation outcomes, hazards, risks, and actions should be known. They should also know what to do

in imminent or serious danger to their life or health. There should be no consequences for them.

Workers include temporary workers, contractors, visitors, and any other parties.

Comparison to OHSAS 18001: The key change is the awareness of implications of not performing to the OH&S management system. And workers should be aware to identify serious or imminent risks that pose danger to their life or health.

7.4 Communication

Organizations should have a process for internal and external communication stating what, when, with whom and how it will communicate. Legal requirements and other requirements must be considered. The communication must be reliable. And there must be documented evidence of communication as appropriate. Communication must be understandable to all workers and interested parties e.g. you might have to communicate in several languages.



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Comparison to OHSAS 18001: The methodology of how to communicate is much more structured. The key change is considering the diverse needs that workers might have e.g. language.

7.5 Documented information

Documented information is a new term covering all forms and formats. Previous terms “records”, “work instructions”, “routines” and “procedures are incorporated in this new term. Furthermore, it is not specified which format or media you want to use. A procedure may even be in the format of a video.

Basically, you have to make sure that documented information can be identified, reviewed, and approved and that they are understandable. Documented information must be controlled and protected.

Comparison to OHSAS 18001: Only the term documented information instead of documents and records has changed. The chapter is aligned with all other management system standards.

8 Operation

8.1 Operational planning and control

8.1.1 General

The chapter sets out requirements related to process management. Processes need to meet the requirements of the OH&S management system and to implement actions, shall be planned, implemented, controlled, and maintained. An important requirement is to identify the criteria for the processes. Requirements are also set regarding coordination between relevant parties of a multi-employer work.

A.8.1.1 shows several examples of operational control of processes.

Comparison to OHSAS 18001: More elaborate planning is required. Elimination of hazards and reduction of OH&S risks as well as the principle of adapting work to workers is the key.

8.1.2 Eliminating hazards and reducing OH&S risks

There shall be a process describing how the organization will eliminate hazards and reduce OH&S risks.



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The hierarchy of controls gives a systematic approach to enhance occupational health and safety, eliminate hazards, and reduce OH&S risks. Please be aware of the fact that each control is less effective than the one before. A combination of controls may be used. A.8.1.2 shows examples for each of the controls.

Illustration Wikipedia / NIOSH

Comparison to OHSAS 18001: No changes but included a note on costs of PPE.

8.1.3 Management of change

Organizations shall have a process for the implementation of temporary and permanent changes having an impact on the OH&S management system covering changes to existing or new products, services or processes, changes to legal or other requirements, changes in knowledge or information of hazards, and OH&S risks,

Developments in knowledge and technology.

Consequences of unintended changes shall be reviewed.

This process should make sure that no new hazards or OH&S risks are introduced at the working place.

Comparison to OHSAS 18001: Set out in a separate chapter with clearer requirements.

8.1.4 Procurement

A process to control procurement shall be established and maintained.

8.1.4.2 Contractors

the organization shall coordinate the procurement process for contractors to identify hazards and OH&S risks from the contractors' activities on the organization and vice versa and on interested parties.

It is to ensure that the requirements of the OH&S management system are met by contractors. OH&S criteria for the selection process shall be defined.

A.8.1.4.2 gives good examples for the activities of contractors, means to control them e.g. by contracts, definitions of reporting about hazards, etc. the organization



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should verify if the contractor meets the requirements laid down in the contract and if the contractor and its workers are capable of carrying out the work correctly.

Comparison to OHSAS 18001: New requirements and a more detailed description related to coordination, hazard and risk assessments, and controls. Health and Safety shall be included in procurement criteria.

8.1.4.3 Outsourcing

Organizations have to make sure that outsourced activities are controlled. This covers legal and other requirements as well as the outcome for the OH&S management system. How controls will be carried out shall be defined in the OH&S management system.

The organization should define the extent of control over outsourced processes and functions. Factors to be controlled are e.g. meeting the OH&S management system requirements, technical competence to define controls, the potential effect of outsourced processes on the OH&S management system, extension of sharing the outsourced function, capability to achieve the necessary control, opportunities for improvement.

Comparison to OHSAS 18001: New requirements and more detailed descriptions. Type and degree of control of outsourced processes shall be defined in the OH&S management system.

8.2 Emergency preparedness and response

The process shall include a planned response to emergency situations, training for a planned response, periodically testing and exercising the response capability, evaluation of the performance and revising the plan, communication to workers on relevant information with respect to their duties and responsibilities, communication to contractors, visitors, emergency response services, government, local communities, etc.

Emergency preparedness plans can include natural, technical, and man-made events. Events inside and outside normal working hours must be considered.

Comparison to OHSAS 18001: There are subclauses inserted to give greater emphasis on the hierarchy of controls, management of change, outsourcing,



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procurement, and contractors. The emphasis on the purchasing process and controls is increased. All outsourced processes need to be controlled. Furthermore, there should be more involvement.

9 Performance evaluation

To enable necessary operational control, process control, and effective evaluation of the OH&S management system effectiveness and performance you need to determine what, how, and when monitoring, measurement, and analysis shall be performed.

The organization shall establish, implement and maintain a process(es) for monitoring, measurement, analysis, and performance evaluation. This process is well known to all companies that have already implemented ISO 9001, ISO 14001, or OHSAS 18001. This process must also include compliance monitoring.

There is a requirement to retain documented information as evidence of monitoring, measuring, and evaluation, including any need to document calibration of the equipment.

In Annex A.9.1.1 to Annex A.9.1.2, you will find very detailed information on what the standard expects you to do for performance evaluation.

Comparison to OHSAS 18001: The requirements are more specific e.g. monitoring & measurement of legal requirements, operations-related hazards, risks, and opportunities. Plus, frequency and methods of evaluation of compliance are part of the requirements that a company needs to define.

9.2 Internal audit

The criteria for internal audits, the frequency, the content, and the auditor qualification must be defined. Audit reports must be available.

Comparison to OHSAS 18001: Again, more specific requirements.

9.3 Management review

To ensure the suitability, adequacy, and effectiveness of the OH&S management system the Top Management shall review it periodically.



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There is a list of requirements that must be considered during the management review. The results from the management review must be documented. Top management shall communicate the relevant outputs from the management review to its workers and its representatives.

In Annex A.9.3 definitions of terms are given. Suitability means how the OH&S management system fits into the organization, adequacy of whether the OH&S management system is properly implemented (acceptable and capable), and effectiveness refers to whether the intended outcome is achieved. As in 9.3 a-g, a lot of topics are listed that should be addressed in the management review it is made clear in Annex A.9.3 that the company should define when and how the topics are addressed. This means that not all topics must be always addressed.

Comparison to OHSAS 18001: The management review requirements are much more detailed, supporting the new focus on top management engagement.

10 Improvement

10.1 General

Actions for improvement should be based on the results of the performance evaluation, internal audit results, evaluation of compliance, and management review. Improvement can be achieved by various methods e.g. corrective action, innovation, reorganization, etc.

10.2 Incident, nonconformity, and corrective action

The company must have a process describing how they will handle incidents, nonconformities, and corrective actions. A.10.2 gives you examples of what is meant by incidents, nonconformities, and corrective actions. It is important that a root cause analysis is carried out so that prevention is possible. Furthermore, the effectiveness of corrective actions is to be checked.

Comparison to OHSAS 18001: Prior to taking actions related to the results of the investigation of the incident the OH&S risks must be addressed.

10.3 Continual improvement

It is made clear that a continual improvement of the suitability, adequacy, and effectiveness of the OH&S management system is expected. This includes



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enhancing the OH&S performance, promotion of the culture with respect to OH&S as well as the participation of workers, communication to workers. The organization must document the results of the continual improvement. You can also find some more ideas in Annex A.10.3.



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