

# ISO management standard for Occupational Health and Safety, ISO 45001:2018, is published!

What does this mean for current users of  
OHSAS 18001 and potential new users?

**Kiwa Group**



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## Why do we need management systems for occupational health and safety?

It is estimated that world-wide more than 2 million die every year from work-related accidents. This is more than the entire population of cities like Hamburg, Vienna, Amsterdam.

Occupational injuries and diseases have a significant effect on employers, employees and the wider economy, resulting in losses from early retirements, staff absence and rising insurance premiums.

What are the additional aspects to human loss and pain for businesses?

- Disruption of business and emergency recovery costs
- Loss of key personnel and competence
- Reduced performance
- Loss of business opportunities
- Reduced growth
- Exclusions from markets

To address the problem, ISO has developed a new standard, ISO 45001, Occupational health and safety management systems – Requirements. This standard will help companies to organize their occupational health and safety organization in a better way and thus improve employee safety, reduce workplace risks and create better, safer working conditions, all over the world.

ISO 45001 is structured the same way as ISO 9001 and ISO 14001 so that integration of the management systems is much easier. ISO 45001 takes the existing standards such as OHSAS 18001, the International Labour Organization's ILO-OSH Guidelines, various national standards and the ILO's international labour standards and conventions into account.

The following table gives you an overview of the ISO 45001 structure and shows also where the respective aspects can be found in OHSAS 18001. The content of the clauses might differ. For your guidance we have highlighted the main differences to OHSAS 18001 as comments to the clauses of ISO 45001 in the text below the table.

ISO 45001		OHSAS 18001	
Clause	Content	Clause	Content
	<b>Foreword</b>		<b>Foreword</b>
	<b>Introduction</b>		<b>Introduction</b>
0.1	Background		
0.2	Aim of an OH&SMA		
0.3	Success factors		
0.4	PDCA Cycle		
0.5	Content of this International Standard		
<b>1</b>	<b>Scope</b>	<b>1</b>	<b>Scope</b>
<b>2</b>	<b>Normative References</b>	<b>2</b>	<b>Normative References</b>
<b>3</b>	<b>Terms &amp; Definition</b>	<b>3</b>	<b>Terms &amp; Definition</b>
<b>4</b>	<b>Context of the Organization</b>		
4.1	Understanding the organization and its context		

4.2	Understanding the needs and expectations of workers and other interested parties		
4.3	Determining the scope of the OH&SMS	4.1	General requirements
4.4	OH&S MA		
<b>5</b>	<b>Leadership and worker participation</b>	<b>4.4.3</b>	<b>Communication, participation and consultation</b>
5.1	Leadership and commitment	4.4.1	Resources, roles, responsibility, accountability and authority
5.2	OH&S Policy	4.2	OH&S Policy
5.3	Organizational roles, responsibilities and authorities	4.41	Resources, roles, responsibility, accountability and authority
5.4	Consultation & participation of workers	4.4.3.2	Participation and consultation
<b>6</b>	<b>Planning</b>		
6.1	Actions to address risks and opportunities		
6.1.1	General	4.3.1	Hazard identification, risk assessment and determining controls
6.1.2	Hazard identification and assessment of risks and opportunities		
6.1.2.1	Hazard identification	4.3.1	Hazard identification, risk assessment and determining controls
6.1.2.2	Assessment of OH&S risks and other risks to OH&S management		
6.1.2.3	Identification of OH&S opportunities and other opportunities		
6.1.3	Planning action	4.3.2	Legal and other requirements
6.1.4	Planning to take action	4.3.1	Hazard identification, risk assessment and determining controls
6.2	OH&S objectives and planning to achieve them		
6.2.1	OH&S objectives		
6.2.2	Planning to achieve OH&S objectives	4.3.3	Objectives and programme(s)
<b>7</b>	<b>Support</b>		
7.1	Resources	4.4.1	Resources, roles, responsibility, accountability and authority
7.2	Competence	4.4.2	Competence, training and awareness
7.3	Awareness	4.4.2	Competence, training and awareness
7.4	Communication	4.4.3.1	Communication
7.5	Documented information	4.4.4	Documentation
		4.5.4	Control of records
7.5.1	General		
7.5.2	Creating and updating		

7.5.3	Control of documented information		
<b>8</b>	<b>Operation</b>		
8.1	Operational planning and control		
8.1.1	General	4.4.6	Operational control
8.2	Emergency preparedness and response	4.4.7	Emergency preparedness and response
<b>9</b>	<b>Performance evaluation</b>	<b>4.5</b>	<b>Checking</b>
9.1	Monitoring, measurement, analysis and performance evaluation	4.5.1	Performance measurement and monitoring
9.1.1	General		
9.1.2	Evaluation of compliance	4.5.2	Evaluation of compliance
9.2	Internal audit	4.5.5	Internal audit
9.2.1	General	4.5.5	Internal audit
9.2.2	Internal audit programme	4.5.5	Internal audit
9.3	Management review	4.6	Management review
<b>10</b>	<b>Improvement</b>		
10.1	General		
10.2	Incident, non-conformity and corrective action	4.2	OH&S policy
		4.6	Management review
		4.5.3.2	Nonconformity, corrective action and preventive action
10.3	Continual improvement	4.3.3	Objective and programme(s)

For those who have management systems according to ISO 9001 and/or ISO 14001 established the new structure is already known and some documents can be easily used.

## 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 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 is 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 is separately defined and interested parties is more elaborated.

*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 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, 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 expectation are or could become a legal or other requirement.

Workers in this context means 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

Organization 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 organization, for the whole site or just parts of the organization. Top management is responsibility for 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 to be determined but now the definition is much wider.*

#### 4.4 OH&S management system

Organization 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 to successfully implement an OH&S management system and the overall responsibility and accountability for the prevention of work-related injury and ill health lies 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 which protects against reprisals / disciplinary actions.

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 to the*

*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 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

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.

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 is 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 on 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

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

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 a documented information on the OH&S objectives and the plan 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 programme. 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 human, natural, infrastructure e.g. buildings, plant, equipment, information technology, communication systems etc., technology, financial.

*Comparison to OHSAS 18001: No changes*

### 7.2 Competence

In order to make the OH&S management system work you have to identify the competences 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 the 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.

*Comparison to OHSAS 18001: The methodology how to communicate is much more structured. 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 the 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.

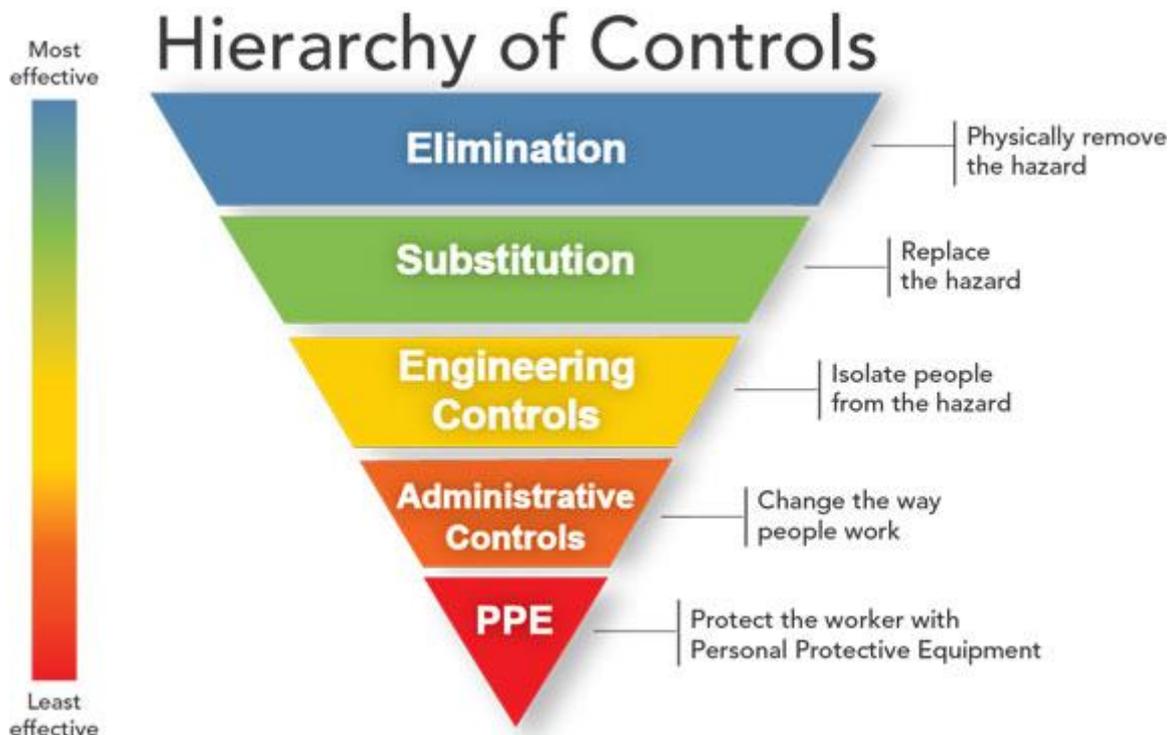
A.8.1.1 shows several examples of operational control of processes.

*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. The “hierarchy of control” shall be used (see picture below).

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.

*Comparison to OHSAS 18001: No changes*

#### 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 should verify if the contractor meets the requirements laid down in the contract and if the contractor and its workers is 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, potential effect of outsourced processes on the OH&S management system, extend 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 OH&S management system.*

#### 8.2 Emergency preparedness and response

The process shall include a planned response to emergency situations, training for 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 hierarchy of controls, management of change, outsourcing, 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 having 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 a 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.

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 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 managements 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 the 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 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, effectiveness of corrective actions is to be checked.

*Comparison to OHSAS 18001: Prior to taking actions related to the results of the incidents investigation 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 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 the Annex A.10.3.

*Comparison to OHSAS 18001: This is now a separate clause. There are new requirements and there is more emphasis on performance.*

## **Migration from OSHAS 18001:2007**

The International Accreditation Forum (IAF) has published the transition time table which is binding for all certification bodies and its customers.

Once ISO 45001:2018 has been published, the official status of OHSAS 18001:2007 will be considered as being "Withdrawn" taking into account a three-year migration period. The three-year transition period will start on the 12 of March 2018. All certificates to OHSAS 18001:2007 will expire after the 12 of March 2021.

Kiwa Teknologisk Institut Sertificering as, is accredited and may issue accredited certificates to ISO 45001:2018.

It is recommended that at least one additional audit day is needed for the transfer if the transfer takes place during a surveillance or recertification audit.

If you are currently holding a valid OSHAS 18001:2007 accredited certificate you may seek to Migrate the certification to ISO 45001:2018. Migration may be performed in conjuncture with at any planned audit or as a separate additional audit. The transfer will normally consist of an additional stage 1 audit. Please contact your Kiwa contact person to set up a specific migration plan.

### Initial certification and Re-certification after OHSAS 18001:2007

- The latest opportunity to achieve certification or renew current OHSAS 18001:2007 certificates is set to 12 of March 2020.

### Yearly surveillance audits;

- All audits after 12 of September 2020 will be performed after ISO 45001:2018.

If transition has not taken place prior to the end of the transition period, an initial certification process must be performed.

## How can we support you?

For those of you who have already implemented an occupational health and safety management system based on **OHSAS 18001 a gap analysis** will be helpful. The report will highlight the areas in which you have to adapt your existing system

For those who want to **start implementing** an occupational health and safety management system we can support you as follows:

- Pre-audit: we will audit your current systematic of organizing the occupational health and safety in your company. The report will give you information on what to do.
- General training for ISO 45001

For more information please contact us!

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