ISO/DIS 45001

Understanding the new international
standard for occupational health & safety

bsi.

The new international way to manage occupational health & safety

Every year, millions of workers are injured or lose their lives globally from work-related accidents and diseases. Organizations worldwide recognize the need to provide a safe and healthy working environment, reduce the likelihood of accidents and demonstrate they are actively managing risks. The new international standard for occupational health and safety will provide an internationally accepted framework that will help protect employees as well as protecting the longevity and health of an organization.

This guide has been designed to help you understand the requirements of the new international standard for Occupational Health & Safety Management Systems (OH&S), ISO/DIS 45001. It specifies the requirements, with guidance for its use for establishing, implementing, maintaining and continually improving an OH&S management system for any organization, regardless of size, activity or location.

So why the new international standard?

Every day across the globe, horrific statistics for health and safety incidents, accidents and their related costs are recorded. Although organizations tend to use generic health and safety guidelines or national and consortia standards, none of these demonstrate global conformity.

There was a worldwide need to harmonize health and safety management systems using an international standard and sharing best practices. This can be seen at local, national, regional and global levels — applying to both developing and developed countries. With an international standard to refer to, together with the right infrastructure and training, organizations will be able to address these risks better in future.

ISO/DIS 45001 has been written using the new ISO High Level Structure (HLS) for management system standards which:-

• Integrates with other management systems

• Provides an integrated approach to organizational management

• Reflects the increasingly complex environments in which organizations operate

• Enhance an organization's ability to address their health & safety risks.

1 worker dies every 15 seconds*

153 workers have an accident every 15 seconds*

2.3m deaths per annum*

317m accidents per annum*

NB. This guide is designed to be read in conjunction with the latest available version of ISO/DIS 45001—Occupational Health and Safety Management System — Requirements with guidance for use. It does not contain the complete content of the standard and should not be regarded as a primary source of reference in place of the standard itself.

* ILO statistics Jan 2016

What's in the new standard and what are the benefits for organizations?

ISO/DIS 45001 will be the world's first OH&S international standard which will help thousands of organizations to provide a safe and healthy workplace for their workers and other people, prevent deaths, work-related injury and ill-health and to continually improve its OH&S performance.

Organization's will improve their resilience by ensuring they can anticipate, prepare for, respond and adapt to changes so they survive and prosper.

With this standard you can:

- Ensure your health & safety management is aligned with the strategic direction of the organization
- Improve integration with other management system standards
- Increase involvement of the leadership team
- Improve occupational health and safety performance.

It's much less prescriptive than previous local health & safety standards and can be used as a more agile business improvement tool. This means you can make it more relevant to the requirements of your own organization.

ISO/DIS 45001 brings occupational health and safety management and continual improvement into the heart of an organization. This new standard is an opportunity for organizations to align their strategic direction with their OH&S management system. In addition, there is an increased focus on improving occupational health and safety performance and culture.

Our customers tell us they get **multiple benefits** as a result of implementing and adopting occupational health and safety management systems, such as:

- Reduce work related injuries, ill health and death.
- Eliminate or minimize OH&S risks.
- Demonstrate corporate responsibility and meet supply chain requirements.
- Protect brand reputation.
- Motivate and engage staff through consultation and participation.

Comparing the latest version of ISO/DIS 45001 with OHSAS 18001

ISO/DIS 45001 is based on Annex SL — the new ISO high level structure (HLS) that brings a common framework to all management systems. This helps to keep consistency, align different management system standards, offer matching sub-clauses against the top level structure and apply common language across all standards. With the new standard in place, organizations will find it easier to incorporate their OH&S management system into core business processes and get more involvement from senior management. The Plan-Do-Check-Act (PDCA) cycle can be applied to all processes and to the OH&S management system as a whole. The diagram here (Figure 1) illustrates how Clauses 4 to 10 can be grouped in relation to PDCA.
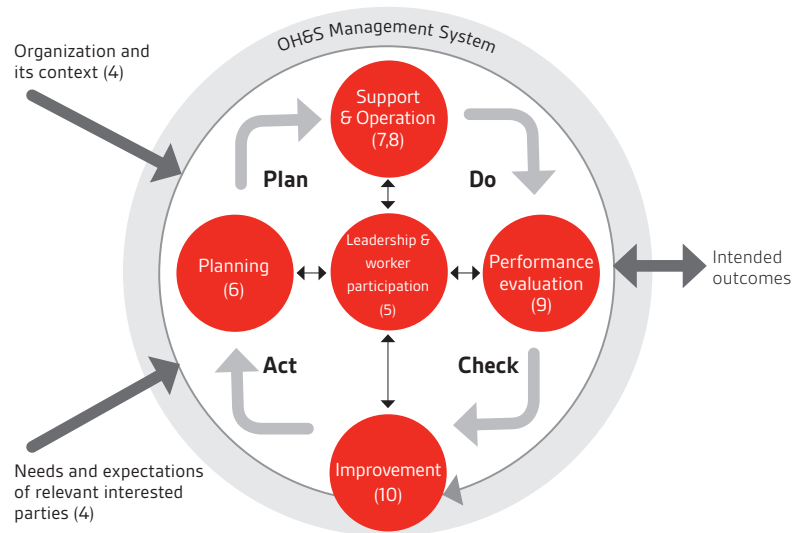
Figure 1

Overview of new and updated concepts in ISO/DIS 45001

New/updated concept	Comment
Context of the organization	Provides a greater understanding of the important issues that can affect, positively or negatively the way it manages its OH&S responsibilities.
Workers and other Interested parties	Much more detail about considering their needs and expectations, then deciding whether these need to be addressed within the system.
Leadership and culture	Requirements specific to top management with regards to demonstrating leadership, commitment and promoting a positive occupational health and safety culture.
Participation and consultation	Enhanced requirements with regard to worker involvement and consultation in relation to the establishment and implementation of the OH&S management system.
Risks and opportunities	Includes risks and opportunities relating to the management system as well as OH&S risks & OH&S opportunities.
Documented information	Replaces documents and records.
Operational planning and control	More detailed requirements in relation to multi-employer workplaces, hierarchy of controls, management of change, outsourcing, procurement and contractors.
Performance evaluation	Measurement of OH&S operations that can have an impact on legal requirements, operational controls, OH&S risks, opportunities & performance and progress towards objectives.
Evaluation of compliance	More detailed process requirements including maintaining knowledge and understanding of its status of compliance.
Management Review	More detailed requirements relating to inputs and outputs of the review.
Incident, non-conformity and corrective action	More detailed process requirements and preventive action now replaced by risk approach.

The key requirements of ISO/DIS 45001

Clause 1: Scope

This clause details the scope of the international standard, which specifies the requirements for an occupational health & safety management system (OH&S) with guidance for its use. It enables organizations to provide safe and healthy working conditions for the prevention of work-related injury and ill health and proactively improve its OH&S performance.

Clause 2: Normative references.

There are no normative references within the standard. The clause is retained in order to maintain the same numbering scheme as all the other ISO management system standards.

Clause 3: Terms and definitions

At first sight, the listing of terms and definitions seems confusing as they are not listed in alphabetical order. Instead the terms are listed relative to their conceptual importance (and thus where they occur in the standard).

Terms and definitions have been extended from 23 in OHSAS 18001 to 37 in ISO/DIS 45001 and provides further guidance and clarity to avoid misunderstanding. A number of new definitions have been added and some existing definitions revised including those relating to worker participation, consultation, OH&S risk, OH&S opportunity, OH&S performance and injury and ill health amongst others.

Clause 4: Context of the organization.

This clause establishes the context of the OH&S management system and underpins the rest of standard. It gives an organization the opportunity to identify and understand the external & internal factors and interested parties that affect the intended outcome(s) of the OH&S management system. It also in part addresses the concept of preventive action.

Firstly, the organization will need to identify external and internal issues that are relevant to its purpose i.e. what are the relevant issues, both inside and out, that have an impact on or affect its ability to achieve the intended outcome(s) of the OH&S management system.

It should be noted that the term 'issue' covers not only problems or potential problems, but also important topics for the system to address, such as changing circumstances, legal requirements and other obligations.

Secondly, an organization will need to identify and take into account the needs and expectations of the 'interested parties' relevant to their OH&S management system. This is far more prominent than in OHSAS 18001:2007 and includes its workers, as well as other people such as customers, owners, clients and visitors.

Next, the scope of the OH&S management system has to be determined taking the above into account. The scope is intended to clarify the boundaries to which the system will apply, especially if the organization is part of a larger organization.

Finally, the last requirement of Clause 4 is to establish, implement, maintain and continually improve the OH&S management system in accordance with the requirements of the standard.

Clause 5: Leadership and worker participation

This clause places requirements on 'top management' which is the person or group of people who directs and controls the organization at the highest level. Note that if the organization that is the subject of the OH&S management system is part of a larger organization, then the term 'top management' refers to the smaller organization. Top management must take overall responsibility and accountability for the protection of workers' work-related health and safety and need to develop, lead and promote a culture that supports the OH&S management system.

They must ensure that the requirements are integrated into the organization's processes and that the policy and objectives are compatible with the strategic direction of the organization. They also need to establish the OH&S policy and the standard defines the characteristics and properties that the policy is to include.

There is a greater focus on top management to demonstrate leadership and commitment to the management system and ensure active participation of workers in the development, planning, implementation and continual improvement of the OH&S management system. This includes using consultation and the identification and removal of obstacles or barriers to participation.

Top management need to ensure that the importance of effective OH&S management is communicated and understood by all parties and that the OH&S management system achieves its intended outcomes.

Also contained within this clause is the requirement to establish, implement and maintain an OH&S policy in consultation with workers at all levels. This must include commitments to provide safe and healthy working conditions, satisfying legal requirements, setting OH&S objectives and continual improvement.

Finally top management need to assign and communicate responsibilities, accountabilities and authorities for relevant roles within the system, including workers at each level within the organization assuming responsibility for those aspects of the OH&S management system over which they have control.

Clause 6: Planning

Planning has always been a familiar element in OH&S management, but now there is an increased focus on ensuring that it is considered with the outputs of Clause 4 'context of the organization'. Planning should be seen as an on-going process that anticipates changing circumstances.

The first part covers the identification of risks and opportunities that need to be addressed to ensure the system can achieve its intended outcomes, prevent or reduce undesired effects and continually improve.

The identification and assessment of hazards is key and should include routine and non-routine activities amongst others as well as workers, contractors, visitors and others not under the direct control of the organization.

A process needs to be established and maintained to assess the risks and opportunities identified and how they should be proactively managed in a systematic manner.

The standard requires organizations to establish a process to determine and update legal and other requirements which are applicable to its hazards and OH&S risks.

Another key element is the need to establish OH&S objectives which are measurable or at least capable of evaluation. OH&S objectives need to maintain and continually improve the OH&S management system.

The clause also addresses planning of changes which must be done in a planned and systematic manner. There is a need to identify the potential consequences of changes as these can present both risks to workers and opportunities to improve performance.

Clause 7: Support

This clause begins with a requirement that organizations shall determine and provide the necessary resources to establish, implement, maintain and continually improve the OH&S management system. These cover human resources, natural resources, infrastructure and financial resources. Simply expressed, this is a very powerful requirement covering all OH&S resource needs.

Organizations will need to determine the necessary competence of workers that affect or can affect OH&S performance and ensure they receive the appropriate education and training. Within this clause there is a requirement to retain documented information as evidence of competence.

In addition, organizations need to ensure that all workers are aware of the OH&S policy, the OH&S hazards and risks that are relevant and their contribution to the effectiveness of the system and the implications of not conforming to it.

Organizations also need to determine internal and external information and communications relevant to the OH&S management system.

Finally, 'documented information' is a new term that replaces the references in OHSAS 18001 to 'documents' and 'records'. This includes the creation and updating of documented information and their control. The requirements are similar to those in OHSAS 18001 for the control of documents and records.

Clause 8: Operation

This clause deals with the execution of the plans and processes that are the subject of previous clauses. Operational planning and controls should be established to meet the requirements of the OH&S management system including controls to reduce OH&S risks to levels as low as reasonable practical.

Operational controls can use a variety of methods, for example, the introduction of method statements or safe systems of work, preventative maintenance regimes, inspection programmes and regular reviews on the competency of workers.

Controls can combine several steps such as hazard elimination, replacing the dangerous with non-dangerous, implementing protective measures or providing and ensuring use of personal protective equipment.

Change needs to be planned for in a systematic manner, ensuring they do not introduce new or unforeseen hazards or risks. At the same time, organizations should use the process to identify OH&S opportunities to reduce risks.

Procurement and outsourcing controls are required to ensure that outsourced processes affected are controlled and to evaluate and control procurement of goods before their introduction.

Contractors also need to be considered as they can involve different types and levels of OH&S risks. An organization can use a variety of tools for managing contractors' health and safety performance, including pre-qualification criteria and assessment. The organization must ensure that the requirements of its OH&S management system are met by its contractors and their workers and this needs to include OH&S criteria for selection of contractors.

Arrangements with regards to emergency preparedness and response are also a feature of this clause.

Clause 9: Performance evaluation

Performance evaluation covers many of the areas previously featured in Clauses 4.5 and 4.6 in OHSAS 18001.

Organizations will need to determine what information they need to evaluate OH&S performance and effectiveness. Working backwards from this 'information need' will help to identify what specifically needs to be measured and monitored, when, by who and how.

The frequency of monitoring and measuring should be appropriate to the size and nature of the organization, its OH&S performance and with regard to changes in OH&S risk. Documented information that provides evidence of this must be retained.

Clause 10: Improvement

Due to the new structure and risk focus of the standard, there are no preventive action requirements in this clause. However, there are some new more detailed corrective action requirements.

The first is to react to incidents or nonconformities and take action in a timely manner, to control and correct these and deal with the consequences. Root cause analysis can be used to explore all possible factors associated with an incident or nonconformity by asking what happened and why it happened.

The second is to determine whether similar incidents or nonconformities exist, or could potentially occur, leading to appropriate corrective actions across the whole organization if necessary. Although the concept of preventive action has evolved there is still a need to consider potential nonconformities, albeit as a consequence of an actual nonconformity.

The requirement for continual improvement has been extended to continually improve the suitability and adequacy of the OH&S management system as well as its effectiveness through continual improvement objectives.

The standard has brought about some changes in terminology which is shown below:

organization	Person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives
interested party	Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity
worker	Person performing work or work-related activities under the control of the organization
participation	Involvement of workers in decision-making processes(es) in the OH&S management system
consultation	Process by which the organization seeks the views of the workers before it makes a decision
workplace	Place under the control of the organization where a person needs to be or go by reason of work
Injury and ill health	Adverse effect on the physical, mental or cognitive condition of a person
hazard	Source or situation with potential to cause injury and ill health
risk	Effect of uncertainty
OH&S risk	Combination of the likelihood of occurrence of a work-related hazardous event or exposure(s) and the severity of injury and ill health that can be caused by the event or exposures
OH&S opportunity	Circumstances or set of circumstances that can lead to improvement of OH&S performance
OH&S performance	Performance related to the effectiveness of the prevention of injury and ill health to workers and the provision of safe and healthy workplaces
incident	Occurrence(s) arising out of or in the course of work that could or does result in injury and ill health

Documented Information

The requirements for documented information are spread throughout the standard, in summary they are:

4.3	Scope of the OH&S management system.
5.2	OH&S Policy.
5.3	Organizational roles, responsibilities, accountabilities and authorities.
6.1.1	OH&S risks and OH&S opportunities that need to be addressed, and the processes needed to address them to the extent necessary to have confidence that the processes have been carried out as planned.
6.1.2.2	Methodologies and criteria for the assessment of OH&S risks.
6.1.3	Applicable legal requirements and other requirements.
6.2.2	OH&S objectives and plans to achieve them.
7.2	Evidence of competence.
7.4	Evidence of relevant communications.
7.5.1	Documented information required by the International Standard as well as documented information, determined by the organization, as being required for the effectiveness of the OH&S management system.
7.5.3	Documented information of external origin determined by the organization to be necessary for the planning and operation of the OH&S management system.
8.1.1	Documented information to the extent necessary to have confidence that the processes have been carried out as planned and in relation to any situations where the absence of such could lead to deviations from the OH&S policy and OH&S objectives.
8.6	Process and plans for responding to potential emergency situations.
9.1.1	Evidence of monitoring, measurement, analysis and evaluation results.
9.1.2	Evidence of compliance evaluation results.
9.2.2	Evidence of the implementation of the audit programme and the audit results.
9.3	Evidence of the results of the management reviews.
10.1	Information of the nature of the incidents or nonconformities and any subsequent actions taken, and the results of any corrective action taken including their effectiveness.
10.2	Evidence of the results of continual improvement.

Preparing for ISO 45001

The final version of ISO 45001 is currently expected in Q4 2016, it is envisaged that upon its publication, OHSAS 18001 will be withdrawn and there will be a three year period of migration allowed for organizations already certified to OHSAS 18001.

The new standard is a great opportunity to review your existing health & safety system and policy, what should you do now?

1. Take a completely fresh look at the OH&S management system
2. Attend our suite of training courses to understand the new standard in more detail
3. Highlight the key changes as opportunities for improvements
4. Make changes to your documented system to reflect the new requirements (as necessary)
5. Understand and implement the new requirements on context, leadership, risk, participation and OH&S culture
6. Review effectiveness of current control set and make changes as necessary.

Your Journey

BSI has identified a step-by-step journey to help you understand and realize the benefits of ISO 45001. We have mapped out a framework which guides you through the options and support available from BSI to ensure you have the knowledge and information you require.

1. **Buy a copy of the Draft International Standard (DIS) and/or the International Standard on publication.** This will help you become familiar with the new requirements, terminology and layout

2. **Visit the BSI website to access the most up-to-date support material available at bsigroup.com** including whitepapers which can help you understand the changes

3. **Look at the range of BSI training courses** available to make sure you fully understand the changes including migration and implementing courses.

4. **Download our Implementation Toolkit** developed to help you understand, implement and communicate the new ISO 45001 requirements throughout your organization

5. **Consider further services to help implement the changes.** BSI will offer a full range of services including GAP assessments and Entropy software to help you manage your systems.

Training from BSI

Whatever the specific requirement, BSI has designed a series of training courses that can meet your needs. It's worth noting that all BSI courses have been designed by experts in their fields who have been directly involved in the development of ISO/DIS 45001.

Our experienced tutors can help you get to grips with the matters that concern you and your organization directly, whether delivered in-house or as part of an open course where other delegates can share their experience.

These courses include:

ISO/DIS 45001: Migration

1 day classroom based training course

- Learn about the new ISO high level structure and the requirements of ISO 45001

- Essential for anyone involved with migrating their OH&S management system from OHSAS 18001 to ISO 45001 from managers to implementers and auditors.

ISO/DIS 45001: Implementing Changes

1 day classroom based training course

- Learn about the new ISO high level structure and the requirements of ISO 45001

- Essential for anyone involved with implementing an OH&S management system for the first time from managers to implementers and auditors

- Ideal for those who have already attended one of our new high level structure courses including transition courses for ISO 9001 and ISO 14001.

Whitepapers

There are a variety of materials which can be accessed on line at www bsigroup.com and consists of:

- The importance of leadership: understanding the importance of leadership
- Introducing Annex SL: Understand the new high level structure all new and revised management system standards going forward.

Additional services

We also have a wide range of services to help you to implement the changes and understand how well you are doing. These include:

Gap assessment

A pre-assessment service where we take a closer look at your implementation plan and OH&S management system comparing it with the requirements of ISO/DIS 45001. As a first step in your journey with BSI, the gap assessment can help confirm the areas of your system already compliant and any gaps in your system, saving you time and money.

Business improvement tools

When you implement a standard it's extremely important to manage and maintain it in the most efficient manner possible. Best practice organizations do this by deploying business improvement tools such as BSI Action Manager or Entropy software, as one of our clients told us, 'it's literally like having an extra member of the team'. Clients have experienced 50% reduction in the time to implement their management system.

Also available - mapping guide which provides an overview of the changes, deletions, new and enhanced requirements between ISO/DIS 45001 and OHSAS 18001

Why BSI?

BSI has been at the forefront of the development of ISO 45001, from the start; BSI proposed its development and has run the international secretariat supporting the project committee which is developing the standard. Its origins are based on OHSAS 18001, the world renowned health & safety management system which was developed by BSI in 1999. That's why we're best placed to help you understand the new standard.

At BSI we create excellence by driving the success of our clients through standards. We enable others to perform better, manage risk and achieve sustainable growth. For over a century our experts have been challenging mediocrity and complacency to help embed excellence into the way people and products work. We make excellence a habit.

Our products and services

We provide a unique combination of complementary products and services, managed through our three business streams; Knowledge, Assurance and Compliance.

Knowledge

BSI works with business experts, government bodies, trade associations and consumer groups to capture best practice and structure the knowledge all organizations need to succeed. The majority of the widely used and implemented international standards were originally shaped by BSI, for example ISO 9001 – Quality Management and ISO 14001 – Environmental Management.

Assurance

Independent assessment of the conformity of a process or product to a particular standard ensures that our clients perform to a high level of excellence. We help our clients understand how they are performing, thereby identifying areas of improvement from within.

Compliance

To experience real, long-term benefits, our clients need to ensure on-going compliance to a standard so that it becomes an embedded habit. We train our clients to understand standards and how to implement them, as well as provide added value and differentiated management tools to facilitate the process of on-going compliance.

To find out more
visit: **bsigroup.com**