

THE NEW HEALTH AND SAFETY STANDARD ISO 45001:2016 AND ITS PLANNED CHANGES

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Abstract: *Many organization seek how to implement and certify multiple management system standards (MMS). To easily integrate these management system standards, the ISO Technical Management Board (TMB) has produced Annex SL that describes the framework for the generic management systems. According to this Annex SL, all new or revise standards will have the High-level structure. New ISO 45001 Standard will have this HLS structure and its publication is expected at the end of 2016. This paper shows differences in the structure the present OHSAS 18001:2007 Standard and the future new ISO 45001:2016 Standard and gives the view of preparing works associated with the publication of this standard.*

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1 INTRODUCTION

In the field of increasing health and safety legislation and liabilities, organizations of all sizes and industry sectors are now looking the framework at management systems for improving the health and safety performance.

OHSAS 18001 is the right choice for identifying and managing occupational health and safety risks and hazards. It is International Standard that sets out the requirements for occupational health and safety framework. It can be adapted to all types of organizations to help them to eliminate or minimize operational risks and hazards. On the basis of this standard the organizations can create the best possible working conditions that help to meet legal, industry and customer requirements.

2 HISTORY

Already long time ago, people discovered that any work and working tools bring a variety of dangers of accidents and therefore they have been looking for ways how to prevent the injuries. Step by step the security measures were creating with the complexity and the division of labour. The development of the manufactures and the industrial revolution brought new problems relating to safety at work and technical equipment. People worked several hours a day, including children. When the employee had the injury, it was only his/her matter. They were dismissed from work without any right. In the middle of the 19th century the industrial states began to protect the employees through the laws and determined to ensure the safety at work for employers. Great War destroyed the first attempts at international agreements to prevent the injuries.

In 1919 International Labour Organization (ILO) was formed in order in order to create the international principles for the protection of labour, implement them into national laws of the Member States and to manage their application. So far, about 190 conventions were adopted for the protection of labour and many of them also relate to safety at work. In 1989 Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work was adopted. This directive defined the principles of the prevention, framework responsibilities of employers and employees. The implementing directives followed this directive and determined the Occupation Health and Safety (OSH) requirements of workers, working conditions and working environment with a focus on work equipment, protective equipment, manipulation with loads, work with screens, asbestos, chemical substances and so on.

The area of OSH was complicated and therefore the effective health and safety management system was issued. In addition to health and safety of employees and other persons concerned, this management system ensured the safety of manufacturing facilities as well. The publication of OHSAS 18001:1999 was very important.

3 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

OHSAS 18001 is a British Standard for occupational health and safety management system (OHSMS). The system allows effectively manage the risks and hazards to health and safety at work (OSH). It includes the organization structure, planning activities, responsibilities, practices, directives, processes and resources to design, implement, maintain and review

the system and policy of the organization. A number of the standards, specifications and manuals were issued for this system. All are based on the Deming PDCA cycle of continuous improvement and the process approach.

OHSAS 18001:2007	
0.	Introduction
1.	Scope
2.	Normative references
3.	Terms and definitions
4.	OH&S management systems elements
4.1	General requirements
4.2	OH&S Policy
4.3	Planning
4.3.1	Hazard identification, risk assessment and determining controls
4.3.2	Legal & other requirements
4.3.3	Objectives and programmes
4.4	Implementation and operations
4.4.1	Resources, roles, responsibility, accountability and authority
4.4.2	Competence, training and awareness
4.4.3	Communication, participation and consultation
4.4.3.1	Communication
4.4.3.2	Participation and consultations
4.4.4	Documentation
4.4.5	Control of documents
4.4.6	Operational control
4.4.7	Emergency preparedness and response
4.5	Checking
4.5.1	Performance measurement and monitoring
4.5.2	Evaluation of compliance
4.5.3	Incident investigation, non-conformity, corrective action and preventive action
4.5.3.1	Incident investigation
4.5.3.2	Nonconformity, corrective and preventive action
4.5.4	Control of records
4.5.5	Internal audit
4.6	Management review
Annex A (normative) control objectives and controls	
Annex B (normative) OECD principles and this International Standard	
Annex C 9001:2008, ISO 14001:2004 and this International Standard	

Fig. 1 Structure of OHSAS 18001:2007 Standard

In 2007 OHSAS 18001:1999 passed by revision. The present structure of this standard is shown in Fig. 1.

Nowadays this standard is under revision, too (see Fig. 3).

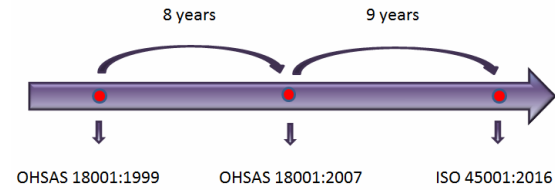


Fig. 2 History of OHSAS 18001 revisions

This management system has a lot of benefits, for example Reduced incident and accident rates, Improved performance monitoring and accident reporting, Better control of OH&S risks, Decrease in overall costs of accidents, Decrease in insurance premiums, Improved levels of compliance to health and safety legislation, Reduced likelihood of fines and prosecutions, which in turn can lead to less HSE or local regulator visits and lower insurance premiums, providing financial benefit, Improved reputation and stakeholder satisfaction – positively presenting the organization for tenders and investment opportunities, A competitive advantage to grow the business, Reduced absenteeism and improved employee morale, leading to increased productivity, Greater involvement and commitment from employees and the management team, resulting in improved health and safety culture, Improved communication and training.

The statistics show 2,2 million workers lose their lives globally every year due to work-related accidents and diseases, 4 % of the world's GNP is lost due to work-related accidents and diseases, and 6 300 workers die every day as a result of occupational accidents or work-related diseases. These statistics prove that there is the immediate need for organizations globally to improve their health and safety management systems. A lot of consumers and customers expect that the organizations will be ethical in every aspect of their business, including the way, how they will treat their employees. ISO 45001:2016 should be the management system standard for a global change.

4 ANNEX SL AND ITS APPENDIX 1

The new management system standard (MSS) or the revision of the existing standard has to be carried out in accordance with Appendix 1 of Annex SL – Proposals for management system standards (ISO/IEC 2012).

All proposals of the management system standards and their justification study have to be identified by the relevant TC (Technical committee)/SC/PC (Project committee) leadership and send to the ISO/TMB for the evaluation before the NWI ballot take place.

The outcome of the work of ISO/TMB (Technical Management Board) /JTCG (Joint technical Coordination Group on MSS) has to have the identical clauses and sub-clauses titles, identical text and common terms and core definitions.

All new or revised projects have to undergo a justification study. The justification criteria questions in Appendix 1 of Annex SL are based on the following principles:

1. Market relevance – any management system standard has to meet the needs of the primary users and other affected parties, and add value for the primary users and other affected parties.
2. Compatibility – between various management system standards and within the family of MSS have to be maintained.
3. Topic coverage – MSS has to have the sufficient application coverage to eliminate or minimize the need for sector specific variances.
4. Flexibility –MSS has to be applicable to the organizations in all relevant sectors, cultures and every size.
5. Free trade – MSS has to permit the free trade of goods and services included in the WTO Agreement on Technical Barriers to Trade.
6. Applicability of conformity assessment
7. Exclusions – MSS should not include directly related product, specifications, test methods, performance levels and other forms of standardizations.
8. Ease of use – MSS should be ensured that the user can easily implement one or more MSS.

5 NEW ISO 45001:2016 STANDARD

The new ISO 45001 Standard on Occupational health and safety management system is being creating by Project Committee ISO/PC 283 that was established in June 2013 by the ISO Technical Management Board (ISO/TMB) following a review of the results of the new work item proposal (NWIP) ballot. The Secretarial was assigned to the British Standards Institution (BSI) with David Smith from UK as Chairman, and Charles Corrie as the Secretary. The first meeting of the committee ISO/PC 283 was in October 2013 at the Holiday Inn Hotel, Brentford Lock London. 83 delegates from 27 Member bodies and 5 Liaison members attended that meeting. They decided that the future standard would carry the number ISO 45001, because the number 18001 has already been assigned to a different standard.

The purpose of that meeting was to review the comments received on the revise draft and to produce the first Working Draft (WD1).

At first PC had to establish the Organization sub-structure to manage its work. It was the reason why Working Group 1 was established with Kristian Glaesel from Denmark as the Convener and Karin Bagge from Sweden as Secretary.

PC held Open Forum session after the opening plenary meeting to consider some key issues (such as

risk, people, workplace and so on) in order to allow participants to contribute to the discussions. PC examined the timeline for the development of ISO 45001:2016 Standard and determined the target date for publication in October 2016. The development of this management system standard will be kept as “live” document that will be allowed to evolve as necessary instead of fixing it.

The first working draft WD1 was produced in December 2013. The comments on the first working draft will be reviewing at March 31 – April 4. on PC Meeting regarding the development Committee Draft 1 (CD1) in Cassablanca (Morocco). In May 2015 the CD1 should be published. The first Draft International standard should be published by February 2015 (DIS), the first Draft International Standard (FDIS) should be published by March 2016 and Final ISO 45001 Standard should be published in October 2016 (see Fig. 3).

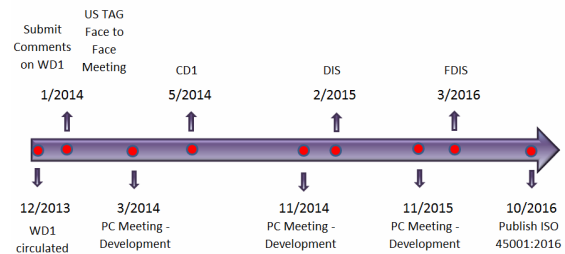


Fig. 3 Plan of ISO 45001 publication

In January 2014 was the first face-to-face meeting of the United States Technical Advisory Group (US TAG) in Washington DC. The purpose of this meeting was to review the recently released first Working Draft (WD1) of future ISO 45001 Occupational Health and Safety Standard and effort to find consensus among the members of the United States Technical Advisory Group in respect of US position on important technical issues. What requirements should standard include and what information should be presented in the Annex A as guidance was discussed.

New standard will have High-Level Structure (HLS) according to ISO Annex SL (previously ISO Guide 83). It means that the standard will have the common format for all new and revised ISO management standards. The structure of this standard should be the same as is shown in Fig. 4. This structure will be supplemented by other sub-clauses or sub-sub-clauses from the Occupational health and safety area.

New standard ISO 45001 should support new areas of management systems to ensure better compatibility and systems governance, making the implementation within the organization a lot smoother. The published standard will apply to any organization wishing to establish and implement the internationally health and safety management system to reduce or minimize risks to personnel and other relevant parties, maintain and constantly improve their health and safety performance, and keep all operations in line

with their stated health and safety policies to the internationally recognized standard.

ISO 45001:2016	
0.	Introduction
1.	Scope
2.	Normative references
3.	Terms and definitions
4.	Context of the organization
4.1	Understanding the organization and its context
4.2	Understanding the needs and expectations of interested parties
4.3	Determining the scope of OH&S management system
4.4	OH&S management system
5.	Leadership
5.1	Leadership and commitment
5.2	OH&S Policy
5.3	Organization roles, responsibilities and authorities
6.	Planning
6.1	Actions to address risks and opportunities
6.2	OH&S objectives and planning to achieve them
7.	Support
7.1	Resources
7.2	Competence
7.3	Awareness
7.4	Communication
7.5	Documented information
7.5.1	General
7.5.2	Creating and updating
7.5.3	Control of documented information
8.	Operation
8.1	Operational planning and control
9.	Performance evaluation
9.1	Monitoring, measuring, analysis and evaluation
9.2	Internal audit
9.3	Management review
10.	Improvement
10.1	Nonconformity and corrective action
10.2	Continual improvement

Annex A (normative) Reference control objectives and controls

Fig. 4 Structure of ISO 45001:2016 Standard

The WD (Working Draft) currently requires the hierarchy of control in clause 8.1.2 of the standard. A lot of OH&S professionals are familiar with this hierarchy of control. It prefers elimination of the hazard as the best choice for controlling OH&S risk. The current WD1 (Working Draft 1) states the following: “When determining prevention and control measures, or considering changes to existing controls, consideration shall be given to reducing the risks according to the following hierarchy:

- a) Eliminate the hazard,
- b) Substitution with less hazardous materials, processes, operations or equipment,
- c) Use engineering controls,
- d) Signage/warnings,
- e) Administrative controls,
- f) Personal protective equipment.

These steps are very similar to those steps that are listed in the American National Standard Institute, ANSI Z10, the clause 5.1.2. The clause 4.3.1 of OHSAS 18001 has the similar requirements that are listed in 5 steps.

ISO 45001 Project Committee (PC) will be able to avoid protracted discussions and negotiations over the content of the requirement section of the standard, which in turn will help the PC meet the tight deadline (3 years) for publication of the standard.

6 CONCLUSION

Analysis of the first draft of the ISO 45001 Health and Safety Management shows that it can make a significant contribution to solving the issues in the integrated management system of the organization in conjunction with the standards ISO 9001:2015 and ISO 14001:2015. HLS unified structure and layout of the key elements of OH & S management into 10 chapters, like the Quality Management System according to ISO 9001:2015 and Environmental Management according to ISO 14001:2015 creates all the prerequisites for standardized construction and operation of integrated management systems (IMS) in organizations of different types and species. In support of these efforts will probably also address comments of a prepared draft ISO 45001. Only joint efforts of professionals – managers of quality, environment, health and safety can result in the standard with synergistic effect for organizations.

REFERENCES

- [1] Annex SL (normative). Proposals for management system standards. ISO/IEC 2012. Available on Internet: <<http://www.unit.org.uy/misc/AnexoSL.pdf>>.
- [2] Antaris Consulting: ISO 45001: The new Health and Safety Standard. Available on Internet: <<http://antarisconsulting.wordpress.com/2014/01/16/ohsas-18001-to-become-iso-45001-2016/>>.
- [3] BSI OHSAS 18001:2007.

- [4] BSI: ISO 45001 WhitePaper. A new International Standard for Occupational Health and Safety Management Systems. Approaching change. Available on Internet: <<http://www.bsigroup.com/LocalFiles/en-GB/iso-45001/Resources/BSI-ISO45001-Revision-Whitepaper-EN-UK.pdf>>.
- [5] BSI: We spend 250000 hours a year improving the performance of UK businesses. BS OHSAS 18001. Available on Internet: <<http://www.bsigroup.com/LocalFiles/en-SG/ISO%2014001%20SG/ISO%2014001%20benefits%20and%20features%20SG.pdf>>.
- [6] Document of LRQA: Plánované zmeny pohľadom rediteľa LRQA. 2013.
- [7] Document of LRQA: Významné pokroky v revízi standard: ISO 45001 (BOZP, drive OHSAS 18001) a ISO 14001 (publikován CD2). 2013.
- [8] FOUCHÉ CH.: ISO 45001: The new Health and Safety Management Standard. Available on Internet: <<http://sheqafrika.com/iso45001-health-safety/>>.
- [9] KLEINOVÁ, R.: Integrácia štandardizovaných manažérskych systémov v podniku. Písomná práca k dizertačnej skúške. HF TUKE, 2013.
- [10] MAJERNÍK, M., KLEINOVÁ, R., SZARYSZOVÁ, P.: News in the Proposal of International Standard CD ISO 9001:2015 for Quality Management System. In *Podniková revue*. Košice : Faculty of Business Economics in Košice (UE in Bratislava). ISSN 1335-9746, 2013, roč. 12, č. 29, s. 29-46.
- [11] MAJERNÍK, M., KLEINOVÁ, R., SZARYSZOVÁ, P.: Comparison of current and revised Standard ISO 14001:2015 for Implementation of Environmental Management. In *Podniková revue*. Košice : Faculty of Business Economics in Košice (UE in Bratislava). ISSN 1335-9746, 2013, roč. 12, č. 30, s. 16-29.

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