



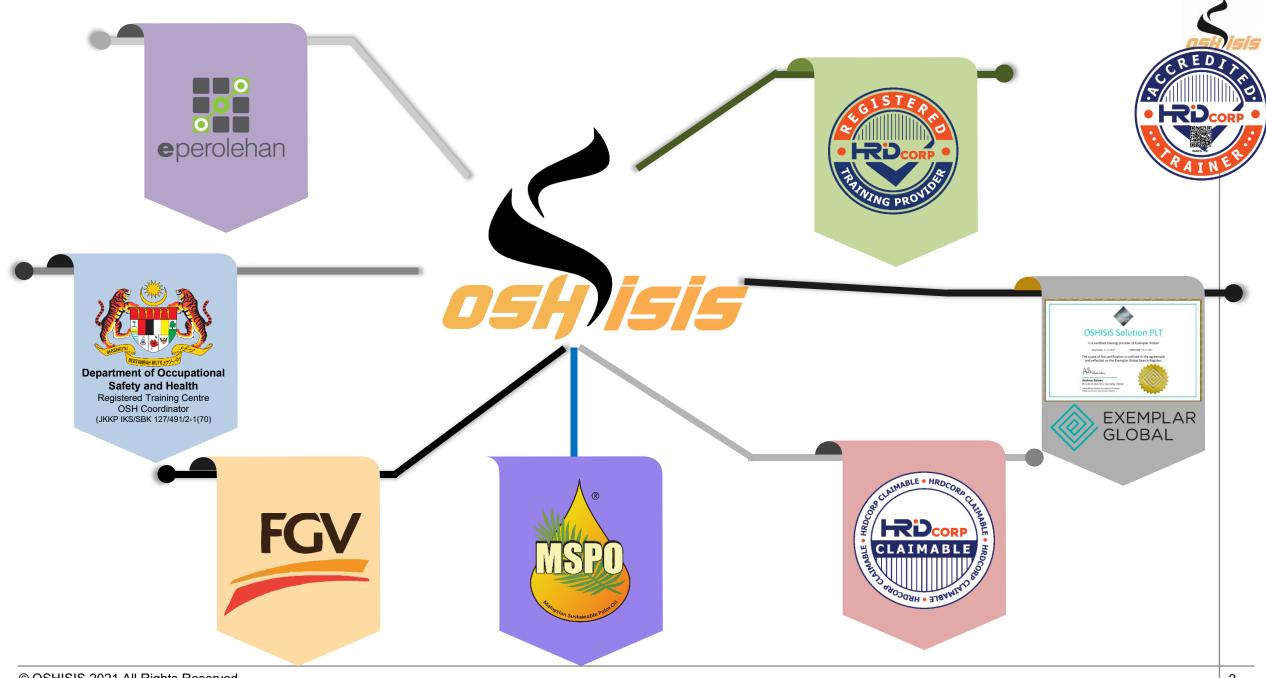
ISO 45001:2018 Lead Auditor Training Course

Gain Recognized Certification

Be officially certified as an ISO 45001:2018 Lead Auditor under the Exemplar Global RTP framework.



RTP Certified Training



Garis Panduan Kursus SBL-Khas Senarai kehadiran pelatih yang mempunyai clock-in dan clock-out semasa latihan dijalankan bagi kelas vitual (bertanda tangan jika kelas fizikal). Gambar semasa latihan dijalankan. (4 keping - gambar penuh, depan, belakang, Ϊij sisi kanan dan kiri bagi latihan fizikal manakala kelas virtual tidak perlu) Screenshot log-in pelatih iaitu mempunyai wajah dan nama asal peserta (Hanya iii

untuk program secara virtual).

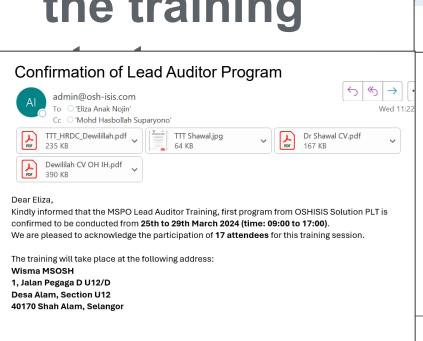
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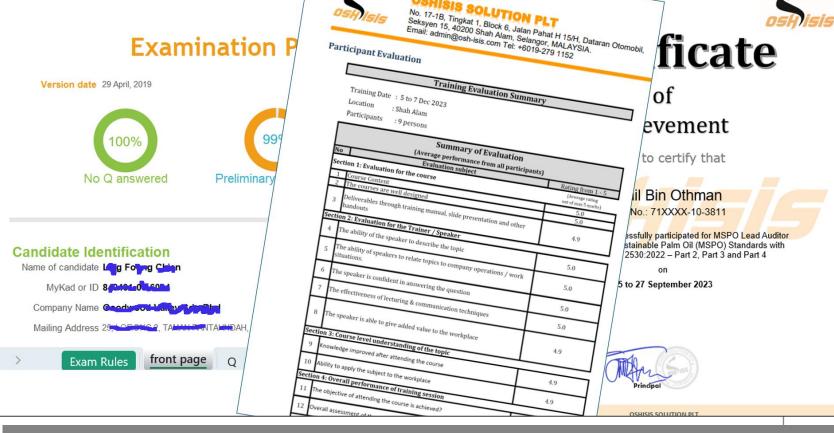




Pre-Training

Notification to Exemplar Global 14 days before the training





Post-Training: Report Submission to Exemplar Global

- Assessment result
- Summary of training evaluation or feedback by the participants
- Recommendation for awarding the certificate of achievement (Passed)

ISO 45001:2018 Lead Auditor Training Course



Recognized Training Provider (ETP) shall design its module with the following requirements as minimum

ISO 14064-1:2018

INTERNATIONAL STANDARD

ISO 45001

> First edition 2018-03

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

Systèmes de management de la santé et de la sécurité au travail — Exigences et lignes directrices pour leur utilisation ISO 19011:2018

INTERNATIONAL STANDARD

ISO 19011

> Third edition 2018-07

Guidelines for auditing management systems

Lignes directrices pour l'audit des systèmes de management

ISO/IEC 17021-1

INTERNATIONAL STANDARD ISO/IEC 17021-1

> First edition 2015-06-15



Case studies

Conformity assessment —
Requirements for bodies
providing audit and certification of
management systems —

Part 1:

Requirements





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Focus Area

ISO 45001:2018 Lead Auditor Training Course



Objective of Training:

- 1. To provide participants with a comprehensive understanding of Occupational Health & Safety Management Systems (OH&S MS), including the structure, key requirements, and benefits of ISO 45001.
- 2. To develop participants' skills in planning, conducting, and reporting OH&S MS audits using appropriate audit techniques.
- 3. To enhance participants' leadership and management capabilities in the context of OH&S MS audits, including roles of lead auditors, team coordination, and effective communication.
- 4. To equip participants with the ability to assess compliance with OH&S standards and identify opportunities for continual improvement.







Day 1:
Foundation,
Integration &
System
Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Welcome and Course Overview

Introduction to the course structure and objectives.

Module 1: Introduction to Occupational Health & Safety (OH&S) Management

Learning Outcome

- Explain the key concepts and scope of Occupational Health and Safety Management Systems (OH&S MS), including ISO 45001:2018.
- Describe the structure, fundamental principles, and benefits of implementing ISO 45001:2018 in an organization.
- Apply the PDCA (Plan-Do-Check-Act) cycle to understand how continual improvement is integrated into OH&S management practices.





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Day 1:
Foundation,
Integration &
System
Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Topic Discussed

- Overview of Occupational Health and Safety
- ❖ Introduction to ISO 45001:2018
- Fundamental Concepts and Scope of ISO 45001
- ❖ Importance and Benefits of OH&S Management Systems
- Understanding the ISO 45001:2018 Standard Structure
- The PDCA (Plan-Do-Check-Act) Cycle





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Day 1: Foundation, Integration & System Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 2: ISO 45001:2018 Standard Requirements in Detail

Learning Outcome

- Interpret and explain the clause-by-clause requirements of ISO 45001:2018, including Clauses 4 to 10 and their corresponding Annex references.
- Demonstrate understanding of key elements such as organizational context, leadership, planning, support, operations, performance evaluation, and continual improvement in the OH&S management system.
- Apply ISO 45001:2018 requirements to assess and improve occupational health and safety performance in an organizational context.





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Day 1:
Foundation,
Integration &
System
Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Topic Discussed

- Clause-by-Clause Explanation of ISO 45001:2018 Requirements
 - ✓ Clause 4: Context of the Organization + Annex A.4
 - ✓ Clause 5: Leadership and Worker Participation + Annex A.5
 - ✓ Clause 6: Planning (Hazard Identification, Risk & Opportunity Assessment) + Annex A.6
 - ✓ Clause 7: Support + Annex A.7
 - ✓ Clause 8: Operation + Annex A.8
 - ✓ Clause 9: Performance Evaluation + Annex A.9
 - ✓ Clause 10: Improvement + Annex A.10





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Day 1:
Foundation,
Integration &
System
Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 3: Integrating Leadership, Support, and Performance for OH&S Improvement (Clauses 4–10) Learning Outcome

- Describe how Clauses 4 to 10 of ISO 45001 interrelate to support OH&S improvement.
- Apply risk planning and operational control strategies in line with ISO 45001.
- Demonstrate how leadership, support, and performance evaluation contribute to a resilient OH&S management system.

Topic discussed

- Understanding Clause 4 & 6 of ISO 45001: Context, Interested Parties, and OH&S Risks and Opportunities
- Bridging Risk Planning and Operational Control in ISO 45001







Day 1:
Foundation,
Integration &
System
Understanding

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 3: Integrating Leadership, Support, and Performance for OH&S Improvement (Clauses 4–10)

Topic discussed

- From Leadership to Results: How ISO 45001 Clauses 5, 7 & 9 Interconnect to Drive OH&S Performance
- Leadership to Improvement for a Resilient OH&S Management System





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Day 2: Risk, Compliance & Legal Alignment

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 4: OH&S Risk Management and Legal Compliance

Learning Outcome

- Apply risk assessment methodologies and hazard identification techniques to manage OH&S risks effectively.
- Implement appropriate risk control measures in accordance with OH&S management principles.
- Demonstrate understanding of key legal requirements under OSHA, including workplace compliance, permits, roles, and classification of incidents.





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Day 2: Risk, Compliance & Legal Alignment

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 4: OH&S Risk Management and Legal Compliance

Topic discussed

- Risk and Opportunities
 - ➤ OSH Risk Assessment Methodologies
 - ➤ Hazard Identification & Risk Control Measures
- Legal Compliance and OSH Requirements
 - > OSHA Enabler
 - Workplace Compliance
 - ➤ Legal Permits, Licenses & Certificates
 - ➤ OSH Competency & Roles
 - Workplace Accidents & Incidents Classification
 - Draft Laws under OSHA





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Day 3: Audit Principles, Planning & Execution

ISO 45001:2018 Lead Auditor Training Course



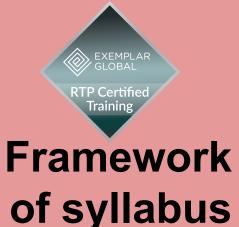
Training Module:

Module 5: Auditing Principles and ISO 19011:2018 Guidelines

Learning Outcome

- Demonstrate the knowledge, skills, and attributes required for effective OH&S auditing based on ISO 19011:2018 guidelines.
- Plan, implement, and manage an OH&S audit programme, including audit scheduling and resource coordination.
- Apply auditing principles and techniques to conduct, monitor, and review audits in line with ISO 19011 best practices.







Day 3: Audit Principles, Planning & Execution

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 5: Auditing Principles and ISO 19011:2018 Guidelines

Topic discussed

- Auditor Competence Knowledge, Skills, and Attributes for Effective OH&S Auditing
- Principles of Auditing
- Managing an Audit Program
- Planning an Audit Programme
- Implementing the Audit Programme
- Monitoring & Review





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Day 3: Audit Principles, Planning & Execution

ISO 45001:2018 Lead Auditor Training Course



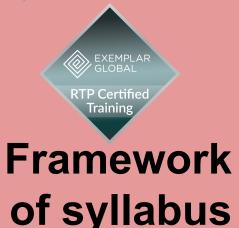
Training Module:

Module 6: Audit Execution (Onsite Assessment)

Learning Outcome

- Prepare and initiate onsite OH&S audits effectively, ensuring readiness of audit tools and team coordination.
- Conduct audit activities using structured observation, interviews, and document review techniques.
- Apply the Turtle Diagram to assess process performance and verify compliance with OH&S requirements.







Day 3: Audit Principles, Planning & Execution

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 6: Audit Execution (Onsite Assessment)

Topic discussed

- Initiating and Preparing for the Audit
- Conducting Audit Activities
- Using the Turtle Diagram for Process Audit





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Day 4:
Reporting,
Follow-up &
Auditor
Competency

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 7: Post-Audit Activities and Auditor Competency

Learning Outcome

- Prepare and complete audit reports that are clear, accurate, and aligned with audit objectives.
- Perform follow-up activities to verify the effectiveness of corrective actions and continual improvement.
- Evaluate auditor performance based on competency criteria and identify opportunities for development and improvement.





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Day 4:
Reporting,
Follow-up &
Auditor
Competency

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 7: Post-Audit Activities and Auditor Competency

Topic discussed

- Reporting, Audit Report Distribution & Completion
- Audit Follow-up Activities
- Auditor Competence, Evaluation and Improvement
- Management System Accreditation and Certification Body Requirements







Day 5: Examination, Review & Course Closure

ISO 45001:2018 Lead Auditor Training Course



Training Module:

Module 8: Audit Practice and Certification Simulation

Activities

- Mock Audit Exercise (Simulated Audit Scenario)
- Team Role Play: Lead Auditor, Auditor, Auditee
- Debriefing and Feedback
- Certification Assessment and Review



Assessment on Participant's Understanding

85%

(min)
Passing marks

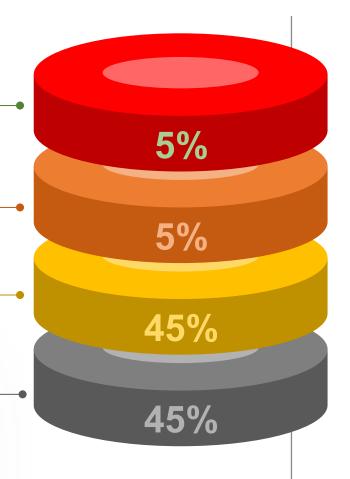


Attendance + Active • Exchange Input

Quiz: Day 2 to Day 3

Assignment:

Online Final Exam:
Multi sets of question







Module 1: Introduction to Occupational Health & Safety (OH&S) Management



What Is ISO 45001:2018?

ISO 45001:2018, released in March 2018, helps organizations manage workplace health and safety risks. It promotes proactive hazard identification, risk assessment, and safety integration into daily operations.



Key features

- → High-Level Structure (Annex SL)
- → Risk-Based Thinking







Introduction to ISO 45001:2018

Occupational Health and Safety Management Systems

ISO 45001:2018 is an internationally recognized standard that helps organizations provide safe and healthy workplaces by preventing work-related injuries and ill health and Improving OH&S performance.

Key Objectives of ISO 45001:2018:



Prevent Injury and III Health



Eliminate Hazards and Minimize OH&S Risks



Exploit OH&S Opportunities



Address Nonconformities and Improve Systematically



UNIVERSAL APPLICABILITY

Relevant to all organizations, activities, locations



ALIGNMENT WITH COMPLIANCE

National & international legal obligations



WORKER-CENTRIC APPROACH

Participation and consultation of workers

Fundamental Concepts and Scope of ISO 45001





Terminologies and Verbal Forms in ISO 45001

- OSH is equivalent to OH&S
- Specific verbal forms of "Shall", "Should", "May" & "Can"



Scope and Use of ISO 45001

- Not include other management areas
- Self-determination or certification
- Demonstrating conformity



Definition and Inclusion of Workers

- Any person under organization's control in performing work
- Workers also including Top Management

What ISO 45001 is Not:



Scope Limitations and Clarifications



ISO 45001 does not prescribe specific criteria for OH&S performance or dictate the design of an OH&S management system.



ISO 45001 does not cover areas such as product safety, property damage, or environmental impacts unless they pose a risk to worker health and safety.



ISO 45001 is not a legally binding regulation, but a voluntary management standard.



What will be the benefits of using ISO 45001?

Improve OH&S Performance



Develop OH&S policy and objectives



Establish processes



Determine hazards and risks



Increase risk awareness



Evaluate OH&S performance

Promote Positive Image & Reputation



Improve regulatory compliance



Reduce costs and downtime



Reduce absenteeism and turnover



Gain international recognition





Key Areas of ISO 45001:2018



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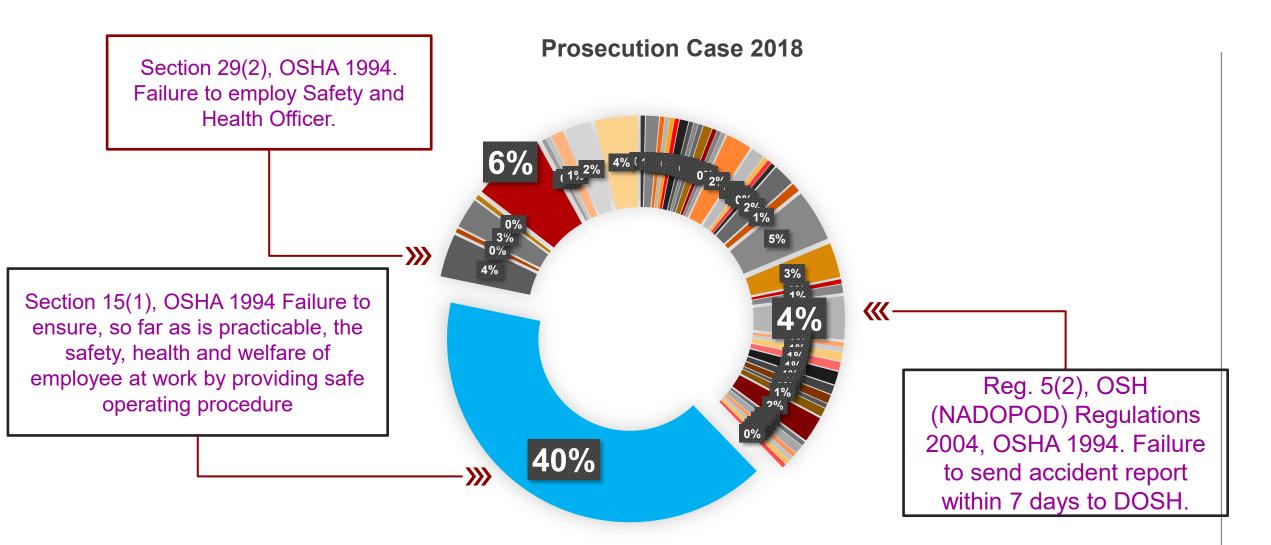






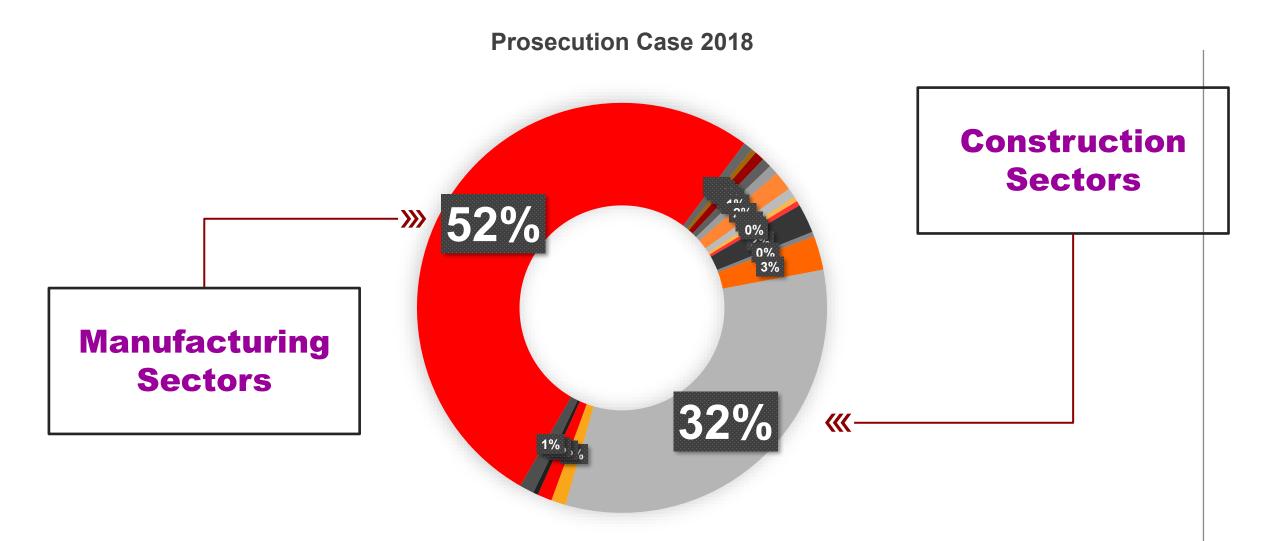


STATISTICS





STATISTICS



Key Areas



1

Structure of International Standard

2

Organizational Context

3

Understanding
Needs of Interested
Parties

4

Leadership

5

Worker Participation

6

Hazard Identification/
Assessment of
Risk

7

Planning

8

Need to Prevent III-Health/Injuries

9

Documented Information

10

Outsourcing,
Procurement &
Contractors

11

OH&S Performance Evaluation

Key Areas



1. Structure of International Standard (High Level Structure)

Foreword Introduction

Background
Aim of OH&S Management System
Success Factors

- Scope
- Normative References
- Terms & Definitions
- Context of the Organization
- Leadership & Worker Participation
- Planning
- Support
- Operation
- Performance Evaluation
- Improvement

Annex A: Guidance on use of this International Standard Bibliography
Alphabetical Index of Terms

2. Organizational Context (Clause 4)

Results of context review should be used to:

- Understand & determine scope and issues (positive & negative) that can affect how organization manages OH&S management system
- Determine risk & opportunities
- Developing or enhancing OH&S Policy & set objectives
- High Level Understanding needs & expectations of workers & other interested parties (and differences for managerial & non-managerial workers)

2. Context

1. Structure

Issues include: conditions, characteristics or changing circumstances that can affect OH&S. Internal/external issues can result in risks/opportunities

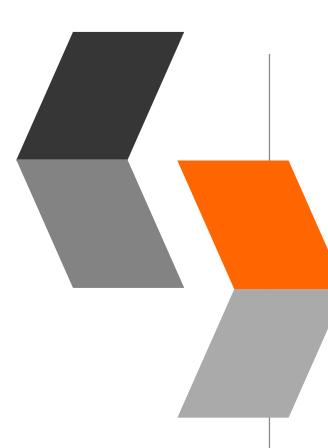
Issues – Internal Context & External Context





3. Understanding Needs of Interested Parties (Clause 4)

- Needs & Expectations of both managerial & non-managerial workers & workers representatives (where they exist)
- Affect OH&S management system or which perceive themselves to be affected by OH&S system (A.4.2)
- Worker & as appropriate workers' representatives
- Legal & Regulatory authorizes
- Parent Organization
- Suppliers, co-contractors & subcontractors
- Workers' organizations (trade unions) and employers' organizations
- Owners, shareholders, clients, visitors, local community, neighbors, general public
- Occupational health & safety organizations; occupational safety and health-care professionals (e.g., doctors, nurses)





4. Leadership (Clause 5)

Leadership has been enhanced to ensure commitment & active support from top management

- Taking overall responsibility & accountability for protection of workers' work-related health & safety
- Ensuring OH&S policy & objectives established
- OH&S compatible with organizations strategic direction
- Integrating OH&S into organizational business process
- Allocating necessary resources OH&S (establish, implement, maintain & improve)
- Ensure Active participation of workers & workers' representatives (consultation & removing obstacles)
- Internal/External Communications supporting OH&S
- Ensuring OH&S management systems achieve intended outcome(s)
- Directing & supporting persons to contribute to effectiveness of OH&S
- Ensuring Continual Improvement of OH&S
- Supporting relevant management roles to demonstrate their leadership as it applies to their areas of responsibility



5. Worker Participation (Clause 5)



Non-Managerial Worker Participation

Give additional emphasis to determine:

- Mechanism for participation & consultation
- Hazard identification & assessment of risk
- Actions to control hazard & risk
- Identification of needs of competence, training & evaluation of training
- Information (what & how) to be communicated
- Investigating incidents, non-conformities, & involved in corrective actions
- Needs & expectations of interested parties
- Establishing policy
- Assigning organizational roles, responsibilities, accountabilities & authorities

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6. Hazard Identification/Assessment of Risk (Clause 6)

Hazard identification should proactively identify any sources or situation arising from organizations activities, with potential for workrelated injury & ill health.

Sources: hazardous substances, radiation, temperature, pressure, dust, noise & vibration **Situations**: working at heights, working in confined space, working alone, worker fatigue, aggressive behavior or harassment, workload and task control

Hazards can be categorized in many ways, including: physical, chemical, biological psychosocial, physiological; or mechanical and electrical; or based on movement and energy.

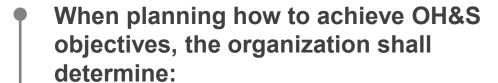
Organization shall establish, implement and maintain a process for on-going proactive identification of hazards arising, taking into account, but not limited to:

- Routine and non-routine activities and situations,
- Emergency situations
- People workers, contractors, visitors and other persons, those can be affected by organizations activities & workers at location not under direct control of organization
- Actual or proposed changes in organization, operations, processes activities & OH&S management systems
- Changes in knowledge of or information about hazards
- Past incidents, internal/external to the organization including emergencies and their causes
- How work is organized, and social factors, including workload, work hours, leadership and culture of organization

7. Planning (Clause 6)

When planning for OH&S management system, organization shall

- Consider issues referred to in "organizational context" (4.1)
- Requirements referred to in "interested parties" (4.2)
- Scope of its OH&S management system (4.3)
- Determine risks and opportunities that need to be addressed



- 1) What will be done
- 2) What resources will be required
- 3) Who will be responsible
- 4) When it will be completed
- 5) How it will be measured through indicators (if practicable) & monitored
- 6) How results will be evaluated
- 7) How the actions to achieve OH&S objectives will be integrated into the organizations business process

OS&H Objectives

OS&H MS



8. Need to Prevent III-Health/Injuries (Clause 6)



ILO ILS recommend that where workers identify circumstances of danger or a hazardous environmental which can cause injury and ill health, they should be able to remove themselves & inform the organization of the circumstances without risk of penalization.

Five basic commitments for OH&S Policy in ISO 45001

- ✓ Provide safe & healthy working conditions for the prevention of work-related injury & ill health;
- ✓ Satisfy applicable legal requirements & other requirements
- ✓ Control OH&S risks using the hierarchy of controls (see 8.12)
- ✓ Continual Improvement of OH&S management system to enhance OH&S performance
- ✓ Participation



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9. Documented Information (Clause 7.5)

Organization will need to maintain & retain documentation information of OH&S objectives & plans to achieve them, keeping complexity to minimum Aimed at preventing the risk of unintended use of obsolete documentation information Should not have effect of preventing workers obtaining full & complete picture of hazards/risks of their work.



- Available & suitable for use, where & when needed
- Adequately protected (loss, confidentiality, use, integrity)
- Control
 - ✓ Distribution, access, retrieval, use
 - ✓ Storage & preservation
 - ✓ Control of changes
 - ✓ Retention & disposition
 - ✓ Access by workers, & where they exist, workers representatives, to relevant documented information



10. Outsourcing, Procurement & Contractors (Clause 8)



Outsourcing: Organization shall ensure that outsourced processes affecting OH&S management system are controlled

An outsourced process is one that:

- Is within scope of OH&S management system
- Is integral to organizations functioning
- Is needed for OH&S management system to achieve its intended outcome
- Liability for conforming to requirements is retained by the organization
- Organization & external provider have a relationship where the process is perceived by interested parties as being carried out by the organization



Procurement: Establish controls to ensure that the procurement of goods (for example products, hazardous materials or substances, raw materials, equipment) and services conform to its OH&S management system requirements

Prior to procuring goods & services, the organization should identify procurement controls that:

- Identify & evaluate potential OH&S risks associated with products, materials, equipment, service
- Requirements for products, materials, equipment, services to conform to OH&S objectives
- Need for information, participation & communications
- Before using verify equipment, installations & materials are adequate before being released for use by workers
- Delivered to specifications & are tested to ensure works as intended
- Usage requirements, precautions or other protective measures are communicated & made available.



11. OH&S Performance Evaluation (Clause 9)

66

Organization shall establish, implement and maintain a process for monitoring, measurement and evaluation. Shall determine what needs to be monitored and measured, including...



Criteria against which the organization will evaluate OH&S performance



Methods for monitoring, measurement, analysis, and evaluation, as applicable, to ensure valid results



When the monitoring and measuring shall be performed



When the results from monitoring and measurement shall be analyzed, evaluated and communicated



Examples of what could be monitored and measured can include:

- Progress on meeting policy commitments, achieving objectives & continual improvement
- Occupational health complaints, health surveillance of workers & work environment monitoring
- Work related incidents, injuries, ill health, complaints, including trends
- > Effectiveness of operational controls & emergency exercises
- ➤ Proactive & reactive actions affecting OH&S performance

➤ Competence





Aim Of An OH&S Management System



Develop and implement OH&S policy & objectives;



awareness of its **OH&S** hazards and risks, associated operational controls



Ensuring top management demonstrate leadership and commitment



Evaluating its **OH&S performance** and seeking to improve it;



Establishing systematic processes which consider its context & risks and its opportunities;



Establishing and developing the necessary **competencies**;



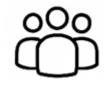
Determine hazards and risks associated with its activities



Developing and supporting an **occupational health and safety culture** in the organization;



Establishing operational controls to eliminate or minimize its OH&S risks;



Ensuring that workers, and where they exist, workers' representatives, are informed, consulted and participate.



SUCCESS FACTOR



Leadership and commitment from top management



Culture of safety promoted by top management



Worker participation and consultation



Effective communication processes



Sufficient resources provided



Clear and aligned OH&S policies



Integration into business operations



Ongoing performance monitoring



Objectives reflect OH&S risks and opportunities



Legal compliance awareness



Processes to identify and control hazards

Success Factor





a) top management leadership, commitment, responsibilities and accountability;



b) **top management developing**, leading and promoting a culture in the organization that supports the intended outcomes of the OH&S management system;



 consultation and participation of workers, and where they exist, workers' representatives;



d) processes for communication and consultation;

Success Factor





e) allocation of the necessary resources to maintain it;



 f) clear OH&S policies, which are compatible with the overall strategic objectives and direction of the organization;



 g) the integration of the OH&S management system into the organization's business processes;



 h) the continual performance evaluation and monitoring of the OH&S management system to improve OH&S performance;

Success Factor





 i) OH&S objectives that align with the OH&S policies and reflect the organization's OH&S hazards and risks and opportunities;



j) awareness and compliance of its applicable legal requirements and other requirements;



k) effective processes for identification of OH&S hazards, control of the OH&S risks and taking advantage of OH&S opportunities.



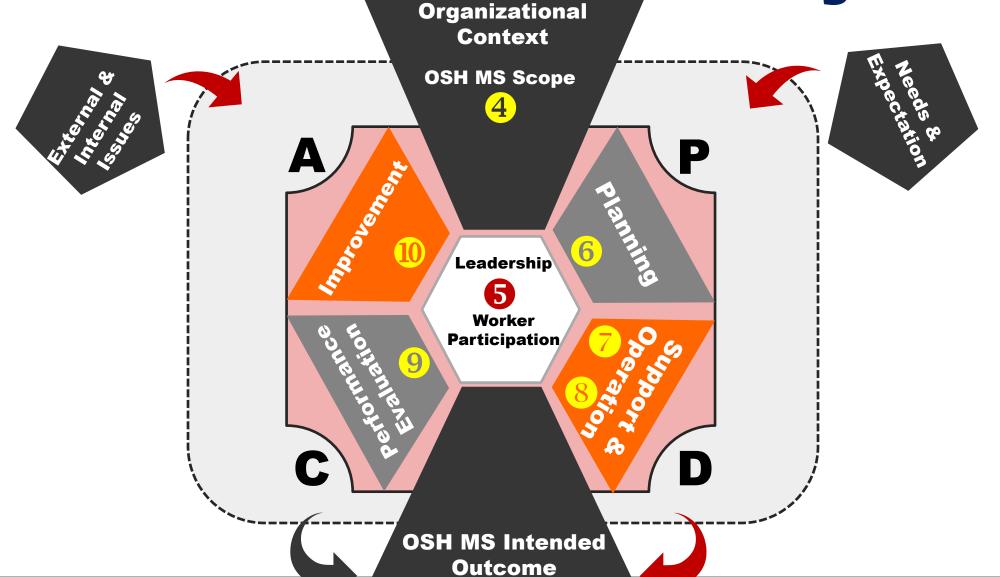


Module 2: ISO 45001:2018 Standard Requirements



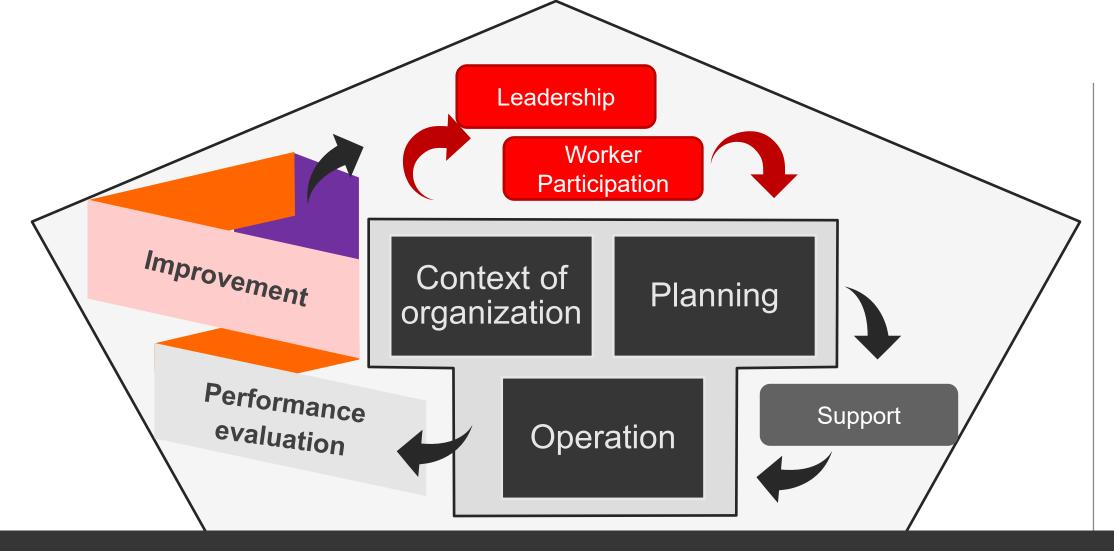


Plan-Do-Check-Action Cycle



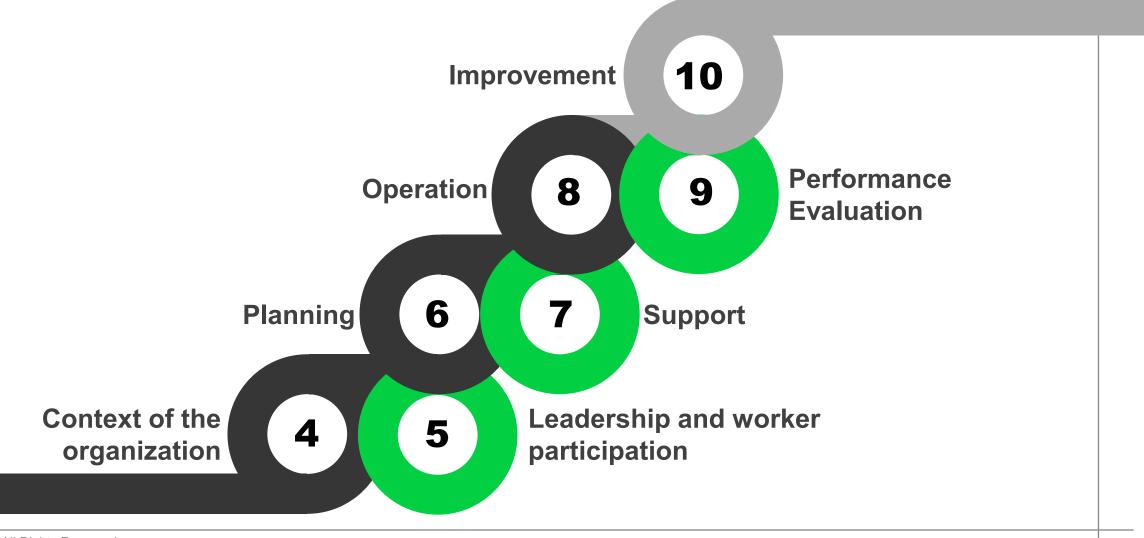


Standard Structure

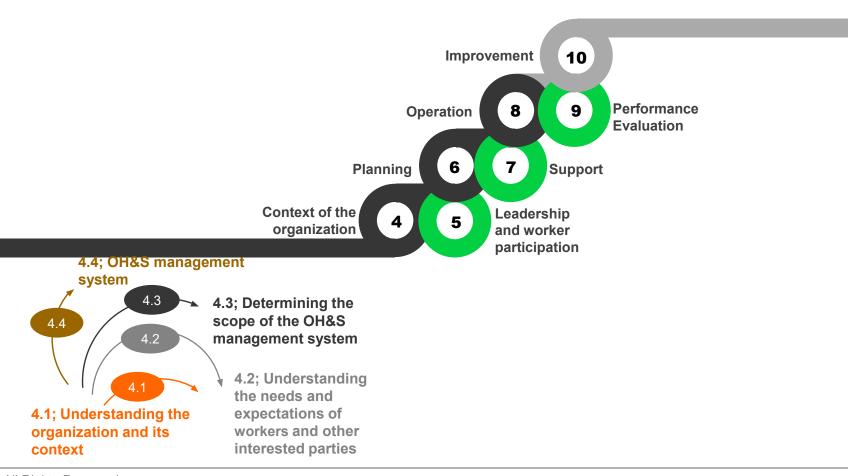




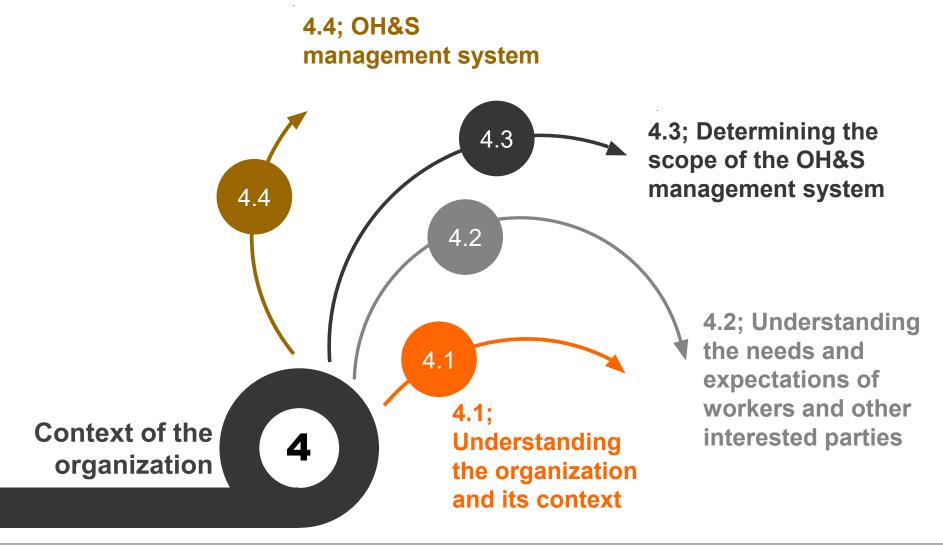




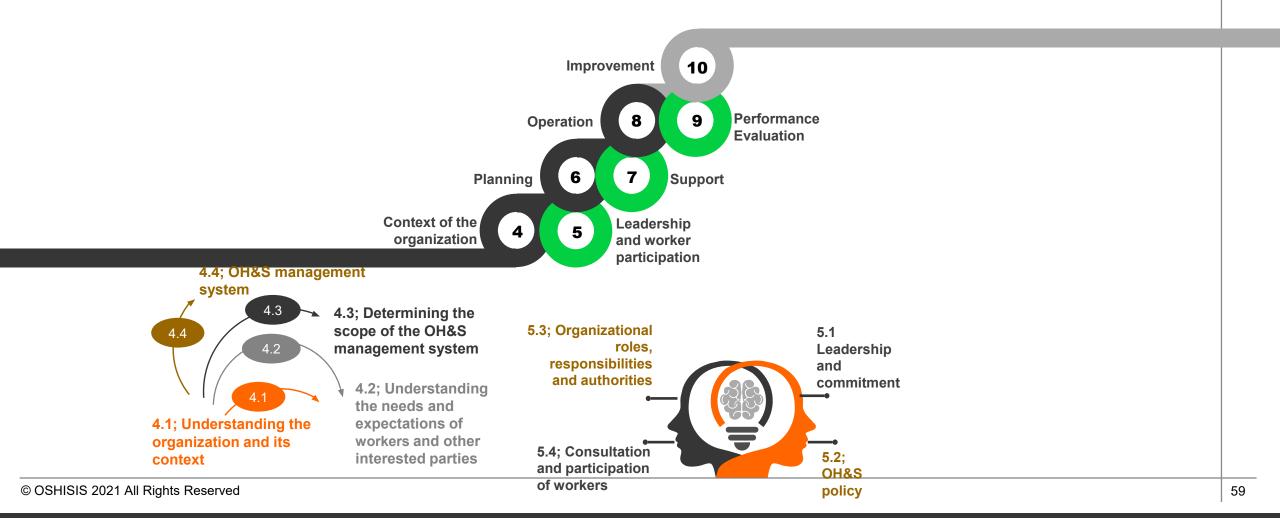




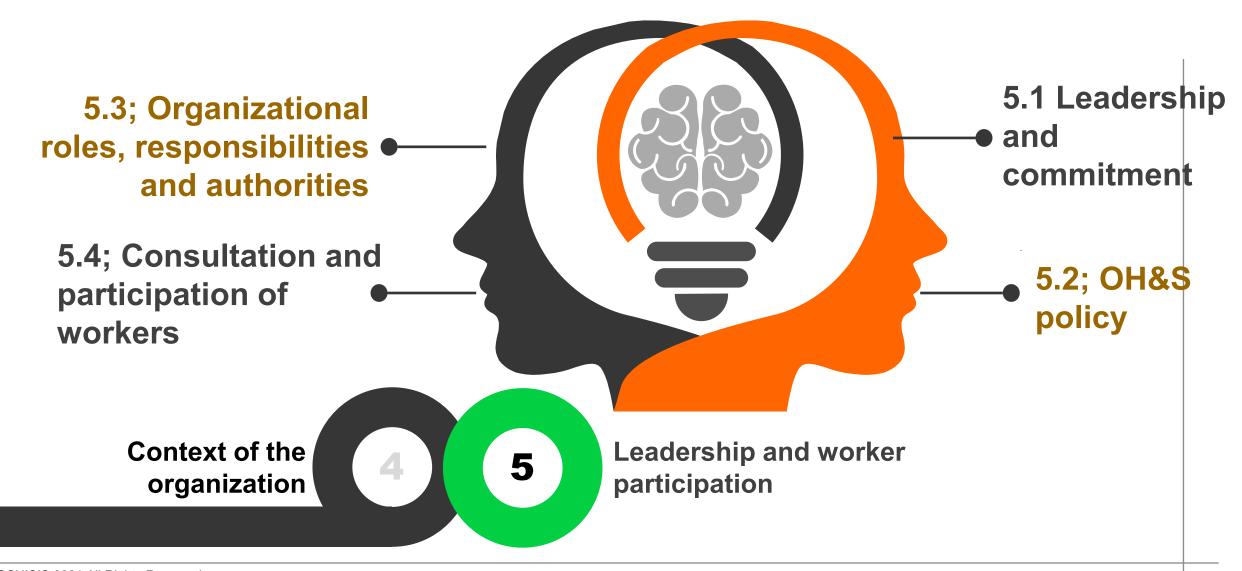




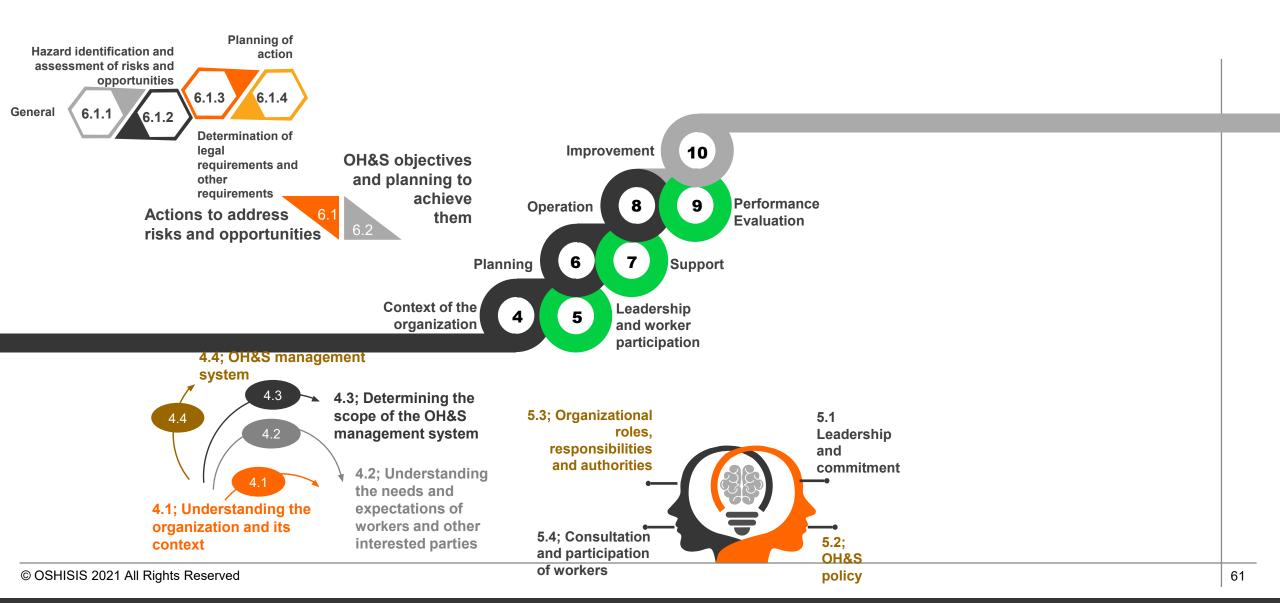








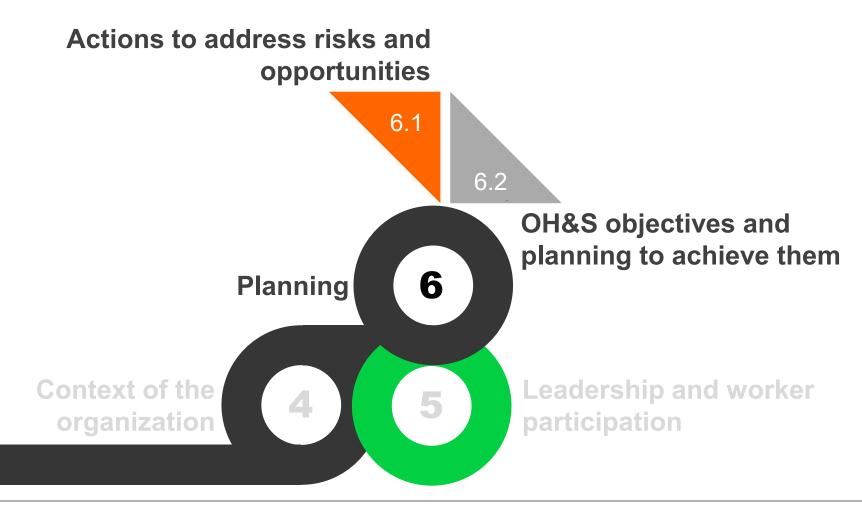




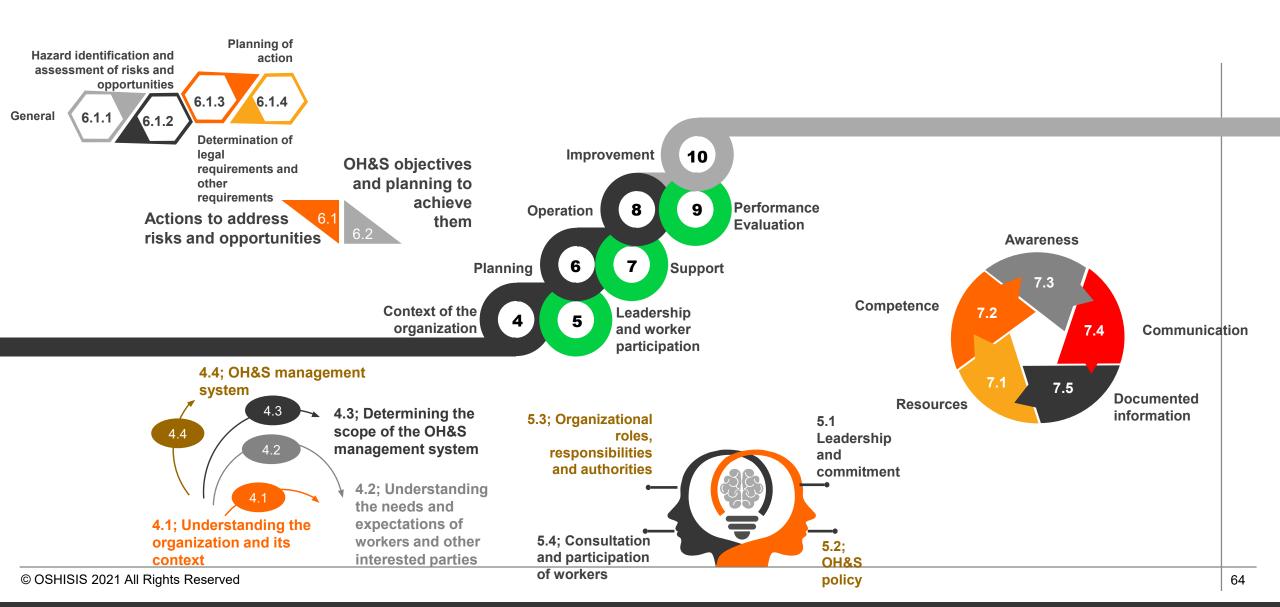








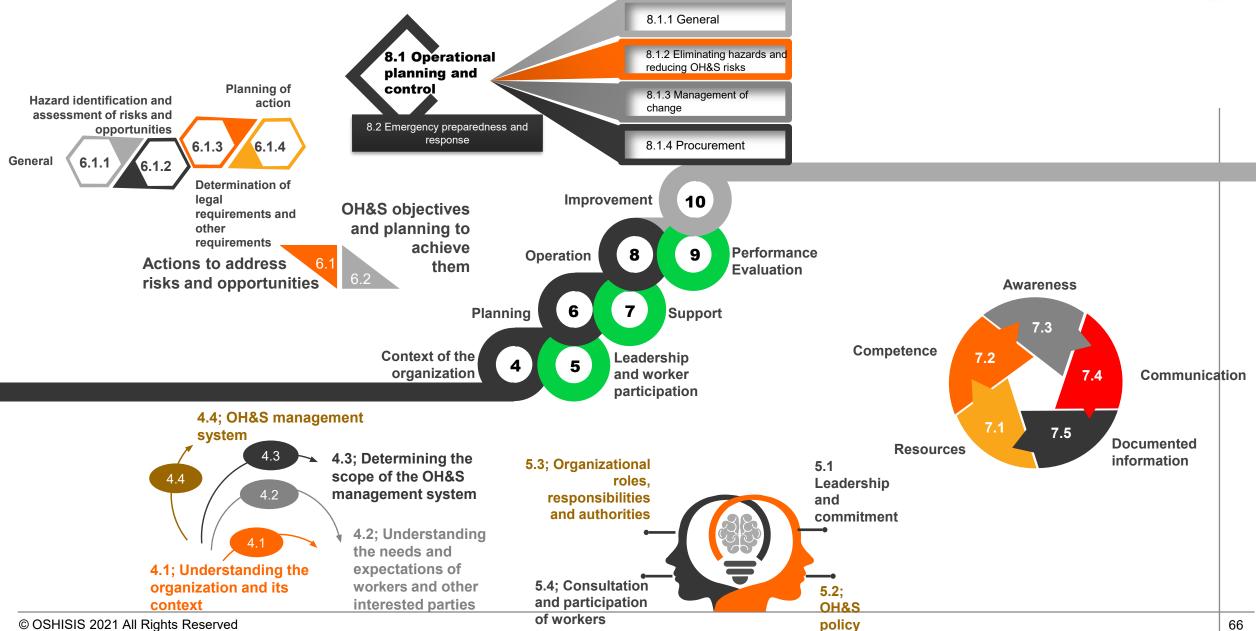


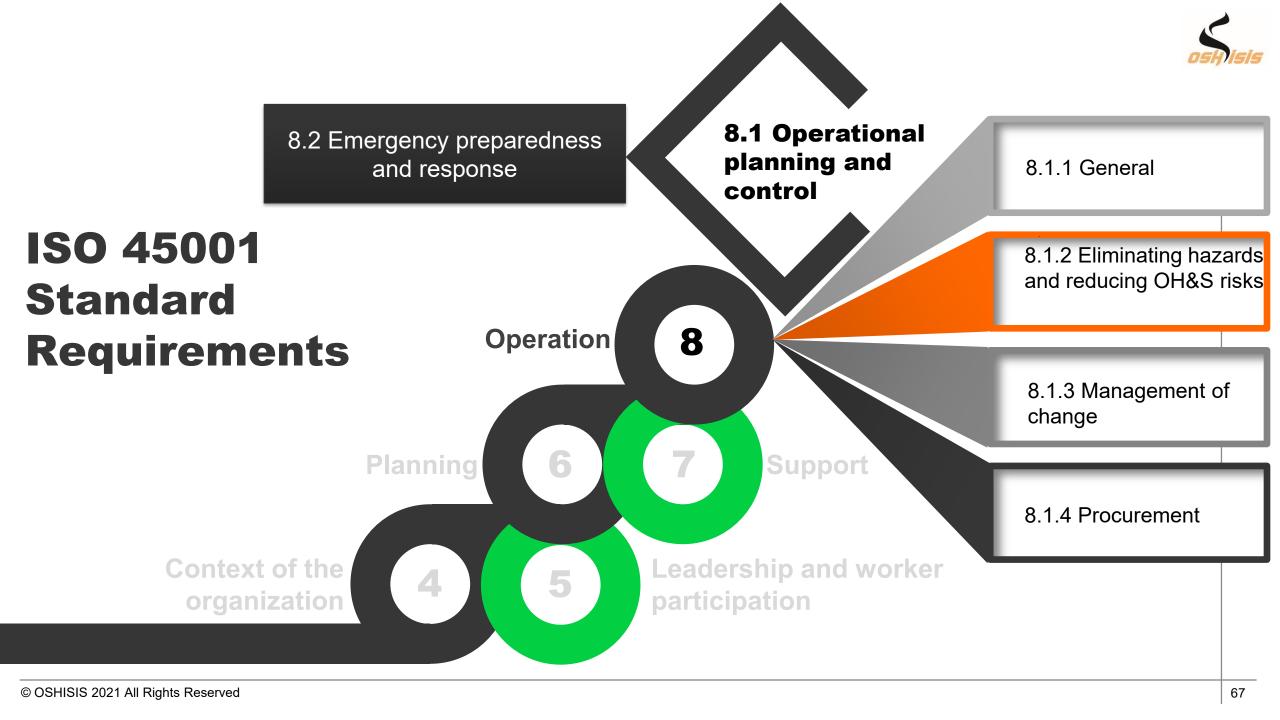




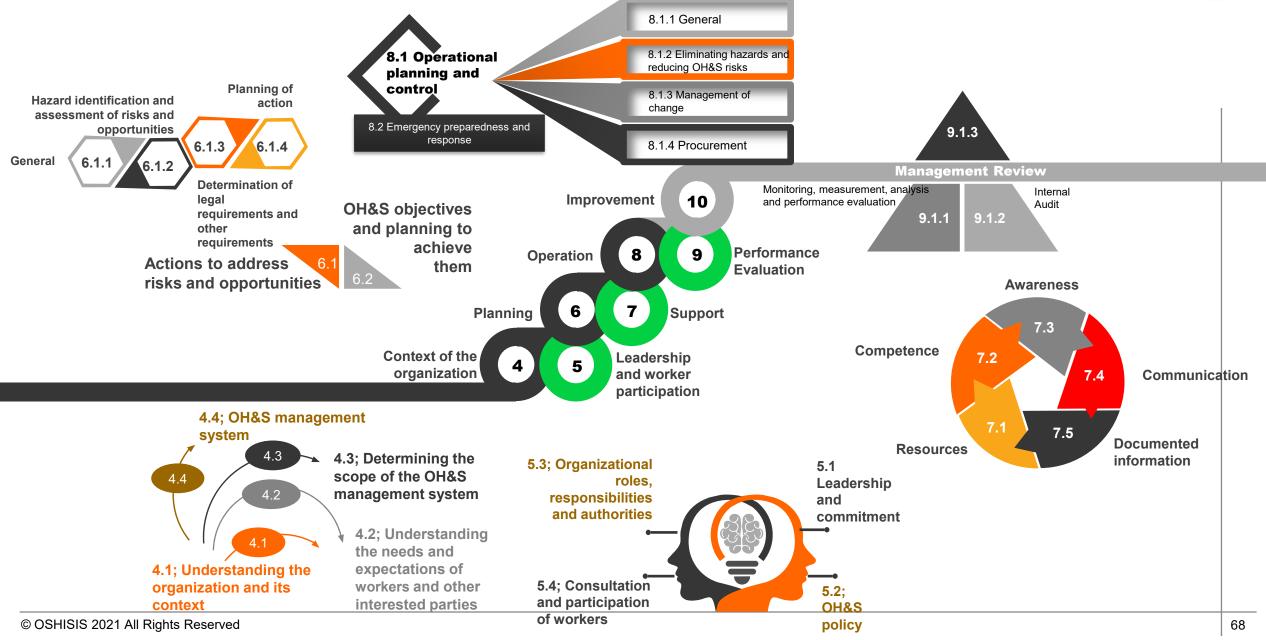






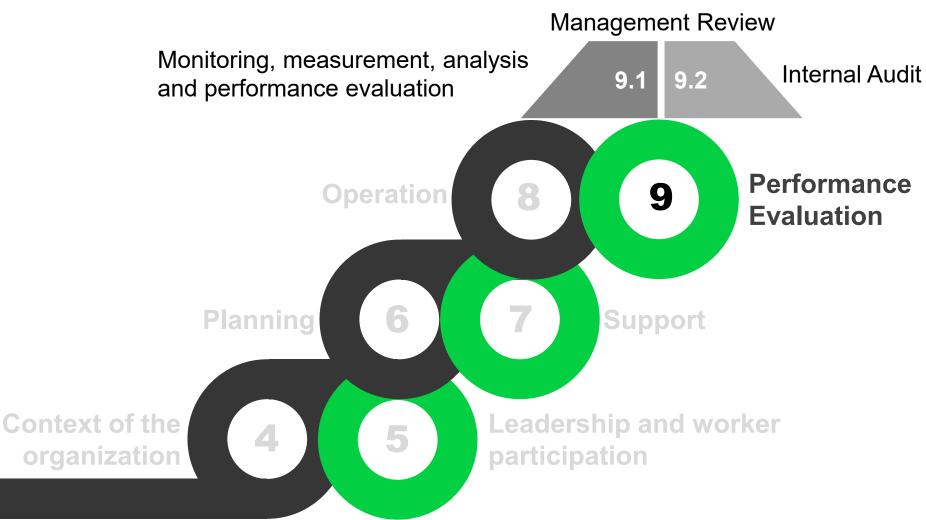




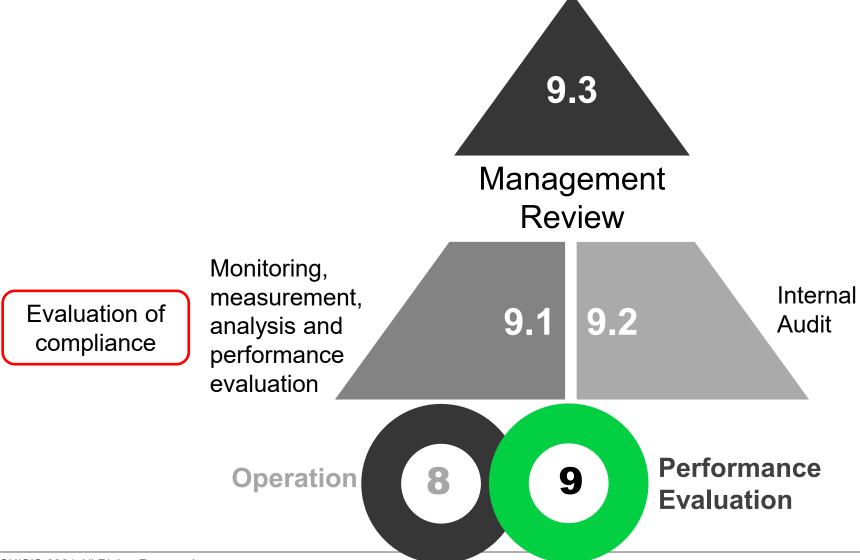












ISO 45001 Standard Requirements 8.1.1 General **Continual Improvement** 10.3 8.1.2 Eliminating hazards and Incident, nonconformity and 8.1 Operational reducing OH&S risks planning and corrective action 10.2 Planning of control 8.1.3 Management of Hazard identification and action change General assessment of risks and 10.1 8.2 Emergency preparedness and opportunities 9.3 response 8.1.4 Procurement 6.1.3 6.1.4 General 6.1.1 6.1.2 **Management Review** Determination of Monitoring, measurement, analysis Internal **Improvement** 10 legal and performance evaluation Audit **OH&S** objectives requirements and 9.1.1 9.2 and planning to other requirements achieve Performance Operation **Actions to address** them **Evaluation** risks and opportunities **Awareness** 7 **Planning** Support 7.3 Competence Context of the Leadership 7.2 organization and worker 7.4 Communication participation 4.4; OH&S management 7.5 system **Documented** Resources 4.3 4.3; Determining the information 5.3; Organizational 5.1 scope of the OH&S 4.4 roles. Leadership 4.2 management system responsibilities and and authorities commitment 4.2; Understanding the needs and expectations of 4.1; Understanding the 5.4; Consultation organization and its workers and other 5.2; and participation

of workers 71 © OSHISIS 2021 All Rights Reserved policy

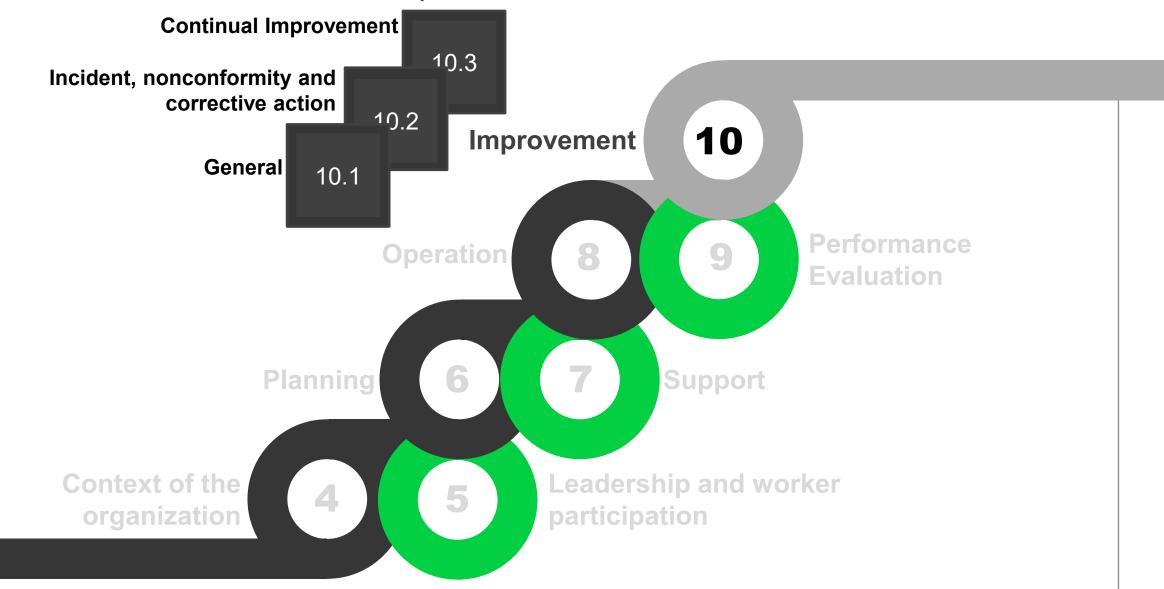
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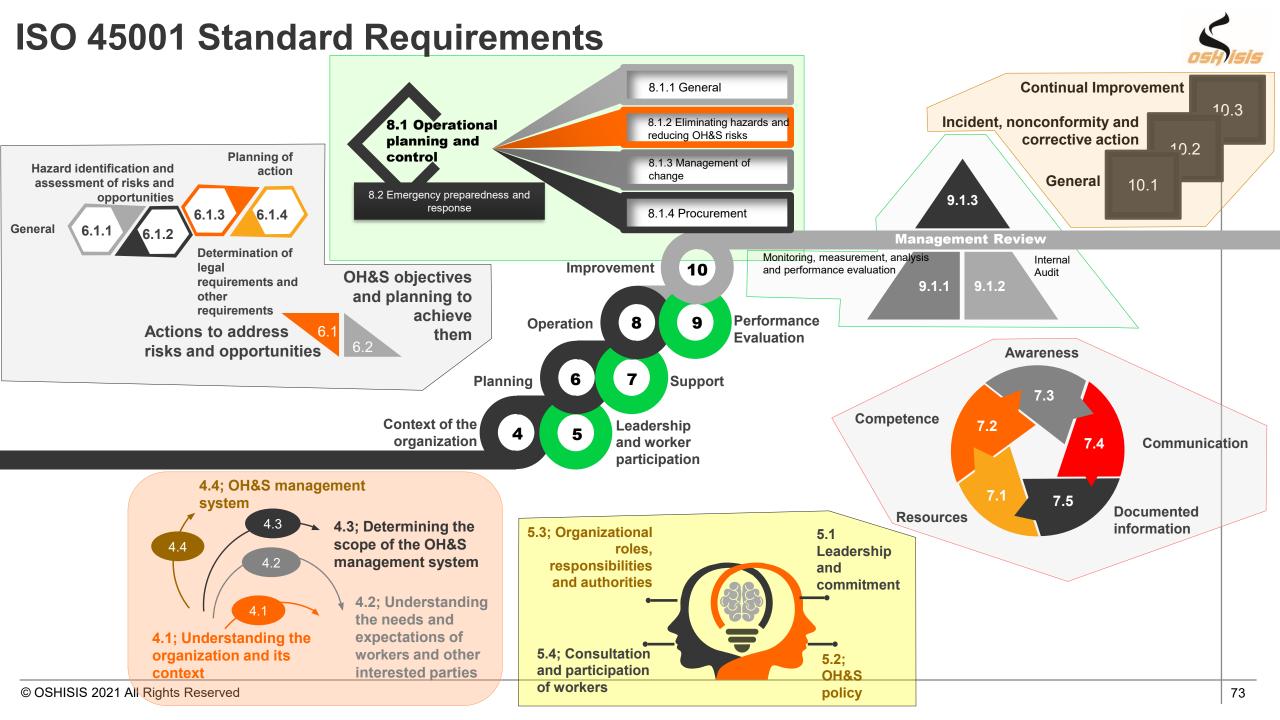
interested parties

context



ISO 45001 STANDARD REQUIREMENTS





Documented Information Management



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

Documented A controlled information Information Item Accessibility OSH MS Scope controlled **Protection** OSH Policy, objective & its performance monitoring Monitoring & measuring (calibration) Changes Competency Shall be controlled Retention Requirement change Operational planning & its control Design process Control of external provider Validity Identity · Identification & traceability **Format** Legal & Other Requirement Process changed Emergency, Incident Nonconformity Identification Description Review Approval Uniformity Analysis - effectiveness & performance Internal audit report Management review Corrective action A meaningful data that significant, Who relevant, material, valid, or Information authorized? important Organizational context Interested parties monitoring Data analysis and evaluation

Documented Information

Clause



The scope shall be available as documented information.	
The OH&S policy shall be available as documented information	
The Office policy shall be available as documented information	
Responsibilities and authorities for relevant roles maintained as documented information	
The organization shall maintain documented information on risks and opportunities	
Documented information on the process(es) and actions needed to determine and	
address its risks and opportunities	
Documented information shall be maintained and retained on the methodology(ies) and criteria for the assessment of OH&S risks	
7	

The organization shall maintain and retain documented information on its legal requirements and other requirements

Documented Information





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

Retain appropriate documented information as evidence of competence

The organization shall retain documented information as evidence of its communications

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

documented information to the extent necessary to have confidence that the processes have been carried out as planned

Maintain and retain documented information on the process(es) and on the plans for responding to potential emergency situations

Appropriate documented information as evidence of the results of monitoring, measurement, analysis and performance evaluation

Documented Information





Appropriate documented information on the maintenance, calibration or verification of measuring equipment

Documented information of the compliance evaluation result(s).

Retain documented information as evidence of the implementation of the audit programme and the audit results

Retain documented information as evidence of the results of management reviews.

The organization shall retain documented information as evidence of the nature of the incidents or nonconformities and any subsequent actions taken

The organization shall retain documented information as evidence of the results of any action and corrective action, including their effectiveness

Documented information as evidence of continual improvement



Module 3

Integrating Leadership, Support, and Performance for OH&S Improvement (Clauses 4–10)

Understanding Clause 4 & 6 of ISO 45001: Context, Interested Parties, and OH&S Risks and Opportunities



Understanding the Organizational Context

(Clause 4.1)



Identifying Interested Parties and Their Needs
(Clause 4.2)



Clause 4.3: Determining the Scope of the OH&S Management System



Addressing Risks and Opportunities (Clause 6.1)

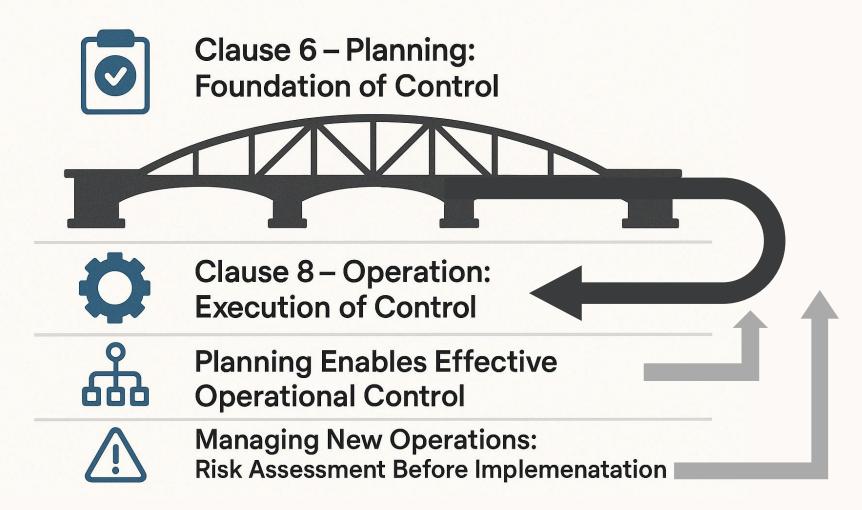


Integrating Context, Stakeholders, and Risk Management



Bridging Risk Planning and Operational Control







From Leadership to Results





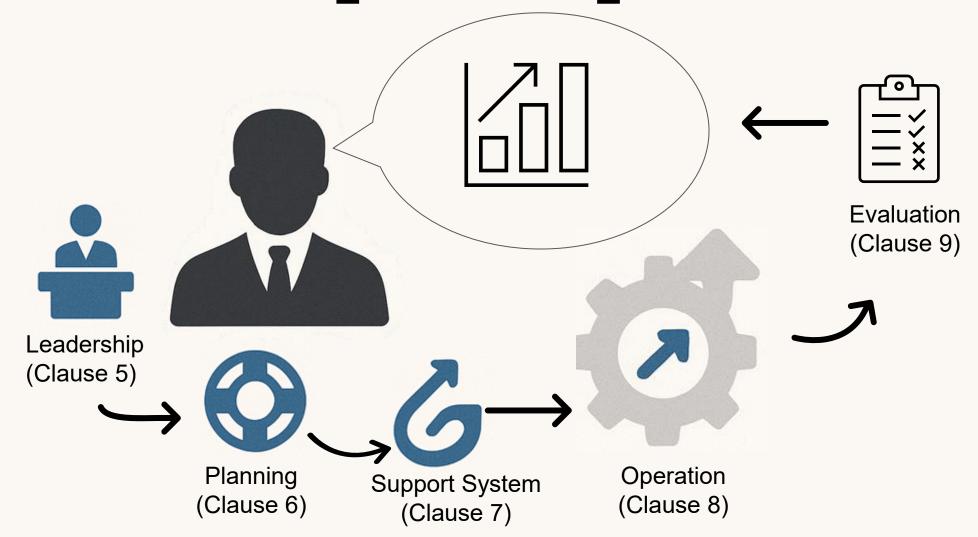
- ✓ Clause 5 Leadership & Worker Involvement
- Clear direction and participant by all parties
- **☑** Clause 7 Support
- Adequate resources
- **☑** Clause 9 Performance

Check

Safety performance is measured, evaluated and tracked.



Leadership to Improvement







4 CONTEXT OF THE ORGANIZATION

4.1 Understanding the organization and its context

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

4.2 Understanding the organization and its context

The organization shall determine:

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



4 CONTEXT OF THE ORGANIZATION

4.3 Determining the scope of the OH&S management system

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

When determining this scope, the organization shall:

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

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

The scope shall be available as **documented information**.



4 CONTEXT OF THE ORGANIZATION

4.4 OH&S management system

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





5.1 Leadership and commitment

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

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





5.1 Leadership and commitment

- h) h) ensuring and promoting continual improvement;
- i) i) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility;
- j) developing, leading and promoting a culture in the organization that supports the intended outcomes of the OH&S management system;
- k) k) protecting workers from reprisals when reporting incidents, hazards, risks and opportunities;
- I) I) ensuring the organization establishes and implements a process(es) for consultation and
- m) participation of workers (see 5.4);
- n) m) supporting the establishment and functioning of health and safety committees, [see 5.4 e) 1)].

NOTE Reference to "business" in this document can be interpreted broadly to mean those activities that are core to the purposes of the organization's existence.





5.2 OH&S policy

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

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

The OH&S policy shall:

- be available as <u>documented information</u>;
- be communicated within the organization;

- be available to interested parties, as appropriate;
- be relevant and appropriate



5.3 Organizational roles, responsibilities and authorities

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

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

Top management shall assign the responsibility and authority for:

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



5.4 Consultation and participation of workers

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

The organization shall:

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

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

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

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



5.4 Consultation and participation of workers

- d) emphasize the consultation of non-managerial workers on the following:
 - 1) determining the needs and expectations of interested parties (see 4.2);
 - 2) establishing the OH&S policy (see 5.2);
 - 3) assigning organizational roles, responsibilities and authorities as applicable (see 5.3);
 - 4) determining how to fulfil legal requirements and other requirements (see 6.1.3);
 - 5) establishing OH&S objectives and planning to achieve them (see 6.2);
 - 6) determining applicable controls for outsourcing, procurement and contractors (see 8.1.4);
 - 7) determining what needs to be monitored, measured and evaluated (see 9.1);
 - 8) planning, establishing, implementing and maintaining an audit programme(s) (see 9.2.2);
 - 9) ensuring continual improvement (see 10.3);



5.4 Consultation and participation of workers

- e) emphasize the participation of non-managerial workers in the following:
 - 1) determining the mechanisms for their consultation and participation;
 - 2) identifying hazards and assessing risks and opportunities (see 6.1.1, and 6.1.2);
 - 3) determining actions to eliminate hazards and reduce OH&S risks (see 6.1.4);
 - 4) determining competence requirements, training needs, training and evaluating training (see 7.2);
 - 5) determining what needs to be communicated and how this will be done (see 7.4);
 - 6) determining control measures and their effective implementation and use (see 8.1, 8.1.3, and 8.2);
 - 7) investigating incidents and nonconformities and determining corrective actions (see 10.2).

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

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



6.1 Actions to address risks and opportunities

6.1.1 General

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

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

When determining the risks and opportunities to the OH&S management system and its intended outcomes that need to be addressed, the organization shall take into account:

— hazards (see 6.1.2.1); — OH&S risks and other risks (see 6.1.2.2); — OH&S opportunities and other opportunities (see 6.1.2.3); — legal requirements and other requirements (see 6.1.3).



6.1 Actions to address risks and opportunities

6.1.1 General

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

The organization shall maintain <u>documented information</u> on:

- risks and opportunities;
- the process(es) and actions needed to determine and address its risks and opportunities (see 6.1.2 to 6.1.4) to the extent necessary to have confidence that they are carried out as planned.





6.1 Actions to address risks and opportunities

6.1.2 Hazard identification and assessment of risks and opportunities

6.1.2.1 Hazard identification

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

- a) how work is organized, social factors (including workload, work hours, victimization, harassment and bullying), leadership and the culture in the organization;
- b) routine and non-routine activities and situations, including hazards arising from:
 - 1. infrastructure, equipment, materials, substances and the physical conditions of the workplace;
 - product and service design, research, development, testing, production, assembly, construction, service delivery, maintenance and disposal;
 - 3. human factors;
 - 4. how the work is performed;





- 6.1 Actions to address risks and opportunities
- 6.1.2 Hazard identification and assessment of risks and opportunities
- 6.1.2.1 Hazard identification
- c) past relevant incidents, internal or external to the organization, including emergencies, and their causes;
- d) potential <u>emergency situations</u>;
- e) people, including consideration of:
 - 1. those with access to the workplace and their activities, including workers, contractors, visitors and other persons;
 - 2. those in the vicinity of the workplace who can be affected by the activities of the organization;
 - 3. workers at a location not under the direct control of the organization;





6.1 Actions to address risks and opportunities

6.1.2 Hazard identification and assessment of risks and opportunities

6.1.2.1 Hazard identification

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



- 6.1 Actions to address risks and opportunities
- 6.1.2 Hazard identification and assessment of risks and opportunities

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

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

- a) assess OH&S risks from the identified hazards, while taking into account the effectiveness of existing controls;
- b) determine and assess the other risks related to the establishment, implementation, operation and maintenance of the OH&S management system.

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



- 6.1 Actions to address risks and opportunities
- 6.1.2 Hazard identification and assessment of risks and opportunities
- 6.1.2.3 Assessment of OH&S opportunities and other opportunities to the OH&S management system

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

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

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



6.1 Actions to address risks and opportunities

6.1.3 Determination of legal requirements and other requirements

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

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

The organization shall maintain and retain <u>documented information</u> on its legal requirements and other requirements and shall ensure that it is updated to reflect any changes.

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





6.1 Actions to address risks and opportunities

6.1.4 Planning action

The organization shall plan:

- a) actions to:
- 1) address these risks and opportunities (see 6.1.2.2 and 6.1.2.3);
- 2) address legal requirements and other requirements (see 6.1.3);
- 3) prepare for and respond to emergency situations (see 8.2);
- b) how to:
- 1) integrate and implement the actions into its OH&S management system processes or other business processes;
- 2) evaluate the effectiveness of these actions;

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

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



6.2 OH&S objectives and planning to achieve them

6.2.1 OH&S objectives

The organization shall establish OH&S objectives at relevant functions and levels in order to maintain and continually improve the OH&S management system and OH&S performance (see 10.3):

The OH&S objectives shall:

- a) be consistent with the OH&S policy;
- b) be measurable (if practicable) or capable of performance evaluation;
- c) take into account:
 - 1) applicable requirements;
 - 2) the results of the assessment of risks and opportunities (see 6.1.2.2 and 6.1.2.3);
 - 3) the results of consultation with workers (see 5.4), and, where they exist, workers' representatives;
- d) be monitored;
- e) be communicated;
- f) be updated as appropriate.



6.2 OH&S objectives and planning to achieve them

6.2.2 Planning to achieve OH&S objectives

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

- a) what will be done;
- b) what resources will be required;
- c) who will be responsible;
- d) when it will be completed;
- e) how the results will be evaluated, including indicators for monitoring;
- f) how the actions to achieve OH&S objectives will be integrated into the organization's business processes.

The organization shall maintain and retain <u>documented information</u> on the OH&S objectives and plans to achieve them.



7.1 Resources

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

7.2 Competence

The organization shall:

- a) determine the necessary competence of workers that affects or can affect its OH&S performance;
- b) ensure that workers are competent (including the ability to identify hazards) on the basis of appropriate education, training or experience;
- c) where applicable, take actions to acquire and maintain the necessary competence, and evaluate the effectiveness of the actions taken;
- d) retain appropriate documented information as evidence of competence.

NOTE Applicable actions can include, for example, the provision of training to, the mentoring of, or the reassignment of currently employed persons, or the hiring or contracting of competent persons.



7.3 Awareness

Workers shall be made aware of:

- a) the OH&S policy and OH&S objectives;
- b) their contribution to the effectiveness of the OH&S management system, including the benefits of improved OH&S performance;
- c) the implications and potential consequences of not conforming to the OH&S management system requirements;
- d) incidents and the outcomes of investigations that are relevant to them;
- e) hazards, OH&S risks and actions determined that are relevant to them;
- f) the ability to remove themselves from work situations that they consider present an imminent and serious danger to their life or health, as well as the arrangements for protecting them from undue consequences for doing so.



7.4 Communication

7.4.1 General

The organization shall establish, implement and maintain the process(es) needed for the internal and

external communications relevant to the OH&S management system, including determining:

- a) on what it will communicate;
- b) when to communicate;
- c) with whom to communicate:
- 1) internally among the various levels and functions of the organization;
- 2) among contractors and visitors to the workplace;
- 3) among other interested parties;
- d) how to communicate.

The organization shall take into account diversity aspects (e.g. gender, language, culture, literacy, disability) when considering its communication needs.



7.4 Communication

7.4.1 General

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

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

- take into account its legal requirements and other requirements;
- ensure that OH&S information to be communicated is consistent with information generated within the OH&S management system, and is reliable.

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

The organization shall retain <u>documented information</u> as evidence of its communications, as appropriate.



7.4 Communication

7.4.2 Internal communication

The organization shall:

- internally communicate information relevant to the OH&S management system among the various levels and functions of the organization, including changes to the OH&S management system, as appropriate;
- b) ensure its communication process(es) enables workers to contribute to continual improvement.

7.4.3 External communication

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



7.5 Documented information

7.5.1 General

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

- a) documented information required by this document;
- b) documented information determined by the organization as being necessary for the effectiveness of the OH&S management system;

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

- the size of organization and its type of activities, processes, products and services;
- the need to demonstrate fulfilment of legal requirements and other requirements;
- the complexity of processes and their interactions;
- the competence of workers.



7.5 Documented information

7.5.2 Creating and updating

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

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



7.5 Documented information

7.5.3 Control of documented information

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

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

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

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



7.5 Documented information

7.5.3 Control of documented information

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

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

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



8.1 Operational planning and control

8.1.1 General

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

- a) establishing criteria for the processes;
- b) implementing control of the processes in accordance with the criteria;
- c) maintaining and retaining <u>documented information</u> to the extent necessary to have confidence that the processes have been carried out as planned;
- d) adapting work to workers.

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



8.1 Operational planning and control

8.1.2 Eliminating hazards and reducing OH&S risks

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

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

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



8.1 Operational planning and control

8.1.3 Management of change

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

- a) new products, services and processes, or changes to existing products, services and processes, including:
- workplace locations and surroundings;
- work organization;
- working conditions;
- equipment;
- work force;
- b) changes to legal requirements and other requirements;
- c) changes in knowledge or information about hazards and OH&S risks;
- d) developments in knowledge and technology.

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



8.1 Operational planning and control

8.1.4 Procurement

8.1.4.1 General

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

8.1.4.2 Contractors

The organization shall coordinate its procurement process(es) with its contractors, in order to identify hazards and to assess and control the OH&S risks arising from:

- a) the contractors' activities and operations that impact the organization;
- the organization's activities and operations that impact the contractors' workers; c)
 the contractors' activities and operations that impact other interested parties in the workplace.
- c) The organization shall ensure that the requirements of its OH&S management system are met by contractors and their workers. The organization's procurement process(es) shall define and apply occupational health and safety criteria for the selection of contractors.

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



8.1 Operational planning and control

8.1.4 Procurement

8.1.4.3 Outsourcing

The organization shall ensure that outsourced functions and processes are controlled. The organization shall ensure that its outsourcing arrangements are consistent with legal requirements and other requirements and with achieving the intended outcomes of the OH&S management system. The type and degree of control to be applied to these functions and processes shall be defined within the OH&S management system.

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



8.1 Operational planning and control

8.2 Emergency preparedness and response

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

- a) establishing a planned response to emergency situations, including the provision of first aid;
- b) providing training for the planned response;
- c) periodically testing and exercising the planned response capability;
- d) evaluating performance and, as necessary, revising the planned response, including after testing and, in particular, after the occurrence of emergency situations;
- e) communicating and providing relevant information to all workers on their duties and responsibilities;
- f) communicating relevant information to contractors, visitors, emergency response services, government authorities and, as appropriate, the local community;
- g) taking into account the needs and capabilities of all relevant interested parties and ensuring their involvement, as appropriate, in the development of the planned response.

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





9.1 Monitoring, measurement, analysis and performance evaluation

9.1.1 General

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

The organization shall determine:

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





9.1 Monitoring, measurement, analysis and performance evaluation

9.1.1 General

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

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

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

The organization shall retain appropriate <u>documented information</u>:

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





9.1 Monitoring, measurement, analysis and performance evaluation

9.1.2 Evaluation of Compliance

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

The organization shall:

- a) determine the frequency and method(s) for the evaluation of compliance;
- b) evaluate compliance and take action if needed (see 10.2);
- c) maintain knowledge and understanding of its compliance status with legal requirements and other requirements;
- d) retain documented information of the compliance evaluation result(s).





9.2 Internal Audit

9.2.1 General

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

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





9.2 Internal Audit

9.2.2 Internal audit programme

The organization shall:

- a) plan, establish, implement and maintain an audit programme(s) including the frequency, methods, responsibilities, consultation, planning requirements and reporting, which shall take into consideration the importance of the processes concerned and the results of previous audits;
- b) define the audit criteria and scope for each audit;
- c) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- d) ensure that the results of the audits are reported to relevant managers; ensure that relevant audit results are reported to workers, and, where they exist, workers' representatives, and other relevant interested parties;
- e) take action to address nonconformities and continually improve its OH&S performance (see Clause 10);
- f) retain <u>documented information</u> as evidence of the implementation of the audit programme and the audit results.

NOTE For more information on auditing and the competence of auditors, see ISO 19011.





9.3 Management Review

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

The management review shall include consideration of:

- a) the status of actions from previous management reviews;
- b) changes in external and internal issues that are relevant to the OH&S management system, including:
 - 1) the needs and expectations of interested parties;
 - 2) legal requirements and other requirements;
 - 3) risks and opportunities;
- c) the extent to which the OH&S policy and the OH&S objectives have been met;





9.3 Management Review

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

The management review shall include consideration of:

- d) information on the OH&S performance, including trends in:
 - 1) incidents, nonconformities, corrective actions and continual improvement;
 - monitoring and measurement results;
 - results of evaluation of compliance with legal requirements and other requirements;
 - 4) audit results;
 - 5) consultation and participation of workers;
 - 6) risks and opportunities;
- e) adequacy of resources for maintaining an effective OH&S management system;
- f) relevant communication(s) with interested parties;
- g) opportunities for continual improvement.





9.3 Management Review

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

- the continuing suitability, adequacy and effectiveness of the OH&S management system in achieving its intended outcomes;
- continual improvement opportunities;
- any need for changes to the OH&S management system;
- resources needed;
- actions, if needed;
- opportunities to improve integration of the OH&S management system with other business processes;
- any implications for the strategic direction of the organization.

Top management shall communicate the relevant outputs of management reviews to workers, and, where they exist, workers' representatives (see 7.4).

The organization shall retain <u>documented information</u> as evidence of the results of management reviews.

10 IMPROVEMENT



10.1 General

The organization shall determine opportunities for improvement (see Clause 9) and implement necessary actions to achieve the intended outcomes of its OH&S management system.

10.2 Incident, nonconformity and corrective action

The organization shall establish, implement and maintain a process(es), including reporting, investigating and taking action, to determine and manage incidents and nonconformities.

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

- a) react in a timely manner to the incident or nonconformity and, as applicable:
 - 1) take action to control and correct it;
 - 2) deal with the consequences;

10 IMPROVEMENT



10.2 Incident, nonconformity and corrective action

- b) evaluate, with the participation of workers (see 5.4) and the involvement of other relevant interested parties, the need for corrective action to eliminate the root cause(s) of the incident or nonconformity, in order that it does not recur or occur elsewhere, by:
 - 1) investigating the incident or reviewing the nonconformity;
 - 2) determining the cause(s) of the incident or nonconformity;
 - 3) determining if similar incidents have occurred, if nonconformities exist, or if they could potentially occur;
- c) review existing assessments of OH&S risks and other risks, as appropriate (see 6.1);
- d) determine and implement any action needed, including corrective action, in accordance with the hierarchy of controls (see 8.1.2) and the management of change (see 8.1.3);
- e) assess OH&S risks that relate to new or changed hazards, prior to taking action;
- f) review the effectiveness of any action taken, including corrective action;
- g) make changes to the OH&S management system, if necessary





10.2 Incident, nonconformity and corrective action

Corrective actions shall be appropriate to the effects or potential effects of the incidents or nonconformities encountered.

The organization shall retain documented information as evidence of:

- the nature of the incidents or nonconformities and any subsequent actions taken;
- the results of any action and corrective action, including their effectiveness.

The organization shall communicate this <u>documented information</u> to relevant workers, and, where they exist, workers' representatives, and other relevant interested parties.

NOTE The reporting and investigation of incidents without undue delay can enable hazards to be eliminated and associated OH&S risks to be minimized as soon as possible.

10 IMPROVEMENT



10.3 Continual Improvement

The organization shall continually improve the suitability, adequacy and effectiveness of the OH&S management system, by:

- a) enhancing OH&S performance;
- b) promoting a culture that supports an OH&S management system;
- c) promoting the participation of workers in implementing actions for the continual improvement of the OH&S management system;
- d) communicating the relevant results of continual improvement to workers, and, where they exist, workers' representatives;
- e) maintaining and retaining <u>documented information</u> as evidence of continual improvement



A.1 General

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

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

A.2 Normative references

There are no normative references in this document. Users can refer to the documents listed in the Bibliography for further information on OH&S guidelines and other ISO management system standards.



A.3 Terms and definitions

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

- a) "Continual" indicates duration that occurs over a period of time, but with intervals of interruption (unlike "continuous", which indicates duration without interruption). "Continual" is therefore the appropriate word to use in the context of improvement.
- b) b) The word "consider" means it is necessary to think about but can be excluded, whereas "take into account" means it is necessary to think about but cannot be excluded.
- c) The words "appropriate" and "applicable" are not interchangeable. "Appropriate" means suitable (for, to) and implies some degree of freedom, while "applicable" means relevant or possible to apply and implies that if it can be done, it shall be done.
- d) This document uses the term "interested party"; the term "stakeholder" is a synonym as it represents the same concept.
- e) The word "ensure" means the responsibility can be delegated, but not the accountability to make sure that an action is performed.



A.3 Terms and definitions

- f) "Documented information" is used to include both documents and records. This document uses the phrase "retain documented information as evidence of..." to mean records, and "shall be maintained as documented information" to mean documents, including procedures. The phrase "to retain documented information as evidence of..." is not intended to require that the information retained will meet legal evidentiary requirements. Instead, it is intended to define the type of records that need to be retained.
- g) Activities that are "under the shared control of the organization" are activities for which the organization shares control over the means or methods, or shares direction of the work performed with respect to its OH&S performance, consistent with its legal requirements and other requirements.

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



A.4 Context of the organization

A.4.1 Understanding the organization and its context

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

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



A.4 Context of the organization

A.4.1 Understanding the organization and its context

- b) internal issues, such as:
 - 1) governance, organizational structure, roles and accountabilities;
 - 2) policies, objectives and the strategies that are in place to achieve them;
 - the capabilities, understood in terms of resources, knowledge and competence (e.g. capital, time, human resources, processes, systems and technologies);
 - 4) information systems, information flows and decision-making processes (both formal and informal);
 - 5) introduction of new products, materials, services, tools, software, premises and equipment;
 - 6) relationships with, as well as perceptions and values of, workers;
 - 7) the culture in the organization;
 - 8) standards, guidelines and models adopted by the organization;
 - 9) the form and extent of contractual relationships, including, for example, outsourced activities;
 - 10) working time arrangements;
 - 11) working conditions;
 - 12) changes in relation to any of the above.



A.4 Context of the organization

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

Interested parties, in addition to workers, can include:

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

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



A.4 Context of the organization

A.4.3 Determining the scope of the OH&S management system

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

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



A.4 Context of the organization

A.4.4 OH&S management system

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

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

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



A.5 Leadership and worker participation

A.5.1 Leadership and commitment

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

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



A.5 Leadership and worker participation

A.5.2 OH&S policy

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

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

The term "minimize" is used in relation to OH&S risks to set out the organization's aspirations for its OH&S management system. The term "reduce" is used to describe the process to achieve this.

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



A.5 Leadership and worker participation

A.5.3 Organizational roles, responsibilities and authorities

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

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

Top management being accountable means being answerable for decisions and activities to the organization's governing bodies, legal authorities and, more broadly, its interested parties. It means having ultimate responsibility and relates to the person who is held to account if something is not done, is not done properly, does not work or fails to achieve its objective.

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

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



A.5 Leadership and worker participation

A.5.4 Consultation and participation of workers

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

Consultation implies a two-way communication involving dialogue and exchanges. Consultation involves the timely provision of the information necessary for workers, and, where they exist, workers' representatives, to give informed feedback to be considered by the organization before making a decision.

Participation enables workers to contribute to decision-making processes on OH&S performance measures and proposed changes.

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

The reception of suggestions will be more effective if workers do not fear the threat of dismissal, disciplinary action or other such reprisals when making them.



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.1 General

Planning is not a single event, but an ongoing process, anticipating changing circumstances and continually determining risks and opportunities, both for the workers and for the OH&S management system.

Undesired effects can include work-related injury and ill health, noncompliance with legal requirements and other requirements, or damage to reputation.

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

OH&S opportunities address the identification of hazards, how they are communicated, and the analysis and mitigation of known hazards. Other opportunities address system improvement strategies.





A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.1 General

Examples of opportunities to improve OH&S performance:

- a) inspection and auditing functions;
- b) job hazard analysis (job safety analysis) and task-related assessments;
- c) improving OH&S performance by alleviating monotonous work or work at a potentially hazardous predetermined work rate;
- d) permit to work and other recognition and control methods;
- e) incident or nonconformity investigations and corrective actions;
- f) ergonomic and other injury prevention-related assessments. Examples of other opportunities to improve OH&S performance:

— integrating occupational health and safety requirements at the earliest stage in the life cycle of facilities, equipment or process planning for facilities relocation, process re-design or replacement of machinery and plant;



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ANNEX A (INFORMATIVE)

A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.1 General

- integrating occupational health and safety requirements at the earliest stage of planning for facilities relocation, process re-design or replacement of machinery and plant;
- using new technologies to improve OH&S performance;
- improving the occupational health and safety culture, such as by extending competence related to occupational health and safety beyond requirements or encouraging workers to report incidents in a timely manner;
- improving the visibility of top management's support for the OH&S management system;
- enhancing the incident investigation process(es);
- improving the process(es) for worker consultation and participation;
- benchmarking, including consideration of both the organization's own past performance and that of other organizations;

____ collaborating in forums that focus on topics dealing with occupational health and safety.



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.1 Hazard identification

The ongoing proactive identification of hazard begins at the conceptual design stage of any new workplace, facility, product or organization. It should continue as the design is detailed and then comes into operation, as well as being ongoing during its full life cycle to reflect current, changing and future activities.

While this document does not address product safety (i.e. safety to end-users of products), hazards to workers occurring during manufacture, construction, assembly or testing of products should be considered.

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

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



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.1 Hazard identification

-The list given in 6.1.2.1 is not exhaustive.

NOTE The numbering of the following list items a) to f) does not correspond exactly to the numbering of the list items given in 6.1.2.1.

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

- a) routine and non-routine activities and situations:
 - a) routine activities and situations create hazards through day-to-day operations and normal work activities;
 - b) non-routine activities and situations are occasional or unplanned;
 - c) short-term or long-term activities can create different hazards;



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.1 Hazard identification

- a) human factors:
 - 1) relate to human capabilities, limitations and other characteristics;
 - information should be applied to tools, machines, systems, activities and environment for safe, comfortable human use;
- b) should address three aspects: the activity, the worker and the organization, and how these interact with and impact on occupational health and safety;
- c) new or changed hazards:
 - can arise when work processes are deteriorated, modified, adapted or evolved as a result of familiarity or changing circumstances;
 - 2) understanding how work is actually performed (e.g. observing and discussing hazards with workers) can identify if OH&S risks are increased or reduced;





A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.1 Hazard identification

- d) potential emergency situations:
- 1) unplanned or unscheduled situations that require an immediate response (e.g. a machine catching fire in the workplace, or a natural disaster in the vicinity of the workplace or at another location where workers are performing work-related activities);
- 2) include situations such as civil unrest at a location at which workers are performing work- related activities which requires their urgent evacuation;



ANNEX A (INFORMATIVE) Guidance on the use of this document

A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.1 Hazard identification

- e) people:
- 1) those in the vicinity of the workplace who could be affected by the activities of the organization (e.g. passers-by, contractors or immediate neighbours);
- 2) workers at a location not under the direct control of the organization, such as mobile workers or workers who travel to perform work-related activities at another location (e.g. postal workers, bus drivers, service personnel travelling to and working at a customer's site);
- 3) home-based workers, or those who work alone;
- f) changes in knowledge of, and information about, hazards:
- 1) sources of knowledge, information and new understanding about hazards can include published literature, research and development, feedback from workers, and review of the organization's own operational



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.2Hazard identification and assessment of risks and opportunities

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

An organization can use different methods to assess OH&S risks as part of its overall strategy for addressing different hazards or activities. The method and complexity of assessment does not depend on the size of the organization, but on the hazards associated with the activities of the organization.

Other risks to the OH&S management system should also be assessed using appropriate methods.

Processes for the assessment of risk to the OH&S management system should consider day-to-operations and decisions (e.g. peaks in work flow, restructuring) as well as external issues (e.g. economic change). Methodologies can include ongoing consultation of workers affected by day-to-day activities (e.g. changes in work load), monitoring and communication of new legal requirements and other requirements (e.g. regulatory reform, revisions to collective agreements regarding occupational health and safety), and ensuring resources meet existing and changing needs (e.g. training on, or procurement of, new improved equipment or supplies).





- A.6 Planning
- A.6.1 Actions to address risks and opportunities
- A.6.1.2Hazard identification and assessment of risks and opportunities

A.6.1.2.3 Assessment of OH&S opportunities and other opportunities for the OH&S management system

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



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.3 Determination of legal requirements and other requirements

- a) Legal requirements can include:
 - 1) legislation (national, regional or international), including statutes and regulations;
 - 2) decrees and directives;
 - 3) orders issued by regulators;
 - 4) permits, licences or other forms of authorization;
 - 5) judgments of courts or administrative tribunals;
 - 6) treaties, conventions, protocols;
 - 7) collective bargaining agreements.



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.3 Determination of legal requirements and other requirements

- b) Other requirements can include:
 - 1) the organization's requirements;
 - 2) contractual conditions;
 - 3) employment agreements;
 - 4) agreements with interested parties;
 - 5) agreements with health authorities;
 - 6) non-regulatory standards, consensus standards and guidelines;
 - 7) voluntary principles, codes of practice, technical specifications, charters;

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



A.6 Planning

A.6.1 Actions to address risks and opportunities

A.6.1.4Planning action

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

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

Actions to address risks and opportunities should also be considered under the management of change

(see 8.1.3) to ensure there are no resulting unintended consequences.



A.6 Planning

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

A.6.2.10H&S objectives

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

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

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

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





A.6 Planning

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

A.6.2.2 Planning to achieve OH&S objectives

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

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

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



A.7 Support

A.7.1 Resources

Examples of resources include human, natural, infrastructure, technology and financial.

Examples of infrastructure include the organization's buildings, plant, equipment, utilities, information technology and communications systems, and emergency containment systems.

A.7.2 Competence

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

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

- a) the education, training, qualification and experience necessary to undertake the role and the retraining necessary to maintain competence;
- b) the work environment;
- c) the preventive and control measures resulting from the risk assessment process(es);
- d) the requirements applicable to the OH&S management system;





A.7 Support

A.7.1 Resources

A.7.2 Competence

- e) legal requirements and other requirements;
- f) the OH&S policy;
- g) the potential consequences of compliance and noncompliance, including the impact on the worker's health and safety;
- h) the value of participation of workers in the OH&S management system based on their knowledge and skill;
- i) the duties and responsibilities associated with the roles;
- j) individual capabilities, including experience, language skills, literacy and diversity;
- k) the relevant updating of the competence made necessary by context or work changes. Workers can assist the organization in determining the competence needed for roles. Workers should have the necessary competence to remove themselves from situations of imminent and serious danger. For this purpose, it is important that workers are provided

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with sufficient training on hazards and risks associated with their work.



A.7 Support

A.7.1 Resources

A.7.2 Competence

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

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

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

A.7.3 Awareness

In addition to workers (especially temporary workers), contractors, visitors and any other parties should be aware of the OH&S risks to which they are exposed.

A.7.4 Communication

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





A.7 Support

A.7.5 Documented information

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

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

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

Examples of confidential information include personal and medical information.



A.8 Operation

A.8.1 Operational planning and control

A.8.1.1 General

Operational planning and control of the processes need to be established and implemented as necessary to enhance occupational health and safety, by eliminating hazards or, if not practicable, by reducing the OH&S risks to levels as low as reasonably practicable for operational areas and activities.

Examples of operational control of the processes include:

- a) the use of procedures and systems of work;
- b) ensuring the competence of workers;
- c) establishing preventive or predictive maintenance and inspection programmes;



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A.8 Operation

A.8.1 Operational planning and control

A.8.1.1 General

- d) specifications for the procurement of goods and services;
- e) application of legal requirements and other requirements, or manufacturers' instructions for equipment;
- f) engineering and administrative controls;
- g) adapting work to workers; for example, by:
- 1) defining, or redefining, how the work is organized;
- 2) the induction of new workers;
- 3) defining, or redefining, processes and working environments;
- 4) using ergonomic approaches when designing new, or modifying, workplaces, equipment, etc.



A.8 Operation

A.8.1 Operational planning and control

A.8.1.2 Eliminating hazards and reducing OH&S risks

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

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

- a) Elimination: removing the hazard; stopping using hazardous chemicals; applying ergonomics approaches when planning new workplaces; eliminating monotonous work or work that causes negative stress; removing fork-lift trucks from an area.
- b) Substitution: replacing the hazardous with less hazardous; changing to answering customer complaints with online guidance; combating OH&S risks at source; adapting to technical progress (e.g. replacing solvent-based paint by water-based paint; changing slippery floor material; lowering voltage requirements for equipment).



A.8 Operation

A.8.1 Operational planning and control

A.8.1.2 Eliminating hazards and reducing OH&S risks

- c) Engineering controls, reorganization of work, or both: isolating people from hazard; implementing collective protective measures (e.g. isolation, machine guarding, ventilation systems); addressing mechanical handling; reducing noise; protecting against falls from height by using guard rails; reorganizing work to avoid people working alone, unhealthy work hours and workload, or to prevent victimization.
- d) Administrative controls including training: conducting periodic safety equipment inspections; conducting training to prevent bullying and harassment; managing health and safety coordination with subcontractors' activities; conducting induction training; administrating forklift driving licences; providing instructions on how to report incidents, nonconformities and victimization without fear of retribution; changing the work patterns (e.g. shifts) of workers; managing a health or medical surveillance programme for workers who have been identified as at risk (e.g. related to hearing, hand-arm vibration, respiratory disorders, skin disorders or exposure); giving appropriate instructions to workers (e.g. entry control processes).
- e) Personal protective equipment (PPE): providing adequate PPE, including clothing and instructions for PPE utilization and maintenance (e.g. safety shoes, safety glasses, hearing protection, gloves).

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A.8 Operation

A.8.1 Operational planning and control

A.8.1.3Management of change

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



A.8 Operation

A.8.1 Operational planning and control

A.8.1.4Procurement

A.8.1.4.1 General

The procurement process(es) should be used to determine, assess and eliminate hazards, and to reduce OH&S risks associated with, for example, products, hazardous materials or substances, raw materials, equipment, or services before their introduction into the workplace.

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



A.8 Operation

A.8.1 Operational planning and control

A.8.1.4Procurement

A.8.1.4.1 General

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

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



A.8 Operation

A.8.1 Operational planning and control

A.8.1.4Procurement

A.8.1.4.2 Contractors

The need for coordination recognizes that some contractors (i.e. external providers) possess specialized knowledge, skills, methods and means.

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

An organization can achieve coordination of its contractors' activities through the use of contracts that clearly define the responsibilities of the parties involved. An organization can use a variety of tools for ensuring contractors' OH&S performance in the workplace (e.g. contract award mechanisms or prequalification criteria which consider past health and safety performance, safety training, or health and safety capabilities, as well as direct contract requirements).



A.8 Operation

A.8.1 Operational planning and control

A.8.1.4Procurement

A.8.1.4.2 Contractors

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

The organization should verify that contractors are capable of performing their tasks before being allowed to proceed with their work; for example, by verifying that:

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



A.8 Operation

A.8.1 Operational planning and control

A.8.1.4Procurement

A.8.1.4.3 Outsourcing

When outsourcing, the organization needs to have control of the outsourced functions and process(es) to achieve the intended outcome(s) of the OH&S management system. In the outsourced functions and process(es), the responsibility for conforming to the requirements of this document is retained by the organization.

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

— the ability of the external organization to meet the organization's OH&S management system requirements;

— the technical competence of the organization to define appropriate controls or assess the adequacy of controls;



Operation A.8

Operational planning and control A.8.1

A.8.1.4Procurement

Outsourcing A.8.1.4.3

- the potential effect the outsourced process or function will have on the organization's ability to achieve the intended outcome of its OH&S management system;
- the extent to which the outsourced process or function is shared;
- the capability of the organization to achieve the necessary control through the application of its procurement process;
- opportunities for improvement.

In some countries, legal requirements address outsourced functions or processes.

A.8.2 Emergency preparedness and response

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

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A.9 Performance evaluation

A.9.1 Monitoring, measurement, analysis and performance evaluation

A.9.1.1 General

In order to achieve the intended outcomes of the OH&S management system, the processes should be monitored, measured and analysed.

- a) Examples of what could be monitored and measured can include, but are not limited to:
 - occupational health complaints, health of workers (through surveillance) and work environment;
 - 2) work-related incidents, injuries and ill health, and complaints, including trends;
 - 3) the effectiveness of operational controls and emergency exercises, or the need to modify or introduce new controls;

4) competence.



A.9 Performance evaluation

A.9.1 Monitoring, measurement, analysis and performance evaluation

A.9.1.1General

In order to achieve the intended outcomes of the OH&S management system, the processes should be monitored, measured and analysed.

- b) Examples of what could be monitored and measured to evaluate the fulfilment of legal requirements can include, but are not limited to:
 - 1) identified legal requirements (e.g. whether all legal requirements have been determined, and whether the organization's documented information of them is kept up-to-date);
 - 2) collective agreements (when legally binding);
 - the status of identified gaps in compliance.



A.9 Performance evaluation

A.9.1 Monitoring, measurement, analysis and performance evaluation

A.9.1.1 General

In order to achieve the intended outcomes of the OH&S management system, the processes should be monitored, measured and analysed.

- c) Examples of what could be monitored and measured to evaluate the fulfilment of other requirements can include, but are not limited to:
 - 1) collective agreements (when not legally binding);
 - 2) standards and codes;
 - 3) corporate and other policies, rules and regulations;
 - 4) insurance requirements.



A.9 Performance evaluation

A.9.1 Monitoring, measurement, analysis and performance evaluation

A.9.1.1 General

In order to achieve the intended outcomes of the OH&S management system, the processes should be monitored, measured and analysed.

- d) Criteria are what the organization can use to compare its performance against.
 - 1) Examples are benchmarks against:
 - i) other organizations;
 - ii) standards and codes;
 - iii) the organization's own codes and objectives;
 - iv) OH&S statistics.



A.9 Performance evaluation

A.9.1 Monitoring, measurement, analysis and performance evaluation

A.9.1.2 Evaluation of compliance

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

A.9.2 Internal audit

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

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



A.9 Performance evaluation

A.9.3 Management review

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

- a) "suitability" refers to how the OH&S management system fits the organization, its operation, its culture and business systems;
- b) "adequacy" refers to whether the OH&S management system is implemented appropriately;
- c) "effectiveness" refers to whether the OH&S management system is achieving the intended outcome.

The management review topics listed in 9.3 a) to g) need not be addressed all at once; the organization should determine when and how the management review topics are addressed.





A.10 Improvement

A.10.1 General

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

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





A.10 Improvement

A.10.2 Incident, nonconformity and corrective action

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

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

- a) incidents: same level fall with or without injury; broken leg; asbestosis; hearing loss; damage to buildings or vehicles where they can lead to OH&S risks;
- b) nonconformities: protective equipment not functioning properly; failure to fulfil legal requirements and other requirements; prescribed procedures not being followed;
- c) corrective actions (as indicated by the hierarchy of controls; see 8.1.2): eliminating hazards; substituting with less hazardous materials; redesigning or modifying equipment or tools; developing procedures; improving the competence of affected workers; changing the frequency of use; using personal protective equipment.





A.10 Improvement

A.10.2 Incident, nonconformity and corrective action

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

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

Reviewing the effectiveness of corrective actions [see 10.2 f)] refers to the extent to which the implemented corrective actions adequately control the root cause(s).





A.10 Improvement

A.10.3 Continual improvement

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

- a) new technology;
- b) good practices, both internal and external to the organization;
- c) suggestions and recommendations from interested parties;
- d) new knowledge and understanding of occupational health and safety-related issues;
- e) new or improved materials;
- f) changes in worker capabilities or competence;
- g) achieving improved performance with fewer resources (i.e. simplification, streamlining, etc.).



MANAGING AUDIT PROGRAM











Establishing an Audit Program

Understanding the Auditee's Context

- Audit Scope
- Audit Extent
- Complexity
- Organizations scale

- Objectives
- internal and external issues,
- stakeholder expectations, and
- confidentiality requirements

Planning the Audit Program

- Audit Objectives
- Integrity
- Resource Allocation
- Competency

Audit Program Details

- Audit Information
- Objectives of the audit program.
- Risks & opportunities
- Scope & boundaries
- Audit schedule
- Types of audits
- Audit criteria
- Team members
- Monitoring
- Review and Improvement



MONITORING AND REVIEW OF THE AUDIT PROGRAMME



Monitoring the Audit Programme

Make sure the audit schealule is followed, teams perform well, audits run smoothly, feedback is collected, and documentation is complete



Potential Modifications to the Audit Programme

Update the programme if there are changes in findings, scope, standards, client needs, or conflicts of interest



Reviewing and Improving the Audit Programme

Regularly check if the audit plan works well, find areas to improve, support auditor development, and report findings



Considerations During Review

Look at trends, process compliance, changes in stakeholder needs, data security, and the effectiveness of risk controls



INITIATING THE AUDIT



- responsible by the team leader
- communicating with auditee

PREPARING FOR THE AUDIT



- review documentation
- planning, risk assessment coordination
- review and use audit results



POST-AUDIT

PREPARING AND DISTRIBUTING AUDIT REPORT



Be complete, accurate, concise, and clear

COMPLETING THE AUDIT



Complete report as per planned

CONDUCTING AUDIT FOLLOW-UP



Corrections, corrective actions, or identify opportunities for improvement



PLANNING AN AUDIT PROGRAMME

	Set Clear Audit Objectives	Align audits with orgizational goals, risks, performance levels, and stakeholder <i>expec</i> tations.
	Define Audit Purpose	Common purposes: improve system performance, verify compliance, and ensure supplier reliability.
ΔÔ	Manage Risks & Use Opportunities	Plan to avoid issues like poor resourcing or weak team selection, while using opportunities to combine audits and reduce costs
	Build the Audit Programme	Define scope, assign roles, choose competent auditors, plan schedules, and set up communication and reporting processes
	Ensure Competent Programme Managers	Managers should un'erstand audit practices, management systems, and keep their knowledge updated
	Decide Audit Scope & Coverage	Consider the size, complexity, past results, and stakeholder concerns when setting how broad detailed the audit will be
\$	Plan for Resources	Allocate enough budget, time, personnel, tools, and logistics (e.g. travel, tech, accommodation) for audit activities



IMPLEMENTING AUDIT PROGRAM



Organize and Communicate the Audit Plan

Share the audit plan, assign roles, choose audit methods fon-site or rerote). and keep everyone informed. Ensure everything is scheduled and risks are managed.



Set Clear Audit Audit Method

Decide how the audit will be done



Assign an Audit Team Leader

Appoint a leader to manage the audit and ensure smooth execution



Keep Records Secure and Organized

Protect all audit documents properly



Set Clear Audit Objectives, Scope & Criteria

Define what you want to achieve, the area, and the standards to follow.



Establish Competent Audit Team

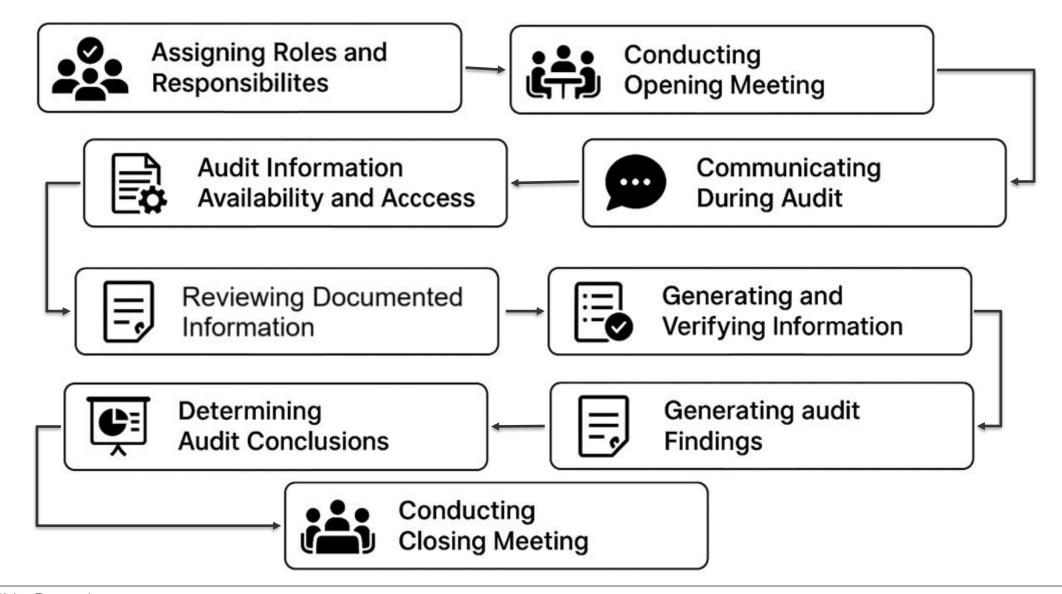
Select skilled auditors, include experts and new auditors if applicable



Review and Use Audit Results

Evaluate achievement of audit objectives, review findings, and share improvements







OSH RISK ASSESSMENT METHODOLOGIES

1. Understanding the Organization and Its Context

Goal:

Understand what's happening inside and outside your company that can affect safety.

Why it's Important:

- Things like;
- · Staff skills
- Equipment/resources
- Weather
- Law or rule changes



These can cause ar increase risks at work.

3. Hazard Identiffication and Assessment of Risks and Opportunities

Goal:

Find dangers, heck the risks, and look for ways to improve safety.



What to include In Risk Assesment

- Daily and unusual tasks
- HIRARC

Emergencies

- JSA
- · Visitors and cotractors
- FMEA

Common Tools Used

- Bowtie Analysis
- HIRARC (Malaysia's recognized approach)

2. Understanding the Needs and Experiations of Workers and Other Interested Par-

Goal:

Find out what workers and others (e.g. contractors, suppliers, community) need for safety.



Why it's important:

- Do you ask workers and include them in risk planning?
- Did you turn their concerns into safety actions?

4. Actions to Address Risks and Opportunities



Goal:

After finding hazards, take action to:

- Achieve safety goals
- · Prevent or reduce problems
- · Keep improving safety

What to Do with Risk Resuits:

- Turn them into real actions like: Training
- PPE, Emergency Plan



HAZARD IDENTIFICATION & RISK CONTROL MEASURES





 The Core of Hazard Identification and Risk Control



5. Applying Hazard Identification & Risk Control Techniques



2. Integration into the OSH Management System



6. From Risk Rating to Control Decision-Making



3. HIRARC as Primary Risk Assessment Tool for the Malaysia application



7. Linking Control Measures with Continual Improvement



4. New Developments: ICOP on OSH Risk Management 202X (DRAFT)



ESSENTIAL OSH COMPETENCY AND COMPLIANCE

Safety and Health Officer

Environmental CP

Environmental monitoring

Genset Chargeman

OSH Coordinator

Boilerman

Noise Risk Assessor

CHRA Assessor

Hygiene Tech. II

IAQ Assessor

Fire Safety Manager

Fire Safety Officer

Medical Surveillance

CIMAH Competent Person

Authorized Gas Tester and Entry Supervisor

Living Quarters Inspector

Radiation Protection Officer (RPO)



Competent Person

Employee to

be trained

Safety and Health Committee Member General OSH Training Hazardous Chemical Handler Scheduled Waste Handler Employees exposed to excessive noise First Aider Fire Safety Manager Fire Safety Team Fire Drill Training Radiation **Protection Officer** Employees handled the highly toxic pesticides Radiation Protection & Safety **General Training**







First Aid Case



Medical Case



Minor Injury



Major Injury



Fatality



Dangerous Occurrence



Occupational Disease



Occupational Poisoning





Overview of the ISO 45001:2018 standard structure

PERSONAL ATTRIBUTES





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KNOWLEDGE AND SKILL



Knowledge of Business Management Practices

Knowledge of Client's

Business Sector



Audit Principles, Procedures, and Techniques





Management System Standards and Reference Documents

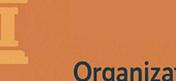


Andards Knowledge of Certification Body's Processes





Applicable Laws, Regulations, and Other Requirements



Organizational Context



Customer Requirements

AUDIT MODELS FOR ISO CERTIFICATION: TEAM-BASED VS SITE-BASED STRUCTURES



Audit Types Based on Audit Team or Scope





Joint Audit

Combine Audit



Audit Types Based on Organizational Structure





Multi-Site Audit

- Multi-SiteWithout Sampling
- Multi-Site with Sampling