

OHSAS 18001

Guide to implementing a Health & Safety Management System



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Introduction

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

The first guide published to assist directors, managers and health and safety professionals to meet their obligations was HS (G) 65 – Successful health and safety management. This guide was produced by the Health and Safety Executive in 1991 and conveys the simple message that 'organizations need to manage health and safety with the same degree of expertise and to the same standards as other core business activities'. It is based upon the quality management concepts of Plan, Do, Check and Act and promotes Policy, Organising, Planning, Measuring Performance and Auditing and Reviewing Performance as the key elements as being contributors to successful health and safety management.

Following on from the success of HS (G) 65, BS 8800 – the Guide to Occupational Health and Safety Management Systems, was introduced in 1996. This British Standard was intended to encourage organizations to adopt an occupational health and safety management system, based upon two approaches:

- ► HS(G) 65
- BS EN ISO 14001

BS 8800 merely translated the key concepts detailed within HS (G) 65 into specific measurable elements. It also sought to encourage organizations that had adopted sound environmental management systems compliant with the requirements of ISO 14001, to implement a formal documented OHS Management System.

However, BS8800 contained only guidance and recommendations, and as such could not be used for certification purposes.

Following the success of ISO 14001 (Environmental Management Systems) and ISO 9001 (Quality Management Systems), and in response to a demand for a recognisable OHS Management System 'standard' against which organizations could be assessed and certificated, OHSAS (Occupational Health and Safety Assessment Series) 18001:1999 and the accompanying guide OHSAS 18002:2000 were published.

Reviewed and revised in 2007, BS OHSAS 18001 is now fully compatible with ISO 9001 and ISO 14001 in order to facilitate the integration of quality, environmental and occupational health and safety management systems by organizations, should they wish to do so.

Background to health and safety

The history of occupational health and safety in Great Britain is to a great extent a story of legislative control over industry. In fact, until the introduction of the Health and Safety at Work etc. Act 1974, legislation consisted of a series of statutes passed on an ad hoc basis in an endeavour to control safety. The first statute to be passed was the Health and Morals of Apprentices Act 1802, which, sought to combat the dreadful conditions experienced by child apprentices within the cotton industry. As well as limiting the number of hours worked, it specified minimum standards for lighting, heating and ventilation. Visitors appointed to factories by local magistrates regulated compliance.

Present day factory legislation is contained within the Factories Act 1961, which consolidated many of the earlier statutes. The Act, in conjunction with other legislation, is being replaced by The Health and Safety at Work etc. Act 1974 and the supporting regulations passed under it.

The Health and Safety at Work etc Act 1974 enabled, for the first time, broad general duties to be placed upon ALL workplaces and allowed for the introduction of more specific codes of practice.

The Health and Safety at Work Act also:

- Established the Health and Safety Commission (HSC) and gave it the power to propose health and safety regulations and Approved Codes of Practice (ACoPs)
- Set up the Health and Safety Executive (HSE) as the unified executive arm of the HSC with the responsibility for enforcing health and safety laws
- Gave health and safety inspectors their enforcement powers
- For the first time in history, placed regulatory duties upon the self employed
- Made provisions for the appointment of safety representatives and safety committees.

However, the regulatory pressures placed upon industry are on the increase, particularly with added demands being placed through EU directives. Such directives have been responsible for most of the recent UK health and safety regulations including the Control of Substances Hazardous to Health Regulations (COSHH) and the Construction (Design and Management) Regulations to name but two.

Benefits of BS OHSAS 18001

There are many reasons for organizations to decide to implement an occupational health and safety management system, not least the reduced risk of failing to comply with legislation. A systematic approach to the effective management of health and safety can bring numerous benefits such as:

Compliance with legislation

BS OHSAS 18001 provides a framework by which an organization can identify the health and safety legislation applicable to its activities, products, services and identified hazards. Such a framework extends to provide the means to comply with the regulatory requirements identified.

Ownership of health and safety issues

BS OHSAS 18001 provides the means by which an organization can communicate and consult upon its health and safety issues.

Nominal effort is required

Companies with a formal documented management system compliant with ISO 9001 (Quality) and/or ISO 14001 (Environmental) can easily extend existing system controls to encompass the management of health and safety.

Training needs are identified and realised

BS OHSAS 18001 enables health and safety training needs to be identified, and the adequacy of subsequent training assessed through measures of competency.

Reduce costs

The cost of an accident extends beyond the compensation paid to an employee. By implementing health and safety improvement strategies, through the effective implementation of a documented OH&S Management System, significant financial savings can be realised; not forgetting the effect that accident reduction can have upon the morale of employees.

Opportunity for integration

Compatibility with ISO 9001/14001 provides an opportunity to integrate your management systems, thereby reducing bureaucracy and maximising effectiveness.

Liabilities minimised

As hazards and their associated risks are eliminated or controlled liabilities are reduced, offering greater stability to your business.

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BS OHSAS 18001 and correspondence with other management standards

Introduction

This section includes an overview of BS OHSAS 18001 – Occupational Health and Safety Management Systems – Specification and OHSAS 18002 – Occupational Health and Safety Management Systems – Guidelines for the implementation of BS OHSAS 18001 and how they correspond to other management standards designed to manage quality and environmental issues.

BS OHSAS 18001 is a specification giving requirements for an Occupational Health and Safety OH&S Management System, to enable an organization to control its OH&S risks and improve its performance. It does not lay down specific performance criteria or give detailed specifications for the actual structure or form of the management system. It is applicable to any organization that wishes to:

- Establish an OH&S Management System to eliminate or minimize risk to employees and other interested parties who may be exposed to OH&S risks associated with its activities
- Implement, maintain and continually improve an OH&S Management System
- Assure itself of its conformance with its stated OH&S policy
- Demonstrate such conformance to others
- Seek certification/ registration of its OH&S Management System by an external organization
- Make a self-determination and declaration of conformance with this OHSAS specification.

All the requirements of BS OHSAS 18001 are intended to be incorporated into any OH&S Management System. The extent of the application of the specification will depend on factors such as the policy statement, the nature of the activities of the organization and the risks and complexity of its operations. It is intended to address occupational health and safety rather than product and services safety.

OHSAS 18002 is the guidance, providing generic advice on the application of BS OHSAS 18001. It explains the underlying principles of BS OHSAS 18001 and describes the intent, typical inputs, processes and typical outputs, against each requirement of the standard in order to aid the implementation process. It does not contain any additional requirements or prescribe any mandatory approaches to the implementation of BS OHSAS 18001.

Correspondence with other standards

The table on the following page represents the correspondence between BS OHSAS 18001, ISO 14001 and ISO 9001. As previously discussed BS OHSAS 18001 closely follows the principles of quality management (Plan, Do, Check and Act) reflecting the key principles and structure of other management systems. The link between health and safety management and environmental management is strong and almost all of the BS OHSAS 18001 clauses are similar to ISO 14001 the potential for integration of these two systems is therefore very clear. **A3**

Similarities between the three major management system standards

Clause	BS OHSAS 18001	Clause	ISO 14001	Clause	ISO 9001
	Introduction		Introduction	0 0.1 0.2 0.3 0.4	Introduction General Process approach Relationship with ISO 9004 Compatibility with other management systems
1	Scope	1	Scope	1 1.1 1.2	Scope Genera Application
2	Normative references	2	Normative references	2	Normative references
3	Terms and definitions	3	Terms and definitions	3	Terms and definitions
4	OH&S management system elements	4	Environmental management system requirements	4	Quality Management System
4.1	General requirements	4.1	General requirements	4.1 5.5 5.5.1	General requirements Responsibility, authority and communication Responsibility and authority
4.2	OH&S Policy	4.2	Environmental Policy	5.1 5.3 8.51	Management commitment Quality policy Continual improvement
4.3	Planning	4.3	Planning	5.4	Planning
4.3.1	Hazard identification, risk assessment and determining controls	4.3.1	Environmental aspects	5.2 7.2.1 7.2.2	Customer focus Determination of requirements related to the product Review of requirements related to the product
4.3.2	Legal & other requirements	4.3.2	Legal & other requirements	5.2 7.2.1	Customer focus Determination of requirements related to the product
4.3.3	Objectives and programmes	4.3.3	Objectives, targets and programmes	5.4.1 5.4.2	Quality Objectives Quality Management System Planning
4.4	Implementation and operation	4.4	Implementation and operation	8.5.1 7	Continual improvement Product realization
4.4.1	Resources, roles, responsibility, accountability and authority	4.4.1	Resources, roles, responsibility and authority	5.1 5.5.1 5.5.2 6.1 6.3	Management commitment Responsibility & authority Management representative Provision of resource Infrastructure
4.4.2	Competence, training and awareness	4.4.2	Competence, training and awareness	6.2.1 6.2.2	(Human resources) General competence, awareness and training
4.4.3	Communication, participation and consultation	4.4.3	Communication	5.5.3 7.2.3	Internal communication Customer communication
4.4.4	Documentation	4.4.4	EMS Documentation	4.2.1	(Documentation requirements) General
4.4.5	Control of documents	4.4.5	Control of documents	4.2.3	Control of documents
4.4.6	Operational control	4.4.6	Operational control	7.1 7.2 7.2.1 7.2.2 7.3.1 7.3.2 7.3.3	Planning of product realization Customer related process Determination of requirements related to the product Review of requirements related to the product Design & development planning Design & development inputs Design & development output
				7.3.4 7.3.5	Design & development review Design & development verification

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Clause	BS OHSAS 18001	Clause	ISO 14001	Clause	ISO 9001
				7.3.6 7.3.7 7.4.1 7.4.2	Design & development validation Control of design & development changes Purchasing process Purchasing information
				7.4.3 7.5 7.5.1	Verification of purchased product Product & service provision Control of production & service provision
				7.5.2 7.5.5	Validation of processes for production and service provision Preservation of product
4.4.7	Emergency preparedness and response	4.4.7	Emergency preparedness and response	8.3	Control of non conforming product
4.5	Checking	4.5	Checking	8	Measurement, analysis and improvement
4.5.1	Performance measurement and monitoring	4.5.1	Monitoring and measurement	7.6 8.1 8.2.3 8.2.4	Control of monitoring & measuring devices General Monitoring & measurement of processes Monitoring & measurement of product
4.5.2	Evaluation of compliance	4.5.2	Evaluation of compliance	8.4 8.2.3 8.2.4	Analysis of data Monitoring & measurement of processes Monitoring & measurement of product
4.5.3	Incident investigation, non-conformity, corrective action and preventive action	-	-	-	-
4.5.3. 1	Incident investigation	-	-	-	-
4.5.3. 2	Nonconformity, corrective and preventive action	4.5.3	Nonconformity, corrective and preventive action	8.3 8.4 8.5.2 8.5.3	Control of nonconforming product Analysis of data Corrective action Preventive action
4.5.4	Control of records	4.5.4	Control of records	4.2.4	Control of records
4.5.5	Internal audit	4.5.5	Internal audit	8.2.2	Internal audit
4.6	Management review	4.6	Management review	5.1 5.6 5.6.1 5.6.2 5.6.3 8.51	Management commitment Management review General Review input Review output Continual improvement

How to use this guide

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This guide is primarily focused on those people who are about to implement an Occupational Health and Safety Management Systems in their organization.

This guidance will be helpful to organizations of all sizes and structures. This book will also be helpful to other interested parties who seek a better understanding of Occupational Health and Safety Management Systems in general and BS OHSAS 18001 in particular.

The main section of the guide addresses each clause of BS OHSAS 18001. Broken down into headings, it aims to simplify the intentions of each clause and gives practical guidance on how to implement the clause and meet the requirements of the OHSAS specification.

The guide should be used in conjunction with BS OHSAS 18001 and OHSAS 18002; it provides an interpretation and guidance to the intention of each clause. It should be noted that this is an interpretation only and the OHSAS specification itself should be referred to. Each clause contains, where appropriate, one or more selfassessment questions (SAQ's). These can be used to gauge the current position of the organization with respect to meeting the requirements of the specification or to gauge progress during implementation. If you can answer yes to all of the SAQ's, you are probably ready for registration to BS OHSAS 18001. If not, work through this book or contact NQA at the address below.

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Terms and definitions

Acceptable risk: risk that has been reduced to a level that can be tolerated by the organization having regard to its legal obligations and its own OH&S policy.

Audit systematic: independent and documented process for obtaining "audit evidence" and evaluating it objectively to determine the extent to which "audit criteria" are fulfilled.

NOTE: independent does not necessarily mean external to the organization. In many cases, particularly in smaller organizations, independence can be demonstrated by the freedom from responsibility for the activity being audited.

NOTE: for further guidance on "audit evidence" and "audit criteria" see ISO 19011.

Continual improvement: recurring process of enhancing the OH&S Management System in order to achieve improvements in overall OH&S performance consistent with the organization's OH&S policy.

NOTE: the process need not take place in all areas of activity simultaneously.

NOTE: adapted from ISO 14001:2004.

Corrective action: action to eliminate the cause of a detected nonconformity or other undesirable situation

NOTE: there can be more than one cause for a nonconformity.

NOTE: corrective action is taken to prevent recurrence whereas preventive action is taken to prevent occurrence.

Document: information and its supporting medium.

NOTE: the medium can be paper, magnetic, electronic or optical computer disc, photograph or master sample, or a combination thereof.

Hazard: source, situation, or act with a potential for harm in terms of human injury or ill health, or a combination of these.

Hazard identification: process of recognizing that a hazard exists and defining its characteristics.

III health: identifiable, adverse physical or mental condition arising from and/or made worse by a work activity and/or work-related situation.

Incident: work-related event(s) in which an injury or ill health (regardless of severity) or fatality occurred, or could have occurred. NOTE: an accident is an incident which has given rise to injury, ill health or fatality.

NOTE: an incident where no injury, ill health, or fatality occurs may also be referred to as a "near-miss", "near-hit", "close call" or "dangerous occurrence"

NOTE: an emergency situation is a particular type of incident.

Interested party: person or group, inside or outside the workplace, concerned with or affected by the OH&S performance of an organization.

Nonconformity: non-fulfilment of a requirement.

Occupational Health and Safety (OH&S): conditions and factors that affect, or could affect the health and safety of employees or other workers (including temporary workers and contractor personnel), visitors, or any other person in the workplace.

NOTE: organizations can be subject to legal requirements for the health and safety of persons beyond the immediate workplace, or who are exposed to the workplace activities

OH&S Management System: part of an organization's management system used to develop and implement its OH&S policy and manage its OH&S risks.

NOTE: a management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.

NOTE: a management system includes organizational structure, planning activities (including for example, risk assessment and the setting of objectives), responsibilities, practices, procedures, processes and resources.

OH&S objective: OH&S goal, in terms of OH&S performance, that an organization sets itself to achieve.

NOTE: objectives should be quantified wherever practicable.

NOTE: 4.3.3 requires that OH&S objectives are consistent with the OH&S policy

OH&S performance: measurable results of an organization's management of its OH&S risks.

NOTE: OH&S performance measurement includes measuring the effectiveness of the organization's controls

NOTE: in the context of OH&S Management Systems, results can also be measured against the organization's OH&S policy, OH&S objectives and other OH&S performance requirements.

OH&S Policy: overall intentions and direction of an organization related to its OH&S performance as formally expressed by top management.

NOTE: the OH&S policy provides a framework for action and for the setting of OH&S objectives

Organization: company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

NOTE: for organizations with more than one operating unit, a single operating unit may be defined as an organization.

Preventive action: action to eliminate the cause of a potential nonconformity or other undesirable potential situation.

NOTE: there can be more than one cause for a potential nonconformity.

NOTE: preventive action is taken to prevent occurrence whereas corrective action is taken to prevent recurrence.

Procedure: specified way to carry out an activity or a process. NOTE: procedures can be documented or not.

Record: document stating results achieved or providing evidence of activities performed.

Risk: combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or ill health that can be caused by the event or exposure(s).

Risk assessment: process of evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable.

Workplace: any physical location in which work related activities are performed under the control of the organization.

NOTE: when giving consideration to what constitutes a workplace, the organization should take into account the OH&S effects on personnel who are, for example, travelling or in transit (e.g. driving, flying, on boats or trains), working at the premises of a client or customer, or working at home.

NOTE: some reference documents use the term "risk assessment" to encompass the entire process of hazard identification, determination of risk, and the selection of appropriate risk reduction or risk control measures. OHSAS 18001 and OHSAS 18002 refer to the individual elements of this process separately and use the term "risk assessment" to refer to the second of its steps, namely the determination of risk.

C Principles of BS OHSAS 18001

C1 "A Journey of Continuous Health & Safety Improvement"

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Principles of BS OHSAS 18001

C1

"A Journey of Continuous Health & Safety Improvement"

Are you about to embark upon the journey of health and safety improvement? It is now recognised by many companies that to embark upon such a journey will require a reliable and robust vehicle to transport them to their desired destination.

If BS OHSAS 18001 is to be your chosen vehicle, then the steps involved in implementing such a system can be likened to any journey that you would undertake in everyday life.

Health & Safety Policy

Is the 'road map'

Your health and safety policy should provide clear 'direction' as to where you want to be and the strategies that are to be deployed to enable you to reach your chosen destination. It should clarify the vehicle to be used, (in this case BS OHSAS 18001) and detail who will be responsible for driving and steering it throughout the whole journey. As all employees will be required to travel along with you, your planned journey will have to be communicated to all employees and a copy of the road map (OH&S policy statement) explained to everyone, therefore avoiding the journey becoming a 'mystery tour'.

Planning for hazard identification, risk assessment and risk control

'Route planning'

Before you set off upon your journey, an assessment will have to be made to identify any actual or potential hazards that may prevent you from reaching your ultimate destination (hazard identification and risk assessment) and your route adjusted to suit (risk control). Consideration will have to be taken when developing your company specific road map (policy statement) to the avoidance and elimination of such hazards.

Legal and other requirements

The 'one-way streets'

All companies are affected by health and safety legislation, albeit to varying degrees. Legislation can be likened to a 'oneway' street, you have to drive up it the right way or you could ultimately face a fine and/or prosecution. However, like a one-way street, legislation can be avoided (e.g. by eliminating the use of hazardous chemicals within your workplace you can negate the need to comply with the Control of Substances Hazardous to Health Regulations - COSHH). You will need to identify the 'oneway' streets (legislative obligations) that you will have to travel down upon your journey and ensure that your road map (policy statement) makes reference to them. To avoid driving down a 'new' one-way street the wrong way you will have to keep up to date with changes to legislation.

Objectives

The mandatory 'points of call'

Detail where you need to be, and by when, to arrive at your ultimate destination. Consideration will have to be taken as to the least hazardous routes (risk assessment results), the one-way streets that you need to negotiate (legal compliance) and your overall journey map (policy statement) when identifying your mandatory points of call.

OH&S management programmes

Your complete travel 'timetable'

Once you have identified your mandatory points of call (objectives), you can begin to map out the quickest and safest journey route (management programme). With start and completion dates being assigned between each point of call, the time taken to reach the ultimate destination can be calculated, the appropriate number of 'driver's assigned and consideration given to the amounts of fuel required (£).

Structure & responsibility

'Drivers' of the health and safety vehicle

As the road to continuous health and safety improvement is never ending, responsibility for driving the vehicle (BS OHSAS 18001) will, without doubt, have to be shared. To leave all of the driving to one individual, can ultimately lead to 'tiredness' and a 'system crash'. It is often best to appoint a 'co-driver' (Management Representative) who will 'direct' a number of select drivers through the one-way streets (legislative obligations) and look out for any unpredicted hazards that may become apparent. Once a number of suitable drivers have been nominated, a decision can then be made as to which particular parts of the journey that they themselves will drive.

Training, awareness and competence

Driving lessons and test

Each selected driver will have to be made aware of the road map (policy statement), road hazards (hazards and risk assessments), one-way streets (legal obligations) and be taught the Highway Code (safe systems of work/procedures). External 'driving instructors' [consultants] may be used for this purpose. An 'on the road' test (measure of competence) will have to taken and passed at the end of the driving lessons (training).

Consultation and communication

Making everyone aware of the complete journey

Including the finalised road map (policy), the one-way streets (legislation), the key points of call (objectives), travel timetable (management programme) and Highway Code (operational procedures).

Documentation

Vehicle Operating Manual

The Vehicle-Operating Manual (OH&S policy manual) details how the vehicle (BS OHSAS 18001) is built and structured. Usually issued to all the 'drivers' at the onset of the journey, it provides a complete overview of how to use the vehicle correctly to minimise vehicle (system) breakdown.

Document and data control

Ensuring that journey plans are kept up to date

If everyone is to arrive at the ultimate destination at the same time, all information should be at the same issue status. ALL drivers will need to be made aware any subsequent changes to prevent them straying from the convoy.

Operational control

The 'Highway Code'

The Highway Code (operational procedures), which, if followed, will ensure that accidents do not occur, and that one-way streets (legal obligations) are negotiated correctly.

Emergency preparedness and response

'Breakdown and recovery membership'

Contingency plans, should an emergency occur.

Performance measurement and monitoring

'Regular checks to see that the journey is to plan'

Continual monitoring and measurement of key points of call (objectives) and the status of the one-way streets (legal compliance).

Accidents, incidents, non-conformance and corrective and preventive action

'Accident reporting'

Provides a systematic means of reporting accidents should they occur along the journey. It makes provisions for the amendment of vehicle (system) faults, should that be found to be the cause of the accident.

Records and records management

The 'glove compartment' of BS OHSAS 18001

Where all obsolete road maps (policies), travel timetables (management programmes), etc. are kept for reference purposes.

Audit

'Vehicle servicing'

A periodic check as to the continued road worthiness of your vehicle (system). The vehicle manufacturers (management team) usually specify the frequency of a 'complete service', e.g. every 6000 miles (6 months).

Failure to carry out regular servicing of the vehicle (system) can result in an accident.

Third Party Certification

'MOT'

An independent check, by an accredited garage (certification body) to determine the road worthiness of your vehicle (system). Following a set of pre-determined checks, a certificate or a test sheet detailing the areas requiring repair is issued.

Management review

'Motorway service stops'

Whereby all the drivers can get together to review the journey to date and discuss the effectiveness of, and changes to, the road map (policy), key points of call (objectives), travel timetable (management programme), one-way streets (legislation) and the highway code (operational procedures). Such a get together is used to assess the adequacy of fuel levels (\mathfrak{L}) to complete the journey, and to discuss the results of police spot checks (Audits) and MOT's (Certification).

D OH&S Management System elements

- D1 4.1 General requirements
- D2 4.2 OH&S Policy

OH&S Management System elements

D

As discussed earlier, BS OHSAS 18001 is aligned with ISO 14001, which is based upon the 'Plan, Do, Check, Act' structure pioneered by the American quality expert W. Edwards Deming in the 1950's. This simple but effective structure is still used today to ensure that the hazards and risks associated with organizations activities, products and services are systematically identified and assessed, controlled, monitored and continuously improved.

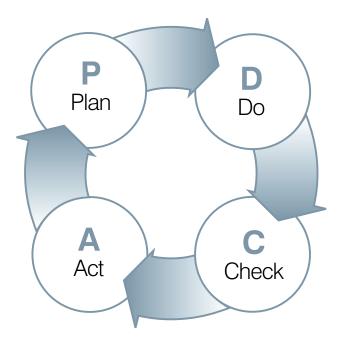


Figure 1: Plan-do-check-act (PDCA) cycle, also known as Deming's cycle.

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4.1 General requirements

Specification intention

Clause 4.1 – General requirements

The organization shall establish and maintain an OH&S Management System, the requirements for which are set out in clause 4. (see above)



4.2 OH&S Policy

Introduction

Having decided to develop an OH&S Management System, the next most critical step is to set out what you wish it to deliver. The H&S policy statement can simply and effectively state these aspirations and communicate such commitments to interested parties. This is especially important to smaller companies who are under pressure from major clients to develop an OHSMS. Sending such an OH&S policy to customers can form part of a marketing strategy and assure clients that you have embarked upon the road to BS OHSAS 18001 certification.

BS OHSAS 18001 policy requirements are based upon similar intentions as those enshrined within the Health & Safety at Work etc Act 1974 (HSAWA) as set out on the following page. However, they do not require that the 'organizational structure' and health and safety 'arrangements' form part of the actual policy document. Instead, under BS OHSAS 18001 such aspirations are usually documented and communicated through the development, and subsequent issue, of a Health & Safety Policy Manual and supporting operational procedures.

BS OHSAS 18001 requirement

Top management shall define and authorize the organizations OH&S policy and ensure that within the defined scope of its management system it:

- a) is appropriate to the nature and scale of the organization's OH&S risks
- b) includes a commitment to prevention of injury and ill health and continual improvement in OH&S management and OH&S performance
- c) include a commitment to at least comply with applicable legal requirements and with other requirements to which the organization subscribes that relate to its OH&S hazards;
- d) provides the framework for setting and reviewing OH&S objectives
- e) is documented, implemented and maintained
- f) is communicated to all persons working under the control of the organization with the intent that they are made aware of their individual OH&S obligations
- g) is available to interested parties and
- h) is reviewed periodically to ensure that it remains relevant and appropriate to the organization.

E What the law requires

E1 Hints for implementation

E2 Developing a H&S Policy Statement

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What the law requires

s2 (3) of the Health & Safety at Work etc Act 1974 states.

"Except in such cases as may be prescribed, it shall be the duty of every employer to prepare and as often as may be appropriate revise a written statement of his general policy with respect to the health and safety at work of his employees* and the organization and arrangements for the time being in force for carrying out that policy, and to bring the statement and any revision of it to the notice of all his employees"

The only exception prescribed under s2 (3) is that contained within the **Employers' Health and Safety Policy Statements (Exception) Regulations 1975** which exempt "any employer who carries on an undertaking in which for the time being he employs less than five employees".

Under s2 (3) the written statement must:

- State your general policy on health and safety
- Describe the organization and arrangements for carrying out your policy
- Be brought to the notice of all your employees
- Be revised whenever appropriate, and every revision must be brought to your employees' attention.

NOTE: The law only requires safety policy statements to cover the health and safety of employees. However, you would do well to set down your strategy for protecting other people who could be put at risk by your activities such as contractors, customers, and the public. If other people's activities (e.g. those of contractors on your site) could put your own employees at risk, you will in any case need to consider how these risks are to be avoided and to cover this aspect in your policy statement.

Under the HSAWA your general policy, organization and arrangements must all be covered but it's up to you how you set out the information. It is therefore acceptable to structure your health and safety management system as you wish as long as you can demonstrate that you are complying with the law. The important thing is to think carefully about all the possible hazards and the best ways of dealing with them, and to set out your policy statement in the way you think will be clearest to your employees, using everyday language. Remember that to be of any use the statement must be read, understood and acted upon by all concerned.

In the case of companies engaged in a number of different activities or whose activities are geographically widespread, a single safety policy statement may not be the best solution. An alternative would be to produce a general statement at the most senior level, setting out the main principles, which could then be used as a basis for more, detailed statements relating to each operational unit.

Where the structure of an organization is such that a number of subsidiaries are themselves employers, each subsidiary would need to issue the 'parent' statement under its own authority as part of its statement.

Although a 'parent' statement can be written in broad terms, because the detailed arrangements are described elsewhere, it should not be forgotten that the health and safety Arrangements for headquarters' staff should also be dealt with in detail, either in the 'parent' statement itself or in associated documents.

Interpretation

BS OHSAS 18001 places a number of mandatory requirements upon your organization with regards to the effective development, issue, maintenance and communication of an OH&S policy. What does this mean?

Top management authorizing the policy

Once developed, the OH&S policy needs to be authorized and endorsed by top management to promote top-level commitment to the aspirations and general objectives contained within it. It is not uncommon for the whole management team to endorse the policy, by signature (as a collective group) to demonstrate their support to ensuring that the policy aspirations are effectively implemented and delivered, rather than seaming to appear that only one senior person has made such a commitment. Such commitment demonstrates credence to the system within the organization.

During the authorization and endorsement processes, consideration should be given to any corporate health and safety policies and aspirations that may exist. Compatibility with your statement should be checked, and formal approval/endorsement of your policy sought from the corporate body.

Dedication to the OHSMS should also be shown in other ways. As well as authorizing the policy, the management team should support the system by allocating suitable and sufficient resources. Simple and regular communications (for example via bulletins) from management on the progress of the system will demonstrate ongoing support.

The inclusion of overall health and safety objectives supported by a commitment to improving health and safety performance

Your policy should include your overall health and safety objectives, i.e. what you are trying to achieve through the introduction of a formal documented management system, e.g. 'to actively identify health & safety hazards with a view to actively eliminating, controlling or minimising them where practicable'.

Include a commitment to continual improvement

Society's expectations are increasing the pressure on organizations to reduce the risk of illness, accidents and incidents in the workplace. In addition to meeting legal responsibilities, the organization should aim to improve its OH&S performance, and its OH&S Management System, effectively and efficiently, to meet changing business and regulatory needs. A commitment to such is therefore imperative in the policy statement.

This does not mean that have to improve in all areas at once, but the policy should drive you overall efforts to continually improve your organization's occupational health and safety performance.

E What the law requires continued

Include a commitment to at least comply with applicable legislation and with other requirements to which the organization subscribes that relate to its OH&S hazards

Organizations are required to be in compliance with 'current' applicable OH&S legislation and other OH&S requirements. The OH&S policy commitment is recognition by the organization of its duty to comply with such legislation or other requirements, and states that it intends doing so.

NOTE: Other requirements may mean, for example, corporate or group policies, the organizations own internal standards or specifications, or HSE Approved Codes of Practice and guidance notes.

Be documented, implemented and maintained

In order for the OH&S policy to be effective, it should be documented and be periodically reviewed for continuing adequacy, and subsequently amended or revised as necessary. Reviewing the statement keeps it alive and relevant to the health and safety issues it is trying to address. It may need to be revised in the light of experience, or because of new hazards or organizational changes. The law requires you to revise the policy statement as often as may be appropriate.

Planning and adequate preparation are the key to successful implementation. Often, OH&S policy statements and OH&S objectives are unrealistic because there are inadequate or inappropriate resources available to deliver them. Before making any public declarations the organization should ensure that any necessary finance, skills and resources are available, and that all OH&S objectives are realistically achievable within such a framework.

Be communicated to all persons working under the control of the organization with the intent that they are made aware of their individual OH&S obligations

This requires the organization to clearly communicate its OH&S policy (and as such general OH&S objectives) to any person working under the control of the organization, which could (as well as employees) be contractors, agency/temporary workers etc., to enable them to have a framework against which they can measure their own individual OH&S performance. (See the table on the next page for ideas on communication).

You may already have suitable means of communicating changes that affect your employees, e.g. team briefing sessions, etc., but whatever communicative arrangements you decide on, similar arrangements should apply for contractors and agency staff whenever a revision is issued. Safety representatives are entitled to inspect and take their own copies under Regulation 7 of the Safety Representatives and Safety Committees Regulations 1977.

Publicising the statement will stimulate your employees' interest, especially if the statement and its relevance to them is explained and discussed. They are more likely to play their part if they are convinced of the value you place on their health and safety.

If part of your workforce does not read English as its native language, you should already have some means of communication established - through bilingual workers, safety signs written in other languages, etc. You will need to ensure that these workers are acquainted with the safety policy and the parts of any supporting documents relevant to them.

Include a commitment to prevention of injury and ill health

Any individual or group (either internal or external) concerned with or affected by the OH&S performance of the organization would be particularly interested in the OH&S policy statement. Therefore, a process should exist to communicate the OH&S policy to them. The process should ensure that interested parties receive the OH&S policy on request but does not necessarily provide for unsolicited copies.

You do not need to provide health and safety inspectors with a copy of the statement unless asked to do so. However, if an inspector visits your premises, he or she may want to check the statement to ensure that it complies with the law.

Communicating the policy commitments of BS OHSAS 18001

Internally	Externally
 posting around the site on notice boards and in reception letters, memos including it with pay cheques training sessions, especially induction training for new staff and contractors staff meeting or briefing intranet/ e-mail staff magazines/ bulletins 	 sales and marketing literature business cards newspaper advertisements annual reports public library local community meetings and open days visitor badges internet/ e-mail external site notice boards

Be reviewed periodically to ensure that it remains relevant and appropriate to the organization

Legislation evolves, societal expectations increase, and change is inevitable. Consequently, the organization's OH&S Policy and Management System will need to be reviewed regularly to ensure its continuing suitability and effectiveness. Such a review is usually conducted as part of the health and safety management review process.

The legal requirement aside, a safety policy statement can bring real benefits. If it is well thought out, has your backing, commands respect and it is thoroughly put into practice, it should lead to better standards of health and safety. Managers and employees will see the importance of the policy and will be encouraged to co-operate.

The OH&S policy should be viewed, therefore, not as commandments set in stone, but as a living document, which drives the system but also grows with it as the system matures.

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Hints for implementation

Consider your legal obligations under the Health and Safety at Work etc Act 1974 (as well as BS OHSAS 18001 requirements) when developing your health and safety policy statement, and format and structure your policy accordingly.

Consider your obligations under any 'corporate' health and safety policies or objectives and ensure that your OH&S policy is compatible with such aspirations.

Use brainstorming techniques to collate ideas and thoughts on the policy content, control and distribution. Try to involve as many people as possible; input from a wide range of people within your organization will increase commitment and ownership. Try the following questions to get ideas flowing:

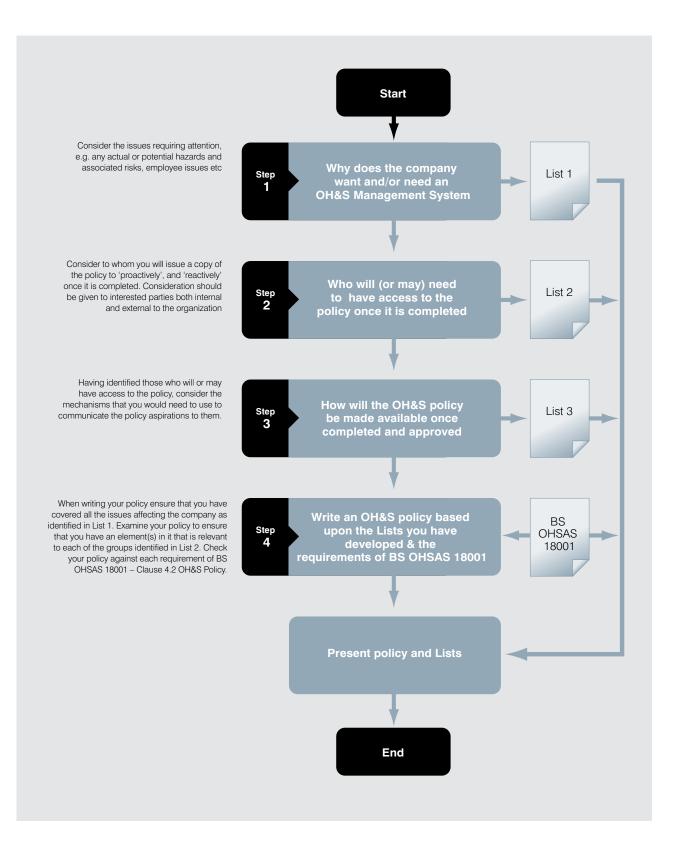
- What are we trying to achieve through our occupational health and safety management system?
- What hazards and risks do we want to address?
- What positive OHS attributes can we promote in the policy?
- Will we do what we say we will?
- Shall we develop a stand-alone document or integrate into other policies?

Write your policy in easy to understand language, keep it jargon free and to the point. The statement should set out clear commitments and act as a springboard when setting objectives. The policy will be brought to life in your plans and actions

Involve people who are exposed to hazards in the workplace in the development of your OH&S policy statement, e.g. shift managers, operators, health and safety representatives etc. to gain ownership.

'Communicate' you policy to all of your employees, don't transmit it. Communication is a two way process whereupon employees can have their say, many company's merely issue the policy in wage packets or place it on notice boards and then fail to understand why their employees do not comprehend its content or buy into the process of continuous OH&S improvement.

Developing a H&S Policy Statement



nqa (21) E2 Developing a H&S Policy Statement continued

1		
List 1		
List 2		
List 3		

E2 Developing a H&S Policy Statement continued

Intentionally left blank for writing the policy statement

Common non-conformances

Some of the common non-conformances found during the certification process include:

- The policy is not defined by top management
- The use of a corporate policy where a site policy is more appropriate
- The policy is not relevant to the company's activity or scope
- Commitment to continual improvement is not clearly defined or missed out altogether
- No mechanisms are in place for revision of the policy
- > The system records do not support the policy commitments
- Communication with employees is not carried out or is inadequate.

Self assessment questions:

- Have you developed a written policy statement?
- Is it appropriate to the nature and scale of the organization's occupational health and safety risks?
- Does it address a commitment to continual improvement and compliance with relevant legislation?
- ▶ Has it been effectively communicated internally and externally?
- Is there a mechanism in place for periodically reviewing the policy?

F	Planning
F1	Planning for hazard identification, risk assessment and risk control
F2	What the law requires
F3	Interpretation – how to assess the risks in your workplace
F4	Interpretation - risk assessment methodologies
F5	Identifying hazards and assessing risks
F6	Legal and other requirements
F7	Objective Programme(s)
F8	Management programme(s)
F9	Example OH&S management programme

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Planning

F1

Planning for hazard identification, risk assessment and risk control

Introduction

After using the process of hazard identification, risk assessment and risk control, your organization should have a total understanding of all its significant OH&S hazards. The outputs from the process will be the basis of the whole management system.

If your organization does not have a current OH&S Management System, its current position with regard to OH&S risks can be established by conducting an 'initial review'. The aim of this 'initial review' is to consider all of the OH&S risks faced by the organization, as a basis for establishing the management system. The following issues are often considered as part of this initial review:

- Identification of the OH&S risks
- Legislative, regulatory requirements and other requirements (e.g. industry codes of practice)
- A close examination of all existing occupational health and safety management practices, processes and procedures
- Collation and evaluation of feedback from the investigation of previous accidents, incidents and emergency situations.

The initial review can be conducted using a number of methods, this often includes:

- Using checklists
- Conducting interviews
- Inspecting processes directly
- Measurement and monitoring of historical and current OH&S performance
- Results of any previous audits and reviews.

The formal process of hazard identification, risk assessment and risk control as required under clause 4.3.1 of OHSAS can then be carried out.

BS OHSAS 18001 requirement

The organization shall establish, implement and maintain a procedure(s) for the ongoing hazard identification, risk assessment, and determination of necessary controls.

The procedure(s) for hazard identification and risk assessment shall take into account:

- a) routine and non-routine activities
- b) activities of all persons having access to the workplace (including contractors and visitors)
- c) human behaviour, capabilities and other human factors

- d) identified hazards originating outside the workplace capable of adversely affecting the health and safety of persons under the control of the organization within the workplace
- e) hazards created in the vicinity of the workplace by work-related activities under the control of the organization

NOTE: it may be more appropriate for such hazards to be assessed as an environmental aspect.

- f) infrastructure, equipment and materials at the workplace, whether provided by the organization or others
- g) changes or proposed changes in the organization, its activities, or materials
- h) modifications to the OH&S Management System, including temporary changes, and their impacts on operations, processes, and activities
- any applicable legal obligations relating to risk assessment and implementation of necessary controls (see also the NOTE to 3.12)
- the design of work areas, processes, installations, machinery/ equipment, operating procedures and work organization, including their adaptation to human capabilities.

The organization's methodology for hazard identification and risk assessment shall:

- a) be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive and
- b) provide for the identification, prioritisation and documentation of risks, and the application of controls, as appropriate.

For the management of change, the organization shall identify the OH&S hazards and OH&S risks associated with changes in the organization, the OH&S Management System, or its activities, prior to the introduction of such changes.

The organization shall ensure that the results of these assessments are considered when determining controls.

When determining controls, or considering changes to existing controls, consideration shall be given to reducing the risks according to the following hierarchy:

- a) elimination
- b) substitution
- c) engineering controls
- d) signage/warnings and/or administrative controls
- e) personal protective equipment.

The organization shall document and keep the results of identification of hazards, risk assessments and determined controls up-to-date.

The organization shall ensure that the OH&S risks and determined controls are taken into account when establishing, implementing and maintaining its OH&S Management System.



What the law requires

The concept of risk assessment became etched within the Health & Safety Legislative framework when the Management of Health & Safety at Work Regulations 1992 (SI 2051) came into force in January 1993.

The notion of risk assessment has of course always been 'implied', if not actually stated, within health and safety legislation. (e.g. s2 (2) (a) of the Health and Safety at Work Act 1974 requires employers to provide and maintain plant and systems of work that are, so far a reasonably practicable, safe and without risks to health). Clear compliance with such a requirement would, by implication, necessitate an assessment of risk.

Revised and re-issued in 1999 to include a requirement for all companies to use the information obtained from their risk assessments to initiate control measures, the Management of Health & Safety at Work Regulations, which are the principal regulations with regards risk assessment, require that

"(1) every employer shall make a suitable and sufficient assessment of:

(a) The risks to the health and safety of his employees to which they are exposed whilst they are at work

(b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertakings.

For the purpose of identifying the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions."

The risk assessment process should therefore consider employees, visitors, contractors, members of the public, and be consistent with the health and safety regulations currently in effect.

Additional requirements for risk assessment are demanded in a number of supporting regulations, namely:

- Manual Handling Operations Regulations 1992
- Personal Protective Equipment at Work Regulations 1992
- ► Health and Safety (Display Screen Equipment) Regulations 1992
- Noise at Work Regulations 2005
- Control of Substances Hazardous to Health Regulations 2002
- Control of Asbestos at Work Regulations 2007
- Control of Lead at Work Regulations 2002
- Regulatory Reform (Fire Safety) Order 2005
- Construction (Design and Management) Regulations 1997

and as such, consideration should be given when developing hazard identification and risk assessment methodologies as to what regulatory requirements are applicable, and methods developed which assess the hazards and risks associated with them.

Interpretation

Hazard identification, risk assessment and risk control processes should be suitable and sufficient to allow your organization to identify, evaluate and control its OH&S risks on an ongoing basis. The hazard identification, risk assessment and risk control processes and their outputs should form the basis of the whole OH&S system. It is important that the links between the hazard identification, risk assessment and risk control and the other elements of the OH&S Management System are clearly established and apparent.

The hazard identification, risk assessment and risk control processes should take into account the cost and time of performing these three processes, and the availability of reliable data. Information already developed for regulatory or other purposes may be used in these processes. You may also take into account the degree of practical control you may have over the OH&S risks being considered. You should determine what the OH&S risks are, taking into account the inputs and outputs associated with your current and relevant past activities, processes, products and /or services.

The complexity of hazard identification, risk assessment and risk control processes will greatly depend on factors such as the size of the organization, the workplace situations within the organization, and the nature, complexity and significance of the hazards. It is not the purpose of BS OHSAS 18001:1999, to force small organizations with very limited hazards to undertake complex hazard identification, risk assessment and risk control exercises.

In all cases, consideration should be given to:

Routine and non-routine activities

Normal, abnormal and potential emergency conditions and operations will need to be considered by the organization when identifying hazards and carrying out subsequent assessments of risk. It is important to remember, and assess, the activities that occur on an infrequent basis such as window cleaning, machine maintenance and repair etc. Organizations that operate a night shift may have to consider other hazards/risks such as violence and aggression towards their staff from external sources, which could occur whilst entering the premises in the dark, etc. Other non-routine activities could include members of staff taking their computers home to do work at the weekend, where upon a risk assessment may need to be undertaken to assess the risks associated with the manual handling of the equipment and its subsequent use.

Activities of all personnel having access to the workplace (including contractors and visitors)

The Management of Health & Safety at Work Regulations 1999 requires that employers make suitable and sufficient assessment the H&S risks to employees and the H&S risks to persons not in his employment arising out of or in connection with the conduct by him of his undertakings.

It is therefore imperative that you consider who could be harmed whilst visiting or working at/on behalf of your organization. Such consideration being given, but not limited, to young workers, trainees, new and expectant mothers, etc. who may be at particular risk; cleaners, visitors, contractors, maintenance workers, etc. who may not be in the workplace all the time; members of the public, or people you share your workplace with, if there is a chance they could be hurt by your activities.

F2 What the law requires continued

Infrastructure, equipment and materials at the workplace, whether provided by the organization or others.

Most workplaces must conform to the minimal facility standards as contained in the Workplace (Health, Safety and Welfare) Regulations 1992. These Regulations formerly consolidate and concentrate the requirements of the Factories Act 1961 and the Offices, Shops and Railway Premises Act 1963 into a single piece of legislation applicable to virtually all workplaces. The principle provisions of the Workplace (Health, Safety and Welfare) Regulations 1992, set parameters and requirements for:

- Regular and systematic maintenance
- Ventilation
- Temperature
- Lighting
- Cleanliness
- Absence of overcrowding
- Sedentary comfort
- Safety underfoot/floors
- Freedom from falls and falling objects
- Structural integrity and stability
- Doors and gates
- Windows and window cleaning
- Escalators and travelators
- Pedestrian traffic routes
- Vehicular traffic routes
- Sanitary conveniences/washing facilities
- Drinking water
- Clothing accommodation
- Rest/meal facilities.

It is therefore imperative that your risk assessment considers the factors above.

Equipment will be governed by the Provision and Use of Work Equipment Regulations (PUWER).

What is a risk assessment?

A risk assessment is nothing more than a careful examination of what, in your workplace, could cause harm to people so that you can weigh up whether you have taken enough precautions or should do more to prevent harm. The aim is to make sure that no one gets hurt or becomes ill. Accidents and ill health can ruin lives, and affect your business if output is lost, machinery is damaged, insurance costs increase, or you have to go to court.

You are legally required to assess the risks in your workplace.

The important things you need to decide are whether a hazard is significant, and whether you have it covered by satisfactory precautions so that the risk is small. You need to check this when you assess the risks. For instance, electricity can kill but the risk of it doing so in an office environment is remote, provided that 'live' components are insulated and metal casings properly earthed.

Interpretation – how to assess the risks in your workplace

The complexity of hazard identification, risk assessment and risk control processes greatly depends on factors such as the size of the organization, the workplace situations within the organization and the nature, complexity and significance of the hazards. It is not the purpose of BS OHSAS 18001 to force small organizations with very limited hazards to undertake complex hazard identification and risk assessment.

HSE Guidance promotes a 5-step approach to hazard identification and risk assessment:

- Step 1: Look for the hazards
- Step 2: Decide who might be harmed and how
- **Step 3:** Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done
- **Step 4:** Record your findings
- Step 5: Review your assessment and revise it if necessary.

Don't be over complicated. In most firms in the commercial, service and light industrial sectors, the hazards are few and simple. Checking them is common sense, but necessary. You probably already know whether, for example, you have machinery that could cause harm, or if there is an awkward entrance or stair where someone could be hurt. If so, check that you have taken what reasonable precautions you can to avoid injury.

If you are a small firm and you are confident you understand what's involved, you can do the assessment yourself (you don't have to be a health and safety expert!). If you are a larger firm, you could ask a responsible employee, safety representative or safety officer to help you. If you are not confident, get help from a competent source, but remember you are responsible for seeing it is adequately done.

Step 1 - Look for the hazards

If you are doing the assessment yourself, walk around your workplace and look afresh at what could reasonably be expected to cause harm. Ignore the trivial and concentrate on significant hazards that could result in serious harm or affect several people.

Ask your employees or their representatives what they think. They may have noticed things that are not immediately obvious. Manufacturers' instructions or data sheets can also help you spot hazards and put risks in their true perspective. So can accident and ill-health records.

Step 2 - Decide who might be harmed, and how?

- Young workers, trainees, new and expectant mothers, etc. who may be at particular risk
- Cleaners, visitors, contractors, maintenance workers, etc. who may not be in the workplace all the time
- Members of the public, or people you share your workplace with, if there is a chance they could be hurt by your activities.

Step 3 - Evaluate the risks and decide whether existing precautions are adequate or more should be done

Consider how likely it is that each hazard could cause harm. This will determine whether or not you need to do more to reduce the risk. Even after all precautions have been taken, some risk usually remains. What you have to decide for each significant hazard is whether this remaining is risk tolerable or intolerable.

First, ask yourself whether you have done all the things that the law says you have got to do. For example, there are legal requirements on prevention of access to dangerous parts of machinery. Then ask yourself whether generally accepted industry standards are in place. But don't stop there - think for yourself, because the law also says that you must do what is reasonably practicable to keep your workplace safe. Your real aim is to make all risks small by adding to your precautions as necessary.

If you find that something needs to be done, draw up an 'action list' and give priority to any risks that are intolerable and/or those, which could affect most people.

In taking action ask yourself:

- Can I eliminate the hazard altogether?
- If not, how can I control the risks so that harm is unlikely?

In controlling risks apply the principles below, if possible in the following order:

- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organize work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first aid).

Improving health and safety need not cost a lot. For instance, placing a mirror on a dangerous blind corner to help prevent vehicle accidents, or putting some non-slip material on slippery steps, are inexpensive precautions considering the risks? And failure to take simple precautions can cost you a lot more if an accident does happen.

But what if the work you do tends to vary a lot or you or your employees move from one site to another? Identify the hazards you can reasonably expect and assess the risks from them. After that, if you spot any additional hazards when you get to a site, get information from others on site, and take what action seems necessary.

But what if you share a work place? Tell the other employers and self-employed people there about any risks your work could cause them, and what precautions you are taking. Also, think about the risks to your own work force from those who share your workplace.

But what if you have already assessed some of the risks? If, for example, you use hazardous chemicals and you have already assessed the risks to health and the precautions you need to take under the Control of Substances Hazardous to Health Regulations (COSHH), you can consider them 'checked' and move on.

Step 4 - Record your findings

If you have fewer than five employees you do not need to write anything down, though it is useful to keep a written record of what you have done. But if you employ five or more people you must record the significant findings of your assessment. This means writing down the significant hazards and conclusions. Examples might be 'Electrical installations: insulation and earthing checked and found sound' or 'Fume from welding: local exhaust ventilation provided and regularly checked'. You must also tell your employees about your findings.

Suitable and sufficient - not perfect!

Risk assessments must be suitable and sufficient. You need to be able to show that:

- A proper check was made
- > You asked who might be affected
- You dealt with all the obvious significant hazards, taking into account the number of people who could be involved
- Precautions are reasonable, and the remaining risk is low.

Keep the written record for future reference or use; it can help you if an inspector asks what precautions you have taken, or if you become involved in any action for civil liability. It can also remind you to keep an eye on particular hazards and precautions. And it helps to show that you have done what the law requires.

To make things simpler, you can refer to other documents, such as manuals, the arrangements in your health and safety policy statement, company rules, manufacturers' instructions, your health and safety procedures and your arrangements for general fire safety. These may already list hazards and precautions. You don't need to repeat all that, and it is up to you whether you combine all the documents, or keep them separately.

Step 5 - Review your assessment and revise it if necessary

Sooner or later you will bring in new machines, substances and procedures which could lead to new hazards. If there is any significant change, add to the assessment to take account of the new hazard. Don't amend your assessment for every trivial change, or still more, for each new job, but if a new job introduces significant new hazards of its own, you will want to consider them in their own right and do whatever you need to keep the risks down. In any case, it is good practice to review your assessment from time to time to make sure that the precautions are still working effectively.

Interpretation - risk assessment methodologies

There is no official guidance on the most appropriate methodology for ranking risks. However the methodology suggested below is used by many businesses and organizations, and found to a suitable means of identifying and prioritising action. It is important to stress that ALL risk assessments are subjective, reflecting the 'opinions' and 'judgements' of the assessor. When carrying out an assessment you may wish to carry out the identification of hazards, risk assessment and risk control processes using a team approach, whereby consensus can be reached as to the prevalent and action required.

The 5x5 method measures each identified hazard against two constituents of risk;

Likelihood - or probability of occurrence; severity - or, the potential consequence(s) upon human health.

'5x5' Assessment Method

Identify hazards - See - Step 1 - previous guidance.

Typical hazards may include, but are not restricted to:

- Electrical
- Fire
- Handling
- Slipping
- Tripping
- Noise
- Vibration
- Chemical use and spillage
- Ventilation
- Radiation
- Lifting
- Falling objects
- Traffic Movement
- Lone-working etc.

Evaluate the risks

Once all of the hazards have been identified, they can be individually risk assessed, to determine whether on not such hazards are tolerable or intolerable whereby:

Likelihood (Probability)

- 5 = Very likely to occur/has Occurred
- 4 = Probable
- 3 = Possible
- 2 = Remote
- 1 = Improbable

Severity (Consequence)

- 5 = Fatal Outcome
- 4 = Major Injury (Reportable under RIDDOR)
- 3 = Three Day Injury (as determined in RIDDOR)
- 2 = Minor Injury (First Aid Treatment only)
- 1 = Accident/Incident where no injury occurs

Having made a judgement as to the risk levels associated with EACH hazard, you will need to assess whether suitable precautions exist to control or reduce the risk. Using the above scenario, if the above office was inhabited at all times, had adequate smoke detection and suitable fire fighting equipment, supported by personnel trained in the use of such equipment it is less likely that the severity would be fatal. The severity may then become (1) as a subsequent fire would be immediately identified and suppressed adequately and safely.

Decide who may be harmed

In the above scenario, potential harm may be restricted to employees, although you will have to consider whether the outbreak of such a fire could prevent evacuation from another room, e.g. an adjacent meeting room used for customers, etc.

Once the risks have been assessed and numerically ranked by multiplying the likelihood and severity values, you will need to prioritise action based upon what you determine as tolerable or intolerable risks. By developing a simple matrix you can ensure that those will the potential to become fatal accidents are addressed before those deemed as being of lesser probability and consequence.

Basic Risk Matrix							
RISK	5	10	15	20	25		
	4	8	12	16	20		
	3	6	9	12	15		
	2	4	6	8	10		
	1	2	3	4	5		
SEVERITY							

Action Priority		
1		Immediate
2		Urgent - ASAP after immediate
3		Planned
4		For consideration

Details of the assessment should be recorded

Whilst you are only obligated to document you risk assessments if you employ five or more persons, having taken the time and trouble to identify your workplace hazards and risks it would be a shame to lose such valuable information through not recording your findings. Such records needn't be complicated and time consuming to complete, but merely serve as written evidence of what you have done.

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Eliminate, combat or minimise

Wherever practicable, hazards should be eliminated, before control or minimisation options are adopted. Signage, the issue of Personal Protective Equipment (PPE) or the issue of formal instructions should only be adopted as a last resort. BS OHSAS 18001 was modified in 2007 to ensure that it mirrored the hierarchy of control as contained within Schedule 1 of the Management of Health and Safety at Work Regulations i.e.:

- Elimination
- Substitution
- Engineering controls
- Signage/warnings and/or administrative controls
- Personal protective equipment.

All hazards identified as having an intolerable risk(s) associated with them will require some form of action to eliminate, control or minimise the risk(s) identified.

You should then consider setting an objective(s) to so. You may however wish to develop a generic objective to 'Eliminate, control or minimise all intolerable health & safety risks as identified by the hazard identification and risk assessment processes', under which will sit a number of supporting sub-objectives or tasks to address each specific hazard graded as intolerable.

You should keep documentation, data and records concerning the identification of hazards, the risk assessment and subsequent control of risks up-to-date in respect of the current activities but also extend them to cover any new or modified activities that may be take place within your organization before they are introduced.

The documentation should include the identification of hazards. It should also include the evaluation of the risks with existing or any proposed control measures in place but also take into account exposure to specific hazards, the likelihood of failure of the control measures, and the potential severity of consequences of injury or damage. Other elements that should be included are the evaluation of the tolerability of residual risk, the identification of any additional risk control measures are sufficient to reduce the risk to a tolerable level.

BS OHSAS 18001 clause 4.3.1 states that:

The organizations methodology for hazard identification and risk assessment shall:

- Be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive and
- Provide for the identification, prioritisation and documentation of risks, and the application of controls, as appropriate.

For the management of change, the organization shall identify the OH&S hazards and OH&S risks associated with changes in the organization, the OH&S Management System, or its activities, prior to the introduction of such changes.

Interpretation

The following criteria should apply to the hazard identification, risk assessment and risk control processes:

- Competency requirements and training needs for performing hazard identification, risk assessment and risk control should be defined. For some organizations, depending on the type of process used, it may be necessary to use external advice/services
- The roles and authorities of personnel responsible for performing hazard identification, risk assessment and risk control should be defined
- Information from employee OH&S consultation, review and improvement activities should be considered (these activities may be either reactive or proactive in nature)
- Feedback to management on the results of hazard identification, risk assessment and risk control should be provided
- As well as considering the hazards and risks posed by activities carried out by its own personnel, the organization should consider hazards and risks arising from the activities of contractors and visitors, and from the use of products or services supplied to it by others
- The OH&S hazards posed by materials, plant and equipment that degrade over time, particularly such materials/plant/ equipment that are being stored
- Hazard identification, risk assessment and risk control should take into account the measures implemented for the control of risks that are effective at the time of the assessment; if consideration of the resulting risk leads to amendments to these measures, then further hazard identification and risk assessment should be conducted to reflect the amendments and to estimate the residual risk
- There should be clear evidence that actions identified from hazard identification, risk assessment and risk control processes are monitored for their timely completion
- Hazard identification, risk assessment and risk control should be carried out as a proactive measure, rather than a reactive one, i.e. they should precede the introduction of new or revised activities or procedures, and risk reduction and control measures identified via the process should be in place before the change takes place
- Where appropriate, hazard identification, risk assessment and risk control should identify competency/training requirements for affected personnel
- Human error should be considered as an integral part of the hazard identification, risk assessment and risk control process
- The organization should keep its documentation, data and records concerning the identification of hazards and the assessment and control of risks up-to-date in respect of ongoing activities, and extend them to cover new developments and new or modified activities, before these are implemented. The results should show the level of risk associated with a particular hazard and may, therefore, affect the organization's OH&S objectives. If this occurs, the organization should review its OH&S objectives accordingly.

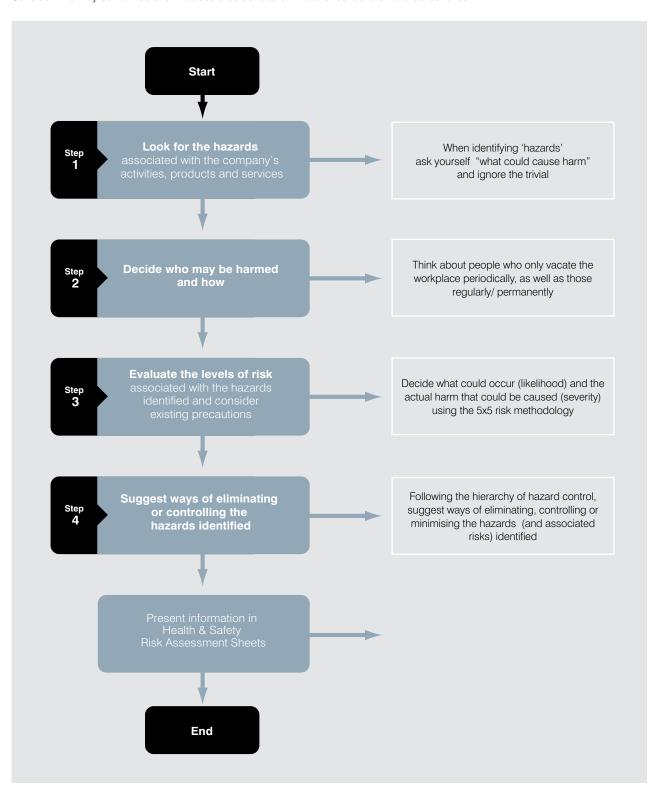
F4 Interpretation - risk assessment methodologies continued

Hints for implementation:

- Consider ALL of your legal obligations when carrying out your hazard identification and risk assessment processes
- Use the HSE's five-step approach to risk assessment as a basis for your methodologies
- Ensure that those responsible for carrying out your assessments are trained and competent
- Review you assessments in light of significant changes to workplace layout, equipment, processes etc. or any accidents that may occur
- Assess any improvement actions, to make sure that your suggested improvements do not create new hazards and risks
- Utilise your health and safety audits to continually review the adequacy of your assessments.
- ► Keep it simple!

Identifying hazards and assessing risks

Identify the hazards/assess the risks associated with the organization's activities, products and services. Consider who may be harmed and what could be done to eliminate or control the hazards identified.



F5 Identifying hazards and assessing risks continued

Common non-conformances:

- Lack of comprehensive, documented procedures for identifying hazards
- Incomplete coverage for past, current and planned activities
- Incomplete coverage of all activities, products or services
- Hazard identification under routine and non-routine not adequately covered
- Risk assessment of activities of all personnel having access to the workplace, including subcontractors and visitors not considered
- Hazard identification and risk assessment does not include facilities in the workplace provided by others
- Poor provision for keeping the information up to date

Self assessment questions:

- Have you established a procedure for identifying and assessing the risk of hazards and the implementation of necessary control measures?
- Have you considered the results of these assessments and the effects of the control to feed into you objectives?
- Are you keeping this information up to date?

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Legal and other requirements

Introduction

Any organization needs to be aware of and understand how its activities are, or will be, affected by applicable legislation and other requirements such as Approved Codes of Practices (ACoPs). This information needs to be communicated to all relevant personnel and to other interested parties such as contractors. The organization also needs to keep abreast of the changes to legislation and to the introduction of new legislation. This will help to ensure compliance with the legislation and avoid enforcement action by the regulatory bodies.

BS OHSAS 18001 requirements

The organization shall establish, implement and maintain a procedure(s) for identifying and accessing the legal and other OH&S requirements that are applicable to it.

The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining its OH&S Management System.

The organization shall keep this information up-to-date.

The organization shall communicate relevant information on legal and other requirements to persons working under the control of the organization, and other relevant interested parties.

Interpretation

This requirement of 4.3.2 from BS OHSAS 18001:2007 is intended to promote an awareness and understanding of legal responsibilities, not to require the organization to establish libraries of legal or other documents that will rarely be referenced or used.

One of the commitments of your OH&S policy is to comply with current applicable OH&S legislation and with other requirements to which the organization subscribes. Your OHS Management System will help you to:

- Identify and evaluate applicable current and future legal and other requirements such as ACoPs and Guidance Notes published by the Health and Safety Executive (HSE)
- Ensure that any relevant requirements are integrated into the operational and management controls of your system.

Typical inputs:

- Details of the organization's production or service realization processes
- Hazard identification, risk assessment and risk control results
- Best practices (e.g. codes, industry association guidelines)
- Legal requirements/governmental regulations
- Listing of information sources
- National, foreign, regional or international standards
- Internal organizational requirements
- Requirements of interested parties.

Process:

- Relevant legislation and other requirements should be identified (Other requirements may include, but are not necessarily restricted to HSE Approved Codes of Practice and Guidelines)
- Organizations should seek out the most appropriate means for accessing the information. It is important to recognise that access will be required to the actual regulations and to any changes made to them. Access to the actual regulations may be afforded through the Internet, public library access, etc. Whilst you may consider keeping up to date with legislative changes and developments through health and safety journals, legislative update services etc.
- The organization should also evaluate which requirements apply, and where they apply, and who needs to receive which kind of information.

Typical outputs:

- Procedures for identifying and accessing legislative information
- Identification of which requirements apply and where [this may take the form of a register(s) of health and safety and other requirements]
- Not only will this register provide evidence that you have identified your legislative obligations but will also provide you with an excellent tool for training staff in legislative awareness
- Requirements (actual text, summary or analysis, where appropriate), available in locations which are to be decided by the organization
- Procedures for monitoring the implementation of controls consequent to new OH&S legislation
- Objectives and targets to comply with your legislative obligations.

Hints for implementation

Considering the large volume of legislation now applicable to businesses, this element of BS OHSAS 18001 may seem like a particularly daunting task. Nevertheless there are several ways in which your organization can obtain information about applicable laws or regulations, without resorting to expensive legal advice. These include:

- Health and safety business journals/newsletters/magazines
- Health and safety guidance notes and ACoPs
- Advice from regulatory agencies (e.g. the Health and Safety Executive, or local authorities)
- Trade associations
- Business clubs/networks
- Public libraries
- The internet (e.g. OPSI web page)
- Customers, suppliers and other companies.

In the same way as ISO14001, BS OHSAS 18001 does not require the development of a register of legislation. It does however require your company to establish a procedure for identifying and having access to legal and other requirements. The certification body will also want to see evidence that your company has evaluated compliance and that the OH&S system is designed to deliver compliance. Where non-compliance is identified appropriate actions should be taken to rectify the situation. It would therefore, be good practice to establish some sort of Manual/Register showing that you have identified the relevant legislation and documented current controls for compliance. This Manual/Register should be reviewed and updated as circumstances within the company change and legislation evolves.

A pro-forma for this register could include the following headings:

- Précis of legislation
- Purpose of legislation
- Coverage/scope of legislation
- Compliance requirements
- Current compliance status
- Responsibility for compliance
- Review frequency.

Not only will this register provide evidence that you have identified and have access to legislation but it will also provide an excellent tool for training staff in legislative awareness.

Common non-conformances

On the whole, certification to BS OHSAS 18001 can be withheld if a legislative breach is identified. Only in circumstances where a documented agreement has been reached with regulator may certification be recommended.

Other potential non-conformances include:

- Procedures not established or maintained
- Identification of legal requirements not sufficiently comprehensive
- Little or no reference to other requirements
- Failure to recognise how laws, regulations or other requirements are relevant to the organization
- Access to legal and other requirements cannot be demonstrated
- Evidence of legal compliance cannot be demonstrated.

Self assessment questions:

- Have you identified applicable rules, requirements, legislation and other requirements relevant to your organization?
- Have you established and documented a procedure for assessing legal and other requirements and keeping them up-to-date?
- Have legislative requirements been factored into the controls of your management system?
- Is there a procedure in place to deal with any areas of non-compliance?

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Objective programme(s)

BS OHSAS 18001 requirements

The organization shall establish, implement and maintain documented OH&S objectives, at relevant functions and levels within the organization.

The objectives shall be measurable, where practicable, and consistent with the OH&S policy, including the commitments to the prevention of injury and ill health, to compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement.

When establishing and reviewing its objectives, an organization shall take into account the legal requirements and other requirements to which the organization subscribes, and its OH&S risks. It shall also consider its technological options, its financial, operational and business requirements, and the views of relevant interested parties.

The organization shall establish, implement and maintain a programme(s) for achieving its objectives. Programme(s) shall include as a minimum:

- a) designation of responsibility and authority for achieving objectives at relevant functions and levels of the organization
- b) the means and time-frame by which the objectives are to be achieved.

The programme(s) shall be reviewed at regular and planned intervals, and adjusted as necessary, to ensure that the objectives are achieved.

Introduction

Objectives

It is necessary to ensure that, throughout the organization, measurable OH&S objectives are established to enable the OH&S policy to be achieved.

Following your OH&S hazard identification assessment, you will have created a list of several issues, some of which may be classed as significant. In addition, your review of relevant legislation may have highlighted areas of compliance obligations requiring tighter control. These issues will need to be incorporated within your OH&S system. To enable this, your company must take the next step of setting objectives and targets.

Moreover, your OH&S policy contains a commitment to continual improvement so it is critical that your objectives reflect any aspirations outlined in the statement. The ongoing achievement of objectives will also provide clear evidence to the certification body that the OH&S system is effective in delivering continual health & safety improvement.

Interpretation

Now that your company has identified its significant OH&S hazards and understood what its legal duties are, the standard now asks you to factor these into the OH&S system. This does not mean that you must set improvement objectives for every significant hazard identified. Financial resources may not allow this, but you should at least set objectives to ensure that the associated risks are effectively managed and controlled. When setting objectives, consider your OH&S policy, including its three core commitments. You should also consider the views of interested parties, your technological options, and financial, operational, and other business requirements.

It is critical that your objectives and targets are appropriate to your organization. They can be set for the entire company or applied specifically to individual departments, activities, and services.

Typical inputs:

- Policy and objectives relevant to the organization's business as a whole
- OH&S policy, including the commitment to continual improvement
- Results of hazard identification, risk assessment and risk control
- Legal and other requirements
- Technological options
- Financial, operational and business requirements
- Views of employees and interested parties
- Information from employee OH&S consultation, reviews and improvement activities in the workplace (these activities may be either reactive or proactive in nature)
- Analysis of performance against previously established OH&S objectives;
- Past records of OH&S non-conformance, accidents, incidents, and property damage
- Results of the management review.

Process

Using information or data from the 'Typical inputs' described above, appropriate levels of management should identify, establish and prioritise OH&S objectives.

During the establishment of OH&S objectives, particular regard should be given to information or data from those most likely to be affected by individual OH&S objectives, as this will assist in ensuring that they are reasonable and more widely accepted. It will also be useful to consider information or data from sources external to the organization, e.g. from contractors or other interested parties.

Meetings by the appropriate levels of management for the establishment, and progression, of OH&S objectives should be held regularly.

For some organizations, there may be a need to document the process of establishing the OH&S objectives in the form of a procedure; however this is not a specific requirement.

F7 Objective programme(s) continued

Interpretation

The OH&S objectives should address both broad corporate OH&S issues and OH&S issues that are specific to individual functions and levels within the organization.

Suitable indicators should be defined for each OH&S objective. These indicators should allow for the monitoring of the implementation of the OH&S objectives.

OH&S objectives should be reasonable and achievable, in that the organization should have the ability to reach them and monitor progress. A reasonable and achievable time scale should be defined for the realization of each OH&S objective.

OH&S objectives may be broken down into separate goals, depending on the size of the organization, the complexity of the OH&S objective and its time-scale. There should be clear links between the various levels of goals and OH&S objectives.

Examples of types of OH&S objectives include:

- Reduction of risk levels
- The introduction of additional features into the OH&S management system
- The steps taken to improve existing features, or the consistency of their application
- The elimination or the reduction in frequency of particular undesired incident(s).

The OH&S objectives should be communicated (e.g. via training or group briefing sessions) to relevant persons working under the control of the organization, and be deployed through the OH&S management programme(s).

Typical outputs

Documented, measurable, OH&S objectives for each function in the organization.

Management programme(s)

Introduction

OH&S Management programme(s)

The organization should seek to achieve its OH&S policy and OH&S objectives by establishing an OH&S management programme(s). This will require the development of strategies and plans of action to be taken, which should be documented and communicated. Progress against meeting the OH&S objectives should be monitored, reviewed and recorded, and the strategies and plans should be updated or amended accordingly.

Interpretation

Typical inputs:

- OH&S policy and OH&S objectives
- Reviews of legal and other requirements
- Results of hazard identification, risk assessment and risk control
- Details of the organization's production or service realization processes
- Information from employee OH&S consultancy, review and improvement activities in the workplace (these activities may be either reactive or proactive in nature)
- Reviews of opportunities available from new, or different, technological options
- Continual improvement activities
- Availability of resources needed to achieve the organization's OH&S objectives.

Process

The OH&S management programme should identify the individuals who are responsible for delivering the OH&S objectives (at each relevant level). It should also identify the various tasks, which need to be implemented in order to meet each OH&S objective.

It should provide for the allocation of appropriate responsibility and authority for each task and allocate time-scales to each individual task, in order to meet the overall time-scale of the related OH&S objective. It should also provide for the allocation of suitable resources (e.g. financial, human, equipment, logistics) to each task.

The programme may also relate to specific training programmes. The training programmes will further provide for the distribution of information and co-ordinate supervision.

Where significant alterations or modifications in working practices, processes, equipment or material are expected, the programme should provide for new hazard identification and risk assessment exercises. The OH&S management programme should provide for consultation of relevant personnel on expected changes.

Typical outputs

Defined, documented OH&S management programme(s).

Objectives and targets should be S M A R T

- Simple
- Measurable
- Achievable
- Relevant
- Time-bound

You needn't set up new management programmes to ensure that OH&S objectives are achieved utilise what you already have in place. Some companies use their business plan, to good effect, to document how such objectives will be achieved.

Consider other objectives that you have committed to, i.e. productivity, quality, environmental, etc. when setting timescales for improvement. Otherwise you may end up continually re-scheduling your management programme.

Examples of objectives and targets

Objectives	Targets
On notice boards and Minimise exposure to hazardous substances.	Sales and marketing Reduce recorded OEL levels of all solvents by 25% in 2009.
Improvement in the number of Lost Time Accidents caused by manual handling.	Submit detailed reduction strategy by QTR3 2008 with a view to a 50% reduction for 2010.
Improve employee awareness of OH&S issues.	Hold monthly awareness training courses. Train all employees by end of 2009.

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Example OH&S management programme

OH&S Policy requirement

Commitment to continual improvement

Legal and other requirements

Workplace (Health, Safety and Welfare) Regulations 1999

Manual Handling (Operations) Regulations 1992

Significant OH&S hazard

6 Lost Time Accidents occurred in 2003 attributed to manual handling activity

Impacts

6 accidents cost the company approximately £xxx in terms of lost production and covering overtime

Objective

To reduce the number of Lost Time Accidents by 50% for 2004

Targets

Review relevant risk assessments and produce reduction strategy

Reduce the amount of unnecessary manual handling operations

Train all employees on manual handling techniques

- I - I -

Task items	Responsibility	Start	Finish
Produce reduction strategy	MJG	1 January	1 February
Produce new Safe Systems of Work to reduce amount of manual handling activity	ABW	1 March	31 July
Develop training package on good manual handling techniques and present course to all relevant staff	ABW	1 August	1 September

Common non-conformances:

- Objectives and targets do not reflect policy requirements
- Objectives and targets do not demonstrate continual improvement
- They are not linked to the significant hazards identified and legislative assessment
- They are not documented and distributed to relevant sections for action
- Responsibilities are not adequately defined
- No detailed means of achieving Objectives and Targets are given
- OH&S hazards of new projects, plant or methods of work are not considered or identified
- Time-scales are not met and / or unrealistic.

- > Do you have documented objectives, targets and management programmes at relevant functions and levels within the organization?
- Have you ensured that your objectives, targets and management programmes are consistent with the OH&S policy, including commitments to continual improvement, legal compliance and identified OH&S hazards?
- Have you considered technological options, financial, operational, business requirements and the views of other interested parties when setting your objectives and targets?
- Have you established a process for tracking and reporting progress and conformance with objectives and targets?
- Have you established detailed action plans of how you will achieve your objectives and targets?
- > Do they include responsibilities, means and time frames to which they are to be achieved?
- Have you communicated the plans to relevant functions and levels of your organization?

G	Implementation and operation
G1	Structure and responsibility
G2	Competence, training and awareness
G3	Communication, participation and consultation
G4	Documentation
G5	Control of documents
G6	Operational control
G7	Emergency preparedness and response

Implementation and operation

G1

Structure and responsibility

BS OHSAS 18001 requirements

Top management shall take ultimate responsibility for OH&S and the OH&S Management System.

Top management shall demonstrate its commitment by:

- a) ensuring the availability of resources essential to establish, implement, maintain and improve the OH&S management system
 - NOTE: Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.
- b) defining roles, allocating responsibilities and accountabilities, and delegating authorities, to facilitate effective OH&S management; roles, responsibilities, accountabilities, and authorities shall be documented and communicated.

The organization shall appoint a member(s) of top management with specific responsibility for OH&S, irrespective of other responsibilities, and with defined roles and authority for:

- a) ensuring that the OH&S Management System is established, implemented and maintained in accordance with this OHSAS Standard
- b) ensuring that reports on the performance of the OH&S management system are presented to top management for review and used as a basis for improvement of the OH&S Management System.
 - NOTE: The top management appointee (e.g. in a large organization, a Board or executive committee member) may delegate some of their duties to a subordinate management representative(s) while still retaining accountability.

The identity of the top management appointee shall be made available to all persons working under the control of the organization.

All those with management responsibility shall demonstrate their commitment to the continual improvement of OH&S performance.

The organization shall ensure that persons in the workplace take responsibility for aspects of OH&S over which they have control, including adherence to the organization's applicable OH&S requirements.

Introduction

Despite playing a fundamental role, organizational and human aspects of OH&S management are often overlooked in comparison to the more technical aspects of regulatory compliance. As a result many systems are poorly understood and attract little or no support from staff. When establishing your OH&S Management System it is critical to consider this human dimension. You should encourage participation at all levels within the company including top management, middle management and operational staff. For your system to be effective you must also clearly define and communicate each person's role within the system. Whether it is the Managing Director or the staff trained to give First Aid.

Typical inputs:

- Organizational structure/organogram
- Hazard identification, risk assessment and risk control results
- OH&S objectives
- Legal and other requirements
- Job descriptions
- Listings of qualified personnel

Process:

1) Overview

The responsibilities and authority of all persons who perform duties that are part of the OH&S Management System should be defined, including clear definitions of responsibilities at the interfaces between different functions.

Such definitions may, among others, be required for:

- Top management
- Line management at all levels in the organization
- Process operators and the general workforce
- Those managing the OH&S of contractors
- Those responsible for OH&S training
- Those responsible for equipment that is critical for OH&S;
- Employees with OH&S qualifications, or other OH&S specialists, within the organization
- Employee OH&S representatives on consultative forums.

However, the organization should communicate and promote the idea that OH&S is the responsibility of everyone in the organization, not just the responsibility of those with defined OH&S Management System duties.

2) Defining top management responsibilities

The responsibility of top management should include defining the organization's OH&S policy, and ensuring that the OH&S Management System is implemented. As part of this commitment, top management should designate a specific management appointee with defined responsibilities and authority for implementing the OH&S Management System. (In large or complex organizations there may be more than one designated appointee.)

3) Defining management appointee responsibilities

The OH&S management appointee should be a member of top management. Other personnel who have delegated responsibilities for monitoring the overall operation of the OH&S function may support the OH&S management appointee. However, there should be evidence that the management appointee is regularly informed of the performance of the system, and retains active involvement in periodic reviews and the setting of OH&S objectives. The organization should ensure that any other duties or functions assigned to these personnel do not conflict with fulfilment of their OH&S responsibilities.

4) Defining line management responsibilities

Line management responsibility should include ensuring that OH&S is managed within their area of operations. Where prime responsibility for OH&S matters rests with line management, the role and responsibilities of any specialist OH&S function within the organization should be appropriately defined to avoid ambiguity with respect to responsibilities and authorities. This should include arrangements to resolve any conflict between OH&S issues and productivity considerations by escalation to a higher level of management.

5) Documentation of roles and responsibilities

OH&S responsibilities and authorities should be documented in a form appropriate to the organization. This may take one or more of the following forms, or an alternative of the organization's choosing:

- OH&S Management System manuals
- Working procedures and task descriptions
- Job descriptions
- Induction training package.

If the organization chooses to issue written job descriptions covering other aspects of employees' roles and responsibilities, then OH&S responsibilities should be incorporated into those job descriptions.

6) Communication of roles and responsibilities

OH&S responsibilities and authorities need to be effectively communicated to all those whom they affect at all levels within the organization. This should ensure that individuals understand the scope and the interfaces between the various functions, and the channels to be used to initiate action.

7) Resources

Management should ensure that adequate resources are available for the maintenance of a safe workplace, including equipment, human resources, expertise and training.

Resources can be considered adequate if they are sufficient to carry out OH&S programmes and activities, including performance measurement and monitoring.

For organizations with established OH&S Management Systems, the adequacy of resources can be at least partially evaluated by comparing the planned achievement of OH&S objectives with actual results.

8) Management commitment

Managers should provide visible demonstration of their commitment to OH&S. Means of demonstration may include visiting and inspecting sites, participating in accident investigation, and providing resources in the context of corrective action, attendance at OH&S meetings, and issuing messages of support.

Typical outputs:

- Definitions of OH&S responsibilities and authorities for all relevant personnel
- Documentation of roles/responsibilities in manuals/procedures/ training packages
- Process for communicating roles and responsibilities to all employees and other relevant parties
- Active management participation and support for OH&S, at all levels.

Hints for implementation

For smaller organizations defining additional resources and responsibilities may not be an easy process. Where possible, try to make the best use of limited resources by using existing management frameworks and keeping the structure as simple as possible. Considering the following issues may help you to set the right organizational structure for your OH&S system.

Consider the results of previous quality or environmental audits. What does this information tell you about the effectiveness of existing structure and how they could be improved?

Identified OH&S hazards

Your OH&S system should be focused towards controlling and managing your significant hazards so it is important to consider which operations these relate to. Then determine who already manages these operations. Could they be used to manage the identified controls?

Objectives and targets

Consider whom you have assigned to implement the objectives and targets and relevant management programmes.

Existing roles and responsibilities

Established roles and responsibilities for health and safety management may be useful in the operation of the management system. However, it does not necessarily follow that their specific health and safety knowledge will be an advantage in the implementation of a management system. Help in an advisory capacity may prove to be a much more effective use of their skills.

Common non-conformances

In most companies responsibilities are clearly defined on organizational charts, but changes may need to be made to incorporate OH&S responsibilities. Potential non-conformances include:

- Management representative responsibilities are not clearly defined
- Failure to identify OH&S responsibilities and authorities of other personnel
- Meaningful changes to job descriptions are often overlooked
- Responsibilities often not communicated to relevant personnel.

- Have your senior management team provided adequate resources to implement and manage the OH&S management system?
- Have you defined documented roles and responsibilities for the OH&S Management System?
- Have these roles been communicated to all relevant staff?
- Do you have an appointed OH&S management representative?
- Have you documented their specific roles in establishing, implementing, maintaining and reporting on the effectiveness of the OH&S Management System?

Competence, training and awareness

BS OHSAS 18001 requirements

The organization shall ensure that any person(s) under its control performing tasks that can impact on OH&S is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records.

The organization shall identify training needs associated with its OH&S risks and its OH&S Management System. It shall provide training or take other action to meet these needs, evaluate the effectiveness of the training or action taken, and retain associated records.

The organization shall establish, implement and maintain a procedure(s) to make persons working under its control aware of:

- a) the OH&S consequences, actual or potential, of their work activities, their behaviour, and the OH&S benefits of improved personal performance
- b) their roles and responsibilities and importance in achieving conformity to the OH&S policy and procedures and to the requirements of the OH&S Management System, including emergency preparedness and response requirements (see 4.4.7)
- c) the potential consequences of departure from specified procedures.

Training procedures shall take into account differing levels of:

a) responsibility, ability, language skills and literacy; andb) risk.

What the law requires

Section 2 of the **Health and Safety at Work etc Act 1974** imposes a general duty on all employers to provide suitable and sufficient training to their employees, including the setting out of the training provisions in their safety policy statement.

Complementary regulations to the 1974 Act provide more explicit details of training requirements, e.g. The Management of Health and Safety at Work Regulations; The Provision and Use of Work Equipment Regulations, etc.

Commonly, health and safety legislation requires certain duties, normally involving a high degree of expertise, to be carried out by 'competent' persons. Examples of which extend, but are not limited, to;

Management of Health and Safety at Work regulations – all employees to appoint a 'competent' person to assist with health and safety compliance.

lonising radiation regulations – appointment of radiation protection supervisors.

Abrasive wheels regulations - mounting of abrasive wheels.

Introduction

Organizations should have effective procedures for ensuring the competence of personnel to carry out their designated functions.

Typical inputs:

- Definitions of roles and responsibilities
- Job descriptions (including details of hazardous tasks to be performed)
- Employee performance appraisals
- Hazard identification, risk assessment and risk control results
- Procedures and operating instructions
- OH&S policy and OH&S objectives
- OH&S programmes
- Skills matrix.

Process

The following elements should be included in the process:

- A systematic identification of the OH&S awareness and competencies required at each level and function within the organization
- Arrangements to identify and remedy any shortfalls between the required OH&S awareness and competency, and the level currently possessed by the individual
- Provision of any training identified as being necessary, in a timely and systematic manner
- Assessment of individuals to ensure that they have acquired, and that they maintain the knowledge and competency required
- Maintenance of appropriate records of an individual's training and competency.

An OH&S awareness and training programme should be established and maintained to address the following areas:

- An understanding of the organization's OH&S arrangements and individuals' specific roles and responsibilities for them
- A systematic programme of induction and ongoing training for employees and those who transfer between divisions
- Sites, departments, areas, jobs or tasks within the organization
- Training in local OH&S arrangements and hazards, risks, precautions to be taken and procedures to be followed, this training being provided before work commences
- Training for performing hazard identification, risk assessment and risk control
- Specific in-house or external training which may be required for employees with specific roles in the OH&S system, including employee OH&S representatives

- Training for all individuals who manage employees, contractors and others (e.g. temporary workers), in their OH&S responsibilities. This is to ensure that both they and those under their control understand the hazards and risks of the operations for which they are responsible, wherever they may take place. Additionally, this is to ensure that personnel have the competencies necessary to carry out the activities safely, by following OH&S procedures
- The roles and responsibilities (including corporate and individual legal responsibilities) of top management for ensuring that the OH&S Management System functions to control risks and minimise illness, injury and other losses to the organization
- Training and awareness programmes for contractors, temporary workers and visitors, according to the level of risk to which they are exposed.

Typical outputs:

- Competency requirements for individual roles
- Analysis of training needs
- Training programmes/plans for individual employees
- Range of training courses/products available for use within the organization
- Training records, and records of evaluation of effectiveness of training.

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Defining training needs for H&S management

Because of the time involved in conducting training needs analysis and training programmes, this is one area of OH&S where it is best not to start from scratch. For example, you probably already have a training programme for quality or environmental purposes. You may wish to consider using such opportunities to incorporate OH&S training.

Also look at current staff experience and qualifications and build upon it. Your existing quality auditing team could be used for OH&S audits if they are given appropriate instruction on the issues to look out for.

If taking staff away from the organization is a problem consider scheduling training opportunities to coincide with other meetings. For instance, safety meetings, staff meetings, and quality circle briefings.

When developing your training plan, do not forget contractors, suppliers and new employees. You may wish to develop an induction pack containing guidance notes, the OH&S policy and relevant procedures. Also consider OH&S skills requirements into your recruitment and tendering processes. This will help to reduce the costs of your training. It will also go some way to ensure that staff and contractors are competent to perform tasks.

Another way to ensure competency is to question employees (in critical functions) on how they perform various aspects of their jobs and get them to demonstrate it. This could form part of your auditing process. Use responses to determine whether they have the requisite skills and understanding to do the job correctly. This will help you gauge whether additional training may be needed.

For the sake of simplicity, you may wish to break training requirements down into different groupings, e.g., legislative requirement and management system requirement. This may help the team implementing your management system identify areas of weakness much more quickly and also generate a priority list of training requirements based on differing demands.

Consideration should be given to providing an awareness course for all employees, where the policy, objectives and targets and a brief introduction to BS OHSAS 18001 and its requirements are communicated. This can also help with the future development of the system and its acceptance by the workforce.

Common non-conformances

This area of BS OHSAS 18001 is commonly cited as an area where most non-conformances can arise. Possible non-conformances with an OH&S system include:

- Training needs analysis not completed for all personnel at each function and level
- Appropriate training not delivered especially where the training need assessment has been identified potential hazards associated with particular responsibilities
- Training found to be inadequate or incomplete, particularly for emergency preparedness and response (including contractors)
- Failure to keep training records up to date or to undertake evaluation process to check competence.

- Has an analysis of training needs been undertaken?
- Has a training plan been developed?
- Has appropriate training been delivered at all levels and within all functions?
- Are records kept of training that has been provided?

Communication, participation and consultation

BS OHSAS 18001 requirements

4.4.3.1 Communication

With regard to its OH&S hazards and OH&S Management System, the organization shall establish, implement and maintain a procedure(s) for:

- a) internal communication among the various levels and functions of the organization
- b) communication with contractors and other visitors to the workplace
- c) receiving, documenting and responding to relevant communications from external interested parties.

4.4.3.2 Participation and consultation

The organization shall establish, implement and maintain a $\ensuremath{\mathsf{procedure}}(s)$ for:

a) the participation of workers by their:

- appropriate involvement in hazard identification, risk assessments and determination of controls
- appropriate involvement in incident investigation
- involvement in the development and review of OH&S policies and objectives
- consultation where there are any changes that affect their OH&S
- representation on OH&S matters.

Workers shall be informed about their participation arrangements, including who is their representative(s) on OH&S matters.

b) consultation with contractors where there are changes that affect their OH&S.

The organization shall ensure that, when appropriate, relevant external interested parties are consulted about pertinent OH&S matters.

What the law requires

Following the introduction of the Health and Safety (Consultation with Employees) Regulations in 1996 every employee is entitled to be provided with information and consulted upon matters affecting them in terms of Health and Safety.

Introduction

The organization should encourage participation in good OH&S practices, support for its OH&S policy and OH&S objectives, from all those affected by its operations, by a process of consultation, participation and communication.

Interpretation

Typical inputs:

- OH&S policy and OH&S objectives
- Relevant OH&S Management System documentation
- Hazard identification, risk assessment and risk control procedures
- Definitions of OH&S roles and responsibilities
- Results of formal employee OH&S consultations with management
- Information from employee OH&S consultation, review and improvement activities in the workplace (these activities may be either reactive or proactive in nature)
- Training programme details.

Hints for implementation

The first step in designing a communications procedure is to determine who your audience is. Make a list of internal and external audiences. Next, decide how you can best reach them. Appropriate communication methods might vary from audience to audience. Start by looking at your existing methods for communicating, both internally and externally. For instance, if you have a QMS consider using the complaint procedure to deal with health and safety related complaints.

Remember communication is an on-going process. Any communication strategy that focuses on one–off or short-term goals is unlikely to yield significant benefits and could be counter productive.

Determine how proactive your external communications strategy will be. Select an approach that fits your organization's culture and strategy. If you are part of a larger organization there may be a corporate policy regarding release of health and safety information.

Process

The organization should document and promote the arrangements by which it consults on and communicates pertinent OH&S information to and from its employees and other interested parties (e.g. contractors, visitors).

This should include arrangements to involve employees in:

- Consultation over the development and review of policies, the development and review of OH&S objectives, and decisions on the implementation of processes and procedures to manage risks, including the carrying out of hazard identification, and in reviewing risk assessments and risk controls relevant to their own activities
- Consultation over changes affecting workplace OH&S such as the introduction of new, or modified, equipment, materials, chemicals, technologies, processes, procedures or work patterns.

Employees should be represented on OH&S matters, and should be informed as to who are their employee representative, and the specified management appointee.

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Common non-conformances

Potential non-conformances include:

- Communication procedures not established nor maintained
- Complaints recorded but not properly communicated internally
- Responses to communications not recorded in accordance with procedures
- Poor communications with stakeholders and other interested parties such as contractors and suppliers
- Internal communication is often neglected
- Training programmes, team briefings and recommendations for improvement, etc not adequately communicated.

- Have you established a procedure for consultation, participation and communication between various levels and functions within your organization?
- Have you established a procedure for receiving, documenting and dealing with communications from interested parties?
- Have you considered processes/decisions for external communication regarding policy, hazards and risks?

BS OHSAS 18001 requirements

The OH&S Management System documentation shall include:

- a) the OH&S policy and objectives
- b) a description of the scope of the OH&S Management System
- c) description of the main elements of the OH&S management system and their interaction, and reference to related documents
- d) documents, including records, required by this OHSAS Standard and
- e) documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of processes that relate to the management of its OH&S risks.

NOTE: It is important that documentation is proportional to the level of complexity, hazards and risks concerned and is kept to the minimum required for effectiveness and efficiency.

Interpretation

To ensure that your OH&S is operating as originally intended you should establish a series of documents to describe the core elements of the system and how each element relates to other systems. OH&S documentation will help to ensure consistent application of the system by providing clear information to people carrying out the tasks. In addition, external parties (such as the certification body) will need to understand how your OH&S operates before they can verify that it meets the requirements of the standard.

In short the standard requires you to look at your system and define how you wish to run it. This should be a compilation of the best practices and current methods.

Hints for implementation

BS OHSAS 18001 requires information, to be kept in paper or electronic form, to describe the core elements of the OH&S system and provide reference to other related documents. Most companies achieve this through the creation of a manual. Remember that there is no right or wrong way to structure an OH&S system.

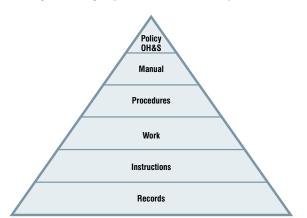


Figure 1: OHS System Hierarchy.

One way to think about your OH&S documentation is to use the figure shown, which also applies to ISO 9001 and ISO14001 documents.

The top manual acts as a series of explanations or statements of how core elements of BS OHSAS 18001 apply to your organization. It should also be a permanent documented reference describing the system and referencing other related procedures and records.

Try to keep your OH&S documentation short and simple. Also use a format that currently works well for your company and cross-refer to other systems, which may meet your OH&S standard requirements (for instance, procedures for non-conformance and corrective actions under quality or environmental systems)

The OH&S documentation does not need to describe every detail of your system. Instead, provide cross-references to relevant documents such as risk assessments.

If you have universal access to computers around your organization contemplate installing the documentation in an electronic format. This has a number of advantages, such as easier updating, access control, and ensuring that all readers use the most up-to-date version of a document.

Common non-conformances

Potential non-conformities in this area include:

- Documentation does not describe core elements of the system
- Documentation does not direct the user to related documentation of the system
- Interfaces with the system are not clearly defined.

- Have you established a documented description of the OH&S system including the policy, key system procedures and relevant forms?
- Does this documented system explain the linkages between system elements?

Control of documents

BS OHSAS 18001 requirements

Documents required by the OH&S Management System and by this OHSAS Standard shall be controlled. Records are a special type of document and shall be controlled in accordance with the requirements given in 4.5.4.

The organization shall establish, implement and maintain a procedure(s) to:

a) approve documents for adequacy prior to issue

- b) review and update as necessary and re-approve documents
- c) ensure that changes and the current revision status of documents are identified
- d) ensure that relevant versions of applicable documents are available at points of use
- e) ensure that documents remain legible and readily identifiable
- f) ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the OH&S Management System are identified and their distribution controlled and
- g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

Introduction

All documents and data containing information critical to the operation of the OH&S Management System and the performance of the organization's OH&S activities should be identified and controlled.

Interpretation

Typical inputs:

- > Details of the documentation and data systems the organization develops to support its OH&S Management System and OH&S activities, and to fulfil the requirements of BS OHSAS 18001:2007
- Details of responsibilities and authorities.

Process

Written procedures should define the controls for the identification, approval, issue and removal of OH&S documentation, together with the control of OH&S data. These procedures should clearly define the categories of documentation and data to which they apply.

Documentation and data should be available and accessible when required, under routine and non-routine conditions, including emergencies. For example, this should include ensuring that up-todate plant engineering drawings, hazardous material data sheets, procedures and instructions are available to process operators, and all who may require them in an emergency.

Interpretation

Typical outputs:

- Document control procedure, including assigned responsibilities and authorities
- Document registers, master lists or indexes
- List of controlled documentation and its location
- Archive records (some of which may need to held in accordance) with legal or other time requirements)

Hints for implementation

The byword for document control is "keep it simple". Do not make your procedure more complicated than it needs to be. Limiting distribution also makes the job easier. For a small organization it is often better to issue one manual with all relevant documentation to the areas needing information. This means that all documents will be in the same place and require the same action to keep them up to date. All documents issued should be logged and controlled on a master list.

The types of OH&S documentation that should be controlled include:

- The OH&S policy statement
- The OH&S Manual
- All OH&S systems procedures
- Any forms or drawings
- Any working instructions/operational procedures.

The following aspects of documentation control can often be found on some of the most effective systems:

- Issue and revision date
- Effective date
- Approval signature
- Revision number
- Documentation number (or other identifier)
- Copy number
- Cross-references.

It is also a good idea to establish a procedure regarding photocopying controlled information. Generally it should be discouraged; however in some circumstances it may be needed. One method of ensuring no photocopies are made is to use colour as identifying the authorized copies. Obsolete documentation needs to be taken out of the system to ensure that it is not inadvertently used.

If all staff that needs access to documents is connected to a computer network, it may be worth consider an electronic system. This can significantly reduce the administrative work involved in document control.

Prepare a document control index that shows all of your OH&S documents and the history of their revision. Put this index in your manual. Also, if multiple copies of documents are available at the facility, prepare a distribution list, showing who has each copy and where the copies are located.

Common non-conformances

Some of the most common non-conformities found by certification bodies include:

- Procedure and responsibilities for creating, modifying and controlling documentation are not properly defined
- A document review process is not established. This may lead to obsolete documents still being in circulation and current versions of documentation not being available
- Regular audits to establish effective documentation control are not carried out.

- Have you prepared a procedure to control OH&S documentation?
- Have you decided who needs access to documents and how many they will need?
- Have you established responsibilities and authorities for document preparation, revision, management and removal?

BS OHSAS 18001 requirements

The organization shall determine those operations and activities that are associated with the identified hazard(s) where the implementation of controls is necessary to manage the OH&S risk(s). This shall include the management of change (see 4.3.1).

For those operations and activities, the organization shall implement and maintain:

- a) operational controls, as applicable to the organization and its activities; the organization shall integrate those operational controls into its overall OH&S Management System;
- b) controls related to purchased goods, equipment and services;
- c) controls related to contractors and other visitors to the workplace;
- d) documented procedures, to cover situations where their absence could lead to deviations from the OH&S policy and the objectives;
- e) stipulated operating criteria where their absence could lead to deviations from the OH&S policy and objectives.

Introduction

The organization should establish and maintain arrangements to ensure the effective application of control and counter measures, wherever these are required to control operational risks, fulfil the OH&S policy and OH&S objectives, and comply with legal and other requirements.

Interpretation

Typical inputs:

- OH&S policy and OH&S objectives
- Hazard identification, risk assessment and risk control results
- Identified legal and other requirements.

Process

The organization should establish procedures to control its identified risks (including those that could be introduced by contractors or visitors), documenting these in instances where a failure to do so could lead to incidents, accidents or other deviations from the OH&S policy and OH&S objectives. The risk control procedures should be reviewed on a regular basis for their suitability and effectiveness, and changes that are identified as being necessary should be implemented.

Account may need to be taken in the procedures of situations where the risks extend into client or other external party premises or areas of control; for example, when employees of the organization are working at a client's site. It can sometimes be necessary to enter into consultation with the external party on OH&S in such circumstances.

Some examples of areas in which risks typically arise, and some examples of control measures against them are given below:

1) Purchase or transfer of goods and services and use of external resources:

- Approval to purchase or transfer hazardous chemicals, materials and substances
- Availability of documentation for the safe handling of machinery, equipment, materials, or chemicals at time of purchase, or the need to obtain such documentation
- Evaluation, and periodic re-evaluation of the OH&S competence of contractors
- Approval of the design of OH&S provisions for new plant or equipment.

2) Hazardous tasks:

- Identification of hazardous tasks
- Pre-determination and approval of working methods
- Pre-qualification of personnel for hazardous tasks
- Permit-to-work systems and procedures controlling the entry and exit of personnel to hazardous work sites.

3) Hazardous materials:

- Identification of inventories, and storage locations
- Safe storage provisions and control of access
- Provision and access to material safety data and other relevant information.

4) Maintenance of safe plant and equipment:

- Provision, control and maintenance of the organization's plant and equipment
- Provision, control and maintenance of PPE
- Segregation and control of access
- Inspection and testing of OH&S related equipment and high integrity systems such as:
 - Operator protection systems
 - Guarding and physical protection
 - Shutdown systems
 - Fire detection and suppression equipment
 - Handling equipment (cranes, forklifts, hoists and other lifting devices)
 - Radiological sources and safeguards
 - Essential monitoring devices
 - Local exhaust ventilation systems
 - Medical facilities and provisions.

Typical outputs:

- Procedures
- Work instructions.

Hints for implementation

The most important step in developing operational controls is to understand the activity. Concentrate on the critical points of that activity that need to be managed to ensure consistent control or improvement of health and safety performance.

Start the process by developing draft procedures with employees who at a later stage have to implement them. This will encourage their participation and the procedure is more likely to succeed. Also consider existing procedures for quality and environment. Some of these may be adequate to control significant health and safety hazards.

You may find that some of your significant health and safety hazards relate to goods purchased from suppliers. In addition, the activities of your contractors may also affect your health and safety hazards. It is vital therefore, that controls covering issues are effectively communicated to them.

Try whenever possible to keep procedures short and simple. Longwinded procedures do not add any greater degree of control.

As a general rule of thumb the more highly skilled and trained your employees are, the less critical procedures will be.

Common non-conformances

Potential non-conformances include:

- Operational control procedures are not related to significant health and safety hazard
- Operational control procedures not prepared or implemented to avoid the possibility of contravening the policy, objectives and targets
- Operating criteria not stipulated
- No mechanism in place to identify the significant health and safety hazards of goods and services and weak operational control procedures applied to suppliers and contractors
- Operating criteria not stipulated or implemented in the following areas:
 - The identification and, where necessary, implementation of control measures
 - Functions to minimise the potential for adverse health and safety hazards
 - Operational controls do not consider abnormal operating conditions, e.g., maintenance.

- Have you identified those operations and activities associated with the significant health and safety hazards?
- Have you established operational controls, including operating criteria?
- Do these controls cover the significant health and safety hazards relating to goods and services?
- Do these controls consider abnormal as well as normal operating conditions?
- Have the relevant controls been communicated to suppliers and contractors?

Emergency preparedness and response

BS OHSAS 18001 requirements

The organization shall establish, implement and maintain a procedure(s):

a) to identify the potential for emergency situations;

b) to respond to such emergency situations.

The organization shall respond to actual emergency situations and prevent or mitigate associated adverse OH&S consequences.

In planning its emergency response the organization shall take account of the needs of relevant interested parties, e.g. emergency services and neighbours.

The organization shall also periodically test its procedure(s) to respond to emergency situations, where practicable, involving relevant interested parties as appropriate.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedure(s), in particular, after periodical testing and after the occurrence of emergency situations (see 4.5.3).

Introduction

The organization should actively assess potential accident and emergency response needs, plan to meet them, develop procedures and processes to cope with them, test its planned responses, and seeking to improve the effectiveness of its responses.

Interpretation

Typical inputs:

- Hazard identification, risk assessment and risk control results
- Availability of local emergency services, and details of any emergency response or consultation arrangements that have been agreed
- Legal or other requirements
- Experiences of previous accidents, incidents and emergency situations
- Similar organizations' experiences from previous accidents, incidents and emergency situations (lessons learned, best practices)
- Reviews of emergency and practice drills performed and the results of subsequent actions.

Process

The organization should develop an emergency plan(s), identify and provide appropriate emergency equipment, and regularly test its response capability through practice drills.

Emergency practice drills should aim to test the effectiveness of the most critical parts of the emergency plan(s) and to test the completeness of the emergency planning process. While desktop exercises may be useful during the planning process, practice drills should be as realistic as possible to be effective. This may require full-scale incident simulations to be conducted. The results of emergency and practice drills should be evaluated, and changes that are identified as being necessary should be implemented.

1) Emergency plan

The emergency plan(s) should outline the actions to be taken when specified emergency situations arise, and should include:

- Identification of potential accidents and emergencies
- Identification of the person who will take charge during the emergency
- Details of actions to be taken by personnel during an emergency, including those actions to be taken by external personnel who are on the site of the emergency, such as contractors or visitors (who may be required, for example, to move to specified assembly points)
- Responsibility, authority and duties of personnel with specific roles during the emergency (e.g. fire-wardens, first-aid staff, nuclear leak/toxic spillage specialists, etc.)
- Evacuation procedures
- Identification and location of hazardous materials, and emergency action required
- Interface with external emergency services
- Communication with statutory bodies
- Communication with neighbours and the public
- Protection of vital records and equipment
- Availability of necessary information during the emergency, e.g. plant layout drawings, hazardous material data, procedures, work instructions and contact telephone numbers.

The involvement of external agencies in emergency planning and response should be clearly documented. These agencies should be advised as to the possible circumstances of their involvement and provided with such information as they require to facilitate their involvement in response activities.

2) Emergency equipment

Emergency equipment needs should be identified, and equipment should be provided in adequate quantity. This should be tested at specified intervals for continuing operability.

Examples include:

- Alarm systems
- Emergency lighting and power
- Means of escape
- Safe refuges
- Critical isolation valves, switches and cut-outs
- Fire-fighting equipment
- First aid equipment (including emergency showers, eye wash stations, etc.)
- Communication facilities.

3) Practice drills

Emergency practice drills should be carried out according to a pre-determined schedule.

Where appropriate and practicable, the participation of external emergency services in practice drills should be encouraged.

Typical outputs:

- Documented emergency plans and procedures
- Emergency equipment list
- Test records for emergency equipment
- Records of
- Practice drills
- Reviews of practice drills
- Recommended actions arising from the reviews.

Hints for implementation

This area of your OH&S systems will have direct links with requirements under health and safety legislation and in particular the Control of Major Accident Hazard Regulations. It is important, therefore, that you closely examine existing controls.

One of the first steps in preparing such a plan is to define an Emergency Response Team. This team should be made up of individuals who have sound understanding of the site process, local conditions and settings and the requirements of relevant environmental and health & safety legislation.

Using the principles of risk assessment the team should identify the potential for accidents and emergencies of all process and activities. In addition to normal operations, the team should also consider abnormal operating conditions (such as start-up and shutdown)

Once this is assessment is complete, the team should ask itself who will need access the appropriate controls or plan. As a rule of thumb copies should be given to each of the key managers and everybody should have access to it. In addition, other copies can be placed at your reception desk and in each of the main buildings on site. Also consider contractors or visitors when distributing the plan.

Also communicate with local emergency services and regulators (Such as HSE, Fire Brigade and the Environment Agency) when developing the plan. They will be able to advise you on its structure and content. They may want to keep a copy of the plan for their purposes.

Time is of the essence in emergency and accident situations, so clearly outline key roles and responsibility and reporting procedures.

Conduct regular mock drills to train staff and get feedback on the effectiveness of your plans/procedures.

Checklist for emergency preparedness and response plan

Does your plan describe the following?

- Key organizational responsibilities
- Potential emergency situations (such as accidents, spills, fires, explosions, and natural disasters)
- Emergency response procedures, including emergency communication procedures
- Arrangements with local emergency services and regulators
- > The location and volume of hazardous raw materials of wastes
- The locations and types of emergency response equipment
- Maintenance of emergency response equipment
- Training / testing of personnel, including the on-site emergency response team
- Testing of alarm / public address systems
- Evacuation routes and exits (map), and assembly points.

Common non-conformances

Common non-conformance identified by certification bodies include:

- Emergency response plans not developed or tested
- Emergency plans not reviewed after the events and no records to show this has occurred
- Training programmes not extended to include emergency preparedness
- Contractors not informed of procedures.

Self assessment questions:

- Have you established procedures to identify potential emergency situations?
- Do these procedures cover criteria for responding to and for preventing and mitigating the health and safety hazards and risks that are foreseeable during emergency situations?
- Have you developed procedures to review and revise the procedures after and accident or emergency situation?
- Do you periodically test the procedures?

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Н	Checking and corrective action
H1	Performance measurement and monitoring
H2	Evaluation of compliance
H3	Incident investigation, nonconformity, corrective action and preventive action
H4	Records and Record management
H5	Audit
H6	Management review

Н

Checking and corrective action

H1

Performance measurement and monitoring

BS OHSAS 18001 requirements

The organization shall establish, implement and maintain a procedure(s) to monitor and measure OH&S performance on a regular basis. This procedure(s) shall provide for:

- a) both qualitative and quantitative measures, appropriate to the needs of the organization
- b) monitoring of the extent to which the organization's OH&S objectives are met
- c) monitoring the effectiveness of controls (for health as well as for safety)
- d) proactive measures of performance that monitor conformance with the OH&S programme(s), controls and operational criteria
- e) reactive measures of performance that monitor ill health, incidents (including accidents, near-misses, etc.), and other historical evidence of deficient OH&S performance
- recording of data and results of monitoring and measurement sufficient to facilitate subsequent corrective action and preventive action analysis.

If equipment is required to monitor or measure performance, the organization shall establish and maintain procedures for the calibration and maintenance of such equipment, as appropriate. Records of calibration and maintenance activities and results shall be retained.

Introduction

The organization should identify key performance parameters for its OH&S performance across the whole organization. These should include, but not be limited to, parameters that determine whether:

- OH&S policy and OH&S objectives are being achieved
- Risk controls have been implemented and are effective
- Lessons are being learnt from OH&S Management System failures, including hazardous events (accidents, near misses and illness cases)
- Awareness, training, communication and consultation programmes for employees and interested parties are effective
- Information that can be used to review and/or improve aspects of the OH&S Management System is being produced and being used.

Typical inputs:

- Hazard identification, risk assessment and risk control results
- Legislation requirements, regulations, best practices (if any)
- OH&S policy and OH&S objectives
- Procedure for dealing with non-conformance's

- Equipment test and calibration records (including those belonging to contractors)
- Training records (including those belonging to contractors)
- Management reports.

Process

1) Proactive and reactive monitoring

An organization's OH&S Management System should incorporate both proactive and reactive monitoring as follows:

- Proactive monitoring should be used to check compliance with the organization's OH&S activities, for example by monitoring the frequency and effectiveness of OH&S inspections
- Reactive monitoring should be used to investigate, analyse and record OH&S Management System failures — including accidents, incidents (including near misses), ill health and property damage cases.

2) Measurement techniques

The following are examples of methods that can be used to measure OH&S performance:

- Results of hazard identification, risk assessment and risk control processes
- Systematic workplace inspections using checklists
- ► OH&S inspections: for example, on a "walk through" basis
- Prior evaluations of new plant, equipment, materials, chemicals, technologies, processes, procedures or work patterns
- Inspections of specific machinery and plant to check that safety related parts are fitted and in good condition
- Safety sampling: examining specific aspects of OH&S
- Environmental sampling: measuring exposure to chemical, biological or physical agents (e.g. noise, volatile organic compounds, legionella) and comparing with recognised standards
- Availability and effectiveness of use of personnel with recognised OH&S experience or formal qualifications
- Behaviour sampling: assessing workers' behaviour to identify unsafe work practices that might require correction
- Analysis of documentation and records
- Benchmarking against good OH&S practices in other organizations
- Surveys to determine employee attitudes on the OH&S management system, OH&S practices, and employee consultation processes.

H1 Performance measurement and monitoring continued

Organizations need to decide what to monitor and how often monitoring should take place based on the level of risk. The frequency of plant or machinery inspections may be defined by law (e.g. for air receivers, steam plant, lifting equipment). An inspection schedule based on hazard identification and risk assessment results, legislation, and regulations should be prepared as part of the OH&S Management System.

Routine OH&S monitoring of processes, workplaces and practices should be carried out according to a documented monitoring scheme by front-line or middle managers. All front-line supervisory personnel should undertake spot checks of critical tasks in order to assure compliance with OH&S procedures and codes of practice.

3) Inspections

Equipment: An inventory (using unique identification of all items) should be drawn up of all equipment subject to statutory or technical examination by relevant personnel. Such equipment should be inspected as required, and should be included in the inspection schemes.

Work conditions: Criteria that specify acceptable workplace conditions should be established and documented. At specified intervals, managers should perform inspections against these criteria. A checklist giving details of the criteria and all items to be inspected may be used for this purpose.

Verification inspections: Verification inspections should be carried out, but these should not absolve front-line managers from carrying out regular inspections, or from identifying hazards.

Inspection records: A record should be kept of every OH&S inspection carried out. The records should indicate whether or not documented OH&S procedures were being complied with. Records of OH&S inspections, tours, surveys, and OH&S Management System audits should be sampled to identify underlying causes of non-compliance and repetitive hazards. Any necessary preventive action should be taken. Substandard conditions and unsafe situations and items identified during the inspections should be documented as non-conformance's, assessed as to risk and corrected in accordance with the non-conformance procedure.

4) Measuring equipment

Measuring equipment that is used to assess OH&S conditions (e.g. sound level meters, light meters, air samplers) should be listed, identified uniquely, and controlled. The accuracy of this equipment should be known. Where necessary, written procedures should be available describing how OH&S measurements are performed. Equipment used for OH&S measurement should be maintained and stored in a proper manner, and should be capable of giving measurements of the accuracy required.

When required, a calibration scheme should be documented for the measuring equipment. This scheme should include:

- The frequency of calibration
- Reference to test methods, where applicable
- Identity of the equipment to be used for the calibration
- Action to be taken when the specified measuring equipment is found to be out of calibration.

Calibration should be carried out under appropriate conditions. Procedures should be prepared for critical or difficult calibrations.

Equipment used for calibration should be in accordance with national standards where such standards exist. If no such standards exist, the basis for the levels used should be documented.

Records should be kept of all calibrations, maintenance activities and results. Records should give details of the measurements before and after adjustment.

The calibration status of measuring equipment should be clearly identified to the users.

OH&S measuring equipment whose calibration status is unknown, or which is known to be out of calibration, should not be used. Additionally, it should be removed from use, and be clearly labelled, tagged, or otherwise marked, to prevent misuse. Such marking should be in accordance with written procedures. The procedures should include the identification of the calibration status of the product. A non-conformance should be issued to document the actions taken. The procedures should include an action plan if outof-calibration equipment is discovered.

5) Supplier (contractor) equipment

Measuring equipment used by contractors should be subject to the same controls as in-house equipment. Contractors should be required to give assurances that their equipment conforms to these requirements. Prior to initiating the work, the supplier should provide a copy of its equipment test records for any identified critical equipment that requires such records. If any tasks require special training, the corresponding training records should be provided to the customer for review.

6) Statistical or other theoretical analytical techniques

Any statistical or other theoretical analytical technique used to assess an OH&S situation, to investigate an OH&S incident or failure, or to assist in decision making in relation to OH&S should be based on sound scientific principles. The management appointee should ensure that the need for such techniques is identified. Where appropriate, guidelines for their use should be documented, along with the circumstances in which they are appropriate.

Typical outputs:

- Procedure(s) for monitoring and measuring
- Inspection schedules and checklists
- "Critical" equipment lists
- Equipment inspection checklists
- Workplace conditions standards and inspection checklists
- Measuring equipment lists
- Measurement procedures
- Calibration scheme, and calibration records
- Maintenance activities and results
- Completed checklists, inspection reports (OH&S management system audit outputs)
- Non-conformance reports
- Evidence of the results of implementing such procedure(s).

Hints for implementation

Monitoring and measurement may at first seem like a time consuming process, but you should make it relevant to your needs. Start with a relatively simple monitoring and measurement system and build upon it as your system grows. Look to the factors of your significant hazards and risks that will give you the most valuable information on how that risk is controlled. Try to resist monitoring just because you can measure it.

When monitoring a particular indicator try to relate it to a factor that you have control over, for instance production or the volume of materials used etc.

Examples of Health and Safety Performance Indicators:

- Lost time injuries per 10,000 hours worked
- Number of accidents, incidents or near misses per machine or per process
- COSHH monitoring results for respirable dust or vapour
- Reduction of residual risk through the implementation of work method statements.

Examples of Management Performance Indicators:

- Percentage of employees trained on health and safety matters
- Number of health and safety suggestions submitted
- Time taken to resolve non-conformances
- Time taken to deal with complaints.

To ensure that the information you are gathering is accurate you should also establish procedures for equipment calibration. Once again this requirement can be integrated within existing quality assurance controls.

Common non-conformances:

- Significant impacts are not monitored to track performance
- Objectives and targets are not tracked
- Procedures are not established to track legislative compliance
- New legislation is not identified
- Procedures dealing with calibration of equipment are not established.

- Have you established procedures to monitor and measure the characteristics of operations and activities with significant health and safety hazards and risks?
- Do these procedures cover performance against objectives and targets?
- Have you established procedures to maintain and calibrate critical monitoring equipment?
- Do you have a documented procedure to regularly evaluate compliance with relevant laws and legislation?

Evaluation of compliance

BS OHSAS 18001 requirements

4.5.2.1 Consistent with its commitment to compliance [see 4.2c)], the organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with applicable legal requirements (see 4.3.2).

The organization shall keep records of the results of the periodic evaluations.

NOTE: The frequency of periodic evaluation may vary for differing legal requirements.

4.5.2.2 The organization shall evaluate compliance with other requirements to which it subscribes (see 4.3.2). The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or to establish a separate procedure(s).

The organization shall keep records of the results of the periodic evaluations.

NOTE: The frequency of periodic evaluation may vary for differing other requirements to which the organization subscribes.

Introduction

To enable BS OHSAS 18001 requirements to be met you will have to establish, implement and maintain a procedure for periodically evaluating compliance with the legal or other requirements that are applicable to your OH&S risks, as part of your commitment to compliance (as documented within your Health and Safety Policy). You should record the results of this evaluation.

A variety of inputs can be used to assess compliance, including:

- audits
- the results of regulatory inspections
- analysis of legal and other requirements
- reviews of documents and /or records of incidents and risk assessments
- facility inspections
- interviews
- project or work reviews
- analysis of test results from monitoring and testing
- facility tours and / or direct observations.

You should establish a methodology for the evaluation of compliance that suits your size, type and complexity. A compliance evaluation can encompass multiple legal requirements or a single requirement. The frequency of evaluations can be affected by factors such as past compliance performance or specific legal requirements. While all legal requirements have to be evaluated, you may need to evaluate individual requirements at different times or at different frequencies, or as appropriate. A compliance evaluation programme can be integrated with other assessment activities. These can include management system audits, environmental audits or quality assurance checks.

The results of the periodic evaluations of legal or other requirements should be recorded.

Hints for implementation:

- Base your evaluation frequencies upon risk i.e. you will need to monitor compliance with the Work at Height Regulation more frequently than say the Display Screen Equipment Regulations as the consequences of failure are far greater. You may also wish to initiate additional compliance audits in the event of accidents and incidents
- Utilise your management system audits to identify actual/ potential breaches
- Use workplace inspections to support the auditing process.

Common non-conformances:

- Evaluations are not carried out by 'competent' persons with knowledge of the Regulatory requirements
- Compliance against new/amended Regulations have been missed
- Procedures are not established to evaluate legislative compliance.

- Have you identified the legal (and other) health and safety requirements that are applicable to your organization?
- Can you demonstrate that you have evaluated compliance against them?
- Do you have a documented procedure to regularly evaluate compliance with relevant laws and legislation?

Incident investigation, nonconformity, corrective action and preventive action

BS OHSAS 18001 requirements

The organization shall establish, implement and maintain a procedure(s) to record, investigate and analyse incidents in order to:

- a) determine underlying OH&S deficiencies and other factors that might be causing or contributing to the occurrence of incidents
- b) identify the need for corrective action
- c) identify opportunities for preventive action

d) identify opportunities for continual improvement

e) communicate the results of such investigations.

The investigations shall be performed in a timely manner.

Any identified need for corrective action or opportunities for preventive action shall be dealt with in accordance with the relevant parts of 4.5.3.2.

The results of incident investigations shall be documented and maintained.

What the law requires

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) cover all places of work and place duties on employers, the self employed and those in control of work premises to report injuries (following three days or more absence from work), diseases and specified dangerous occurrences (incidents).

Under RIDDOR a 'responsible person' has the duty to report to the relevant enforcing authority any of the above scenarios, including deaths.

Introduction

Organizations should have effective procedures for reporting and evaluating/investigating accidents, incidents and nonconformance's. The prime purpose of the procedure(s) is to prevent further occurrence of the situation by identifying and dealing with the root cause(s). Furthermore, the procedures should allow detection, analysis and elimination of potential causes of non-conformities.

Interpretation

Typical inputs:

- Procedures (in general)
- Emergency plan
- Hazard identification, risk assessment and risk control reports
- OH&S Management System audit reports, including nonconformance reports
- Accident, incident and/or hazard reports
- Maintenance and service reports.

Process

The organization is required to prepare documented procedures to ensure that accidents, incidents and non-conformance's are investigated, and corrective and/or preventive actions initiated. Progress in the completion of corrective and preventive actions should be monitored, and the effectiveness of such actions reviewed.

1) Procedure

The procedures should include consideration of the following:

General:

- Define the responsibilities and authority of the persons involved in implementing, reporting, investigating, follow-up and monitoring of corrective and preventive actions
- Require that all non-conformance's, accidents, incidents and hazards be reported
- Apply to all personnel (i.e. employees, temporary workers, contractor personnel, visitors and any other person in the workplace)
- Take into account property damage
- Ensure that no employee suffers any hardship as a result of reporting a non-conformance, accident or incident;
- Clearly define the course of action to be taken following nonconformances identified in the OH&S Management System.

Immediate action

Immediate action to be taken upon observation of nonconformance's, accidents, incidents or hazards should be know to all parties. The procedures should:

- Define the process for notification
- Where appropriate, include co-ordination with emergency plans and procedures
- Define the scale of investigative effort in relation to the potential or actual harm (e.g. include management in the investigation for serious accidents).

Recording

Appropriate means should be used to record the factual information and the results of the immediate investigation and the subsequent detailed investigation. The organization should ensure that the procedures are followed for:

- Recording the details of the non-conformance, accident or hazard
- Defining where the records are to be stored, and responsibility for the storage.

Investigation

The procedures should define how the investigation process should be handled. The procedures should identify:

The type of events to be investigated (e.g. incidents that could have led to serious harm)

- The purpose of investigations
- Who is to investigate, the authority of the investigators, required qualifications (including line management when appropriate)
- Identification of the root cause of non-conformance
- Arrangements for witness interviews
- Practical issues such as availability of cameras and storage of evidence
- Investigation reporting arrangements including statutory reporting requirements.

Investigatory personnel should begin their preliminary analysis of the facts while further information is collected. Data collection and analysis should continue until an adequate and sufficiently comprehensive explanation is obtained.

Corrective action

Corrective actions are actions taken to eliminate the root cause(s) of identified non-conformance's, accidents or incidents, in order to prevent recurrence. Examples of elements to be considered in establishing and maintaining corrective action procedures include:

- Identification and implementation of corrective and preventive measures both for the short-term as well as long-term (this may also include the use of appropriate sources of information, such as advice from employees with OH&S expertise)
- Evaluation of any impact on hazard identification and risk assessment results (and any need to update hazard identification, risk assessment and risk control report(s))
- Recording any required changes in procedures resulting from the corrective action or hazard identification, risk assessment and risk control
- Application of risk controls, or modification of existing risk controls, to ensure that corrective actions are taken and that they are effective.

Preventive action

Examples of elements to be considered in establishing and maintaining preventive action procedures include:

- Use of appropriate sources of information (trends in "no loss incidents", OH&S Management System audit reports, records, updating of risk analyses, new information on hazardous materials, safety "walk-throughs", advice from employees with OH&S expertise, etc.)
- Identify any problems requiring preventive action
- Initiate and implementing preventive action and application of controls to ensure that it is effective
- Record any changes in procedures resulting from the preventive action and submit for approval.

Follow-up

Corrective or preventive action taken should be as permanent and effective as practicable. Checks should be made on the effectiveness of corrective/preventive action taken. Outstanding/ overdue actions should be reported to top management at the earliest opportunity.

2) Non-conformance, accident and incident analysis

Identified causes of non-conformance's, accidents and incidents should be classified, and analysed on a regular basis. Accident frequency and severity ratings should be calculated in accordance with accepted industrial practice for comparison purposes.

Classification and analysis should be carried out of:

- Reportable or lost-time injury/illness frequency or severity rates
- Location, injury type, body part, activity involved, agency involved, day, time of day (whichever is appropriate)
- Type and amount of property damage
- Direct, and root causes.

Due attention should be given to accidents involving property damage. Records relating to repair of property could be an indicator of damage caused by an unreported accident/incident.

Accident and illness data/information is vital, as it can be a direct indicator of OH&S performance. However, caution in their use should be exercised, for example:

- Most organizations have too few injury accidents or cases of work related illness to distinguish real trends from random effects
- If more work is done by the same number of people in the same time, increased workload alone may account for an increase in accident rates
- The length of absence from work attributed through injury or work-related illness may be influenced by factors other than the severity of injury or occupational illness, such as poor morale, monotonous work and poor management/employee relations
- Accidents are often under-reported (and occasionally overreported). Levels of reporting can change. They can improve as a result of increased workforce awareness and better reporting and recording systems
- A time delay will occur between OH&S Management System failures and harmful effects. Moreover, many occupational diseases have long latent periods. It is not desirable to wait for harm to occur before judging whether OH&S management systems are working.

Valid conclusions should be drawn and corrective action taken. At least annually, this analysis should be circulated to top management and included in the management review.

3) Monitoring and communicating results

The effectiveness of OH&S investigations and reporting should be assessed. The assessment should be objective, and should yield a quantitative result if possible.

The organization, having learnt from the investigation, should:

- Identify the root causes of deficiencies in the OH&S Management System and general management of the organization, where applicable
- Communicate findings and recommendations to management and relevant interested parties
- Include relevant findings and recommendations from investigations in the continuing OH&S review process
- Monitor the timely implementation of remedial controls, and their subsequent effectiveness over time
- Apply the lessons learnt from the investigation of nonconformance's across its whole organization, focussing on the broad principles involved, rather than being restricted to specific action designed to avoid repetition of a precisely similar event in the same area of the organization.

4) Record keeping

This can be accomplished rapidly and with a minimum of formal planning or it can be a more complex and long-term activity. The associated documentation should be appropriate to the level of corrective action.

Reports and suggestions should be sent to the management appointee, and, where appropriate, the employee OH&S representative, for analysis and filing.

The organization should maintain a register of all accidents. Incidents that had the potential for significant OH&S consequences, should also be included. Such a register is often required by legislation.

Typical output:

- Accident and non-conformance procedure
- Non-conformance reports
- Non-conformance register
- Investigation reports
- Updated hazard identification, risk assessment and risk control reports
- Management review input
- Evidence of evaluations of the effectiveness of corrective and preventive actions taken.

Hints for Implementation

Again this is one section of BS OHSAS 18001, which has clear links to ISO 9001 and ISO 14001. If you have a quality and/or environmental management system you should already have a corrective/preventive action process. You could use this as a framework for health and safety non-conformances, or if possible totally integrate the systems.

At first, your OH&S audit team will raise most of the nonconformances. However, in the long run, it is worthwhile encouraging all staff to play an active role in reporting nonconformance or observations. This is particular important for near miss incidents which often go unreported. Understanding such events will allow you to put in place controls measure so that the problem is avoided. Remember prevention is always better than a cure.

Common non-conformances

Common non-conformances brought up in the pre-certification and certification audits include:

- Procedures and responsibilities inadequately defined to ensure that non-conformities, corrective and preventative actions are taken
- No record of investigation of the cause of the non-conformance only of the action taken
- Failure to take appropriate corrective action
- Preventative action not demonstrated to ensure that the same problem does not arise again.

- Have you developed procedures for investigating, correcting, and preventing system deficiencies?
- Have responsibilities been assigned for taking and tracking the completion of corrective actions?
- Have you established a process to revise procedures or other OH&S documents based on corrective/preventive actions?

Records and record management

BS OHSAS 18001 requirements

The organization shall establish and maintain records as necessary to demonstrate conformity to the requirements of its OH&S Management System and of this OHSAS Standard, and the results achieved.

The organization shall establish, implement and maintain a procedure(s) for the identification, storage, protection, retrieval, retention and disposal of records.

Records shall be and remain legible, identifiable and traceable.

Introduction

Records should be kept to demonstrate that the OH&S Management System operates effectively, and processes have been carried out under safe conditions. OH&S records that document the management system and conformance to the requirements should be prepared, maintained, legible, and adequately identified.

Typical inputs

Records (used to demonstrate conformance to the requirements) that should be kept include:

- Training records
- OH&S inspection reports
- OH&S Management System audit reports
- Consultations
- Accident/incident reports
- Accident/incident follow-up reports
- OH&S meeting minutes
- Medical tests
- Health surveillance
- PPE issues and PPE maintenance records
- Emergency response drills
- Management reviews
- Hazard identification, risk assessment and risk control records.

Process

The requirement in BS OHSAS 18001 is largely self-explanatory. However, notice should also be given to:

- The authority for disposal of OH&S records
- The confidentiality of the OH&S records
- Legal and other requirements on the retention of OH&S records
- Issues surrounding the use of electronic records.

OH&S records should be complete, legible, and adequately identified. Retention times for OH&S records should be defined. Records should be stored in a safe place, readily retrievable and protected from deterioration. Critical OH&S records should be protected from possible fire and other damage as appropriate, or as required by law.

Typical outputs:

- Procedure (for the identification, maintenance and disposition of OH&S records)
- Adequately stored and readily retrievable OH&S records.

Hints for implementation

Record management is in essence very simple, so try not to over complicate it with complex procedures. Firstly decide what records you will keep, how you will keep them and for how long. You should also consider how to dispose of records once you no longer need them. If your organization has ISO 9001, you should already have a system for managing quality records. You may wish to consider integrating the requirements of both systems.

The evaluation of compliance against your legal obligations will identify the records that you are legally bound to retain and will specify the mandatory retention periods e.g. health surveillance records under Control of Substances Hazardous to Health Regulations (COSHH) need to be retained for 40 years.

Common non-conformances

Some of the most common non-conformities linked to records include:

- The records do not support conformance with the policy commitments
- Breaches of legislative compliance are not recorded
- Procedures and responsibilities are inadequately defined to ensure that suitable records are made and retained to support the system
- Poor identification, traceability and retrievability of records
- Insufficient detail to demonstrate conformance with the requirements of BS OHSAS 18001.

- Have you established a procedure for managing health and safety records?
- Does this procedure cover the identification, maintenance and disposal of records?
- Have you considered any statutory or good practise requirements regarding retention times?
- Do you have effective storage and retrieval systems to protect against loss and/or damage of records?

Audit

BS OHSAS 18001 requirements

The organization shall ensure that internal audits of the OH&S Management System are conducted at planned intervals to:

a) determine whether the OH&S Management System:

- 1) conforms to planned arrangements for OH&S management including the requirements of this OHSAS Standard and
- 2)has been properly implemented and is maintained and

3) is effective in meeting the organization's policy and objectives

b) provide information on the results of audits to management.

Audit programme(s) shall be planned, established, implemented and maintained by the organization, based on the results of risk assessments of the organization's activities, and the results of previous audits.

Audit procedure(s) shall be established, implemented and maintained that address:

- a) the responsibilities, competencies, and requirements for planning and conducting audits, reporting results and retaining associated records and
- b) the determination of audit criteria, scope, frequency and methods.

Selection of auditors and conduct of audits shall ensure objectivity and the impartiality of the audit process.

Introduction

OH&S Management System auditing is a process whereby organizations can review and continuously evaluate the effectiveness of their OH&S Management System. In general, OH&S Management System audits need to consider OH&S policy and procedures, and the conditions and practices in the workplace.

An internal OH&S Management System audit programme should be established to allow the organization to review its own compliance of its OH&S Management System to BS OHSAS 18001. Planned OH&S Management System audits should be carried out by personnel, from within the organization and/or by external personnel selected by the organization, to establish the degree of compliance with the documented OH&S procedures, and whether the system is effective in meeting the OH&S objectives of the organization. In either case, the personnel conducting the OH&S Management System audits should be in a position to do so impartially and objectively.

NOTE: Internal OH&S Management System audits focus on the performance of the OH&S Management System. They should not be confused with OH&S or other safety inspections.

Typical inputs:

- OH&S policy statement
- OH&S objectives
- OH&S procedures and work instructions
- Hazard identification, risk assessment and risk control results
- Legislation and best practices (if applicable)
- ► Non-conformance reports
- OH&S Management System audit procedures
- Competent, independent, internal/external auditor(s)
- Non-conformance procedure

Process

1) Audits

OH&S Management System audits provide a comprehensive and formal assessment of the organization's compliance with OH&S procedures and practices.

OH&S Management System audits should be conducted according to planned arrangements. Additional audits may need to be performed as circumstances require.

Only competent, independent, personnel should carry out OH&S Management System audits.

The output of an OH&S Management System audit should include detailed assessments of the effectiveness of OH&S procedures, the level of compliance with procedures and practices, and should, where necessary, identify corrective actions. The results of the OH&S Management System audits should be recorded and reported to management, in a timely manner.

A review of the results should be carried out by management and effective corrective action taken (where necessary).

NOTE: The general principles and methodology described in ISO 19011 or BS 8800:1996, annex F, are appropriate for OH&S Management System auditing.

2) Scheduling

An annual plan should be prepared for carrying out internal OH&S Management System audits. The OH&S Management System audits should cover the entire operation, which is subject to the OH&S Management System, and assess compliance with BS OHSAS 18001.

The frequency and coverage of OH&S Management System audits should be related to the risks associated with the failure of the various elements of the OH&S Management System. Available data on the performance of the OH&S Management System, the output from management reviews, and the extent to which the OH&S Management System or the environment in which it operates should be considered during the scheduling process.

Additional, unplanned, OH&S Management System audits may need to be conducted, if situations occur which warrant them, e.g. after an accident.

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3) Management support

For OH&S Management System auditing to be of value, top management should be fully committed to the concept of OH&S Management System auditing and its effective implementation within the organization. This includes a commitment to consider OH&S Management System audit findings and recommendations and to take appropriate action as necessary, within an appropriate time. Once it has been agreed that an OH&S Management System audit should be carried out it should be completed in an impartial way. All relevant personnel should be informed of the purposes of OH&S Management System auditing and the benefits. Staff should be encouraged to co-operate fully with the auditors and to respond to their questions honestly.

4) Auditors

One or more persons may undertake OH&S Management System audits. A team approach may widen involvement and improve co-operation. A team approach may also allow a wider range of specialist skills to be utilised.

Auditors should be independent of the part of the organization or the activity that is to be audited.

Auditors need to understand their task and be competent to carry it out. They need to have the experience and knowledge of the relevant standards and systems they are auditing to enable them to evaluate performance and identify deficiencies. Auditors should be familiar with the requirements set out in any relevant legislation. In addition, auditors should be aware of, and have access to, standards and authoritative guidance relevant to the work they are engaged in.

5) Data collection and interpretation

The techniques and aids used in the collection of the information will depend on the nature of the OH&S Management System audit being undertaken. The OH&S Management System audit should ensure that representative samples of essential activities are audited and that relevant personnel (including employee OH&S representatives, where appropriate) are interviewed. Relevant documentation should be examined. This may include:

- OH&S Management System documentation
- OH&S policy statement
- OH&S objectives
- OH&S and emergency procedures
- Permit to work systems and procedures
- Minutes of OH&S meetings
- Accident/incident reports and records
- Any reports or communication from the OH&S enforcement or other regulatory bodies (verbal, letters, notices, etc.)
- Statutory registers and certificates
- Training records
- Previous OH&S Management System audit reports
- Corrective action requests
- Non-conformance reports.

Wherever possible checks should be built into the OH&S Management System audit procedures to help to avoid misinterpretation or misapplication of collected data, information or other records.

6) Audit results

The content of the final OH&S Management System audit report should be clear, precise and complete. It should be dated and signed by the auditor. It should, depending on the case, contain the following elements:

- ▶ The OH&S Management System audit objectives and scope
- The particulars of the OH&S Management System audit plan, identification of the members of the auditing team and the audited representatives, dates of audit and identification of the areas subject to audit
- The identification of reference documents used to conduct the OH&S Management System audit (e.g. BS OHSAS 18001, OH&S management handbook)
- Details of identified non-conformance's
- The auditor's assessment of the degree of conformity with BS OHSAS 18001
- The ability of the OH&S Management System to achieve the stated OH&S management objectives
- The distribution of the final OH&S Management System audit report.

The results of OH&S Management System audits should be fed back to all relevant parties as soon as possible, to allow corrective actions to be taken. An action plan of agreed remedial measures should be drawn up together with identification of responsible persons, completion dates and reporting requirements. Followup monitoring arrangements should be established to ensure satisfactory implementation of the recommendations.

Confidentiality should be considered when communicating the information contained within the OH&S Management System audit reports.

Typical outputs:

- OH&S Management System audit plan/program
- OH&S Management System audit procedures
- OH&S Management System audit reports, including nonconformance reports, recommendations and corrective action requests
- Signed-off/closed-out non-conformance reports
- Evidence of the reporting of the results of OH&S Management System audits to management.

Hints for implementation

Your OH&S audits should focus on objective evidence of conformance. During the actual audit, try to resist evaluating why a procedure was not followed. This step will come later in the corrective and preventive actions.

During the audit, discuss identified deficiencies with the people who work in the area. This will help the auditors verify that their understanding is correct. It can also serve as refresher training (on OH&S requirements) for employees.

Before you start an audit, be sure to communicate the audit scope, schedule, and other pertinent information with the people in the affected area(s). This will help avoid confusion and will facilitate the audit process.

Common non-conformances

Potential non-conformances include:

- > Auditors are not sufficiently independent of the activity audited
- Responsibilities for performing audits are not clearly defined
- Audit programme is not sufficiently comprehensive to cover all areas of the OH&S or activities which hazards can arise
- Audit frequencies are not based upon the levels of risk associated with the activity
- > Audit format or activity not consistent with previous audits
- Audit reports are not completed within the original scope of the audit

- ► Have you an audit procedure and programme?
- ▶ Do you undertake periodic OH&S audits?
- Does your audit programme determine audit frequency?
- ► Have you selected and trained an OH&S audit team?
- Have you established a process to keep records of audit reports?

Management review

BS OHSAS 18001 requirements

Top management shall review the organization's OH&S Management System, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the OH&S Management System, including the OH&S policy and OH&S objectives. Records of the management reviews shall be retained.

Input to management reviews shall include:

- a) results of internal audits and evaluations of compliance with applicable legal requirements and with other requirements to which the organization subscribes
- b) the results of participation and consultation (see 4.4.3)
- c) relevant communication(s) from external interested parties, including complaints
- d) the OH&S performance of the organization
- e) the extent to which objectives have been met
- f) status of incident investigations, corrective actions and preventive actions
- g) follow-up actions from previous management reviews
- h) changing circumstances, including developments in legal and other requirements related to OH&S and
- i) recommendations for improvement.

The outputs from management reviews shall be consistent with the organization's commitment to continual improvement and shall include any decisions and actions related to possible changes to:

- a) OH&S performance
- b) OH&S policy and objectives
- c) resources and
- d) other elements of the OH&S Management System.

Relevant outputs from management review shall be made available for communication and consultation (see 4.4.3).

Introduction

Top management should review the operation of the OH&S Management System to assess whether it is being fully implemented and remains suitable for achieving the company's stated OH&S policy and OH&S objectives.

The review should also consider whether the OH&S policy continues to be appropriate. It should establish new or updated OH&S objectives for continual improvement, appropriate to the coming period, and consider whether changes are needed to any elements of the OH&S Management System.

Typical inputs:

- Accident statistics
- Results of internal and external OH&S management system audits
- Corrective actions carried out to the system since the previous review

- Report from the management appointee on the overall performance of the system
- Reports from individual line managers on the effectiveness of the system locally
- Reports of hazard identification, risk assessment and risk control processes.

Process

Reviews should be carried out by top management on a regular basis (e.g. annually).

NOTE: the frequency of such reviews should be commensurate with the age and development of the system, i.e. a relatively new and untested system may be reviewed quarterly, whilst a tried and tested system which has demonstrated its effectiveness may only need to be reviewed annually.

The review should focus on the overall performance of the OH&S Management System and not on specific details, since these should be handled by the normal means within the OH&S Management System.

Interpretation

In planning for a management review, consideration should be given to the following:

- The topics to be addressed
- Who should attend (managers, OH&S specialist advisors, other personnel)
- Responsibilities of individual participants in respect of the review
- Information to be brought to the review

The review should address:

- Suitability of current OH&S policy
- Setting or updating of OH&S objectives for continual improvement in the forthcoming period
- Adequacy of current hazard identification, risk assessment and risk control processes
- Current levels of risk and the effectiveness of existing control measures
- Adequacy of resources (financial, personnel, material)
- ▶ The effectiveness of the OH&S inspection process
- The effectiveness of the hazard reporting process
- Data relating to accidents and incidents that have occurred
- Recorded instances of procedures not being effective
- Results of internal and external OH&S Management System audits carried out since the previous review and their effectiveness
- The state of preparedness for emergency
- Improvements to the OH&S Management System (e.g. new initiatives to be introduced or expansion of existing initiatives)
- Output of any investigations into accidents and incidents
- An assessment of the effects of foreseeable changes to legislation or technology.
- Reports of emergencies (actual or exercises)

H6 Management review continued

The management appointee should report to the meeting on the overall performance of the OH&S Management System.

Partial reviews of the OH&S Management System performance should be held at intervals that are more frequent, if required.

Typical outputs:

- Minutes of the review
- Revisions to the OH&S policy and OH&S objectives
- Specific corrective actions for individual managers, with target dates for completion
- Specific improvement actions, with assigned responsibilities and target dates for completion
- Date for review of corrective action
- Areas of emphasis to be reflected in the planning of future internal OH&S Management System audits.

Hints for implementation

The term Management Review often gives people the impression of a very senior and formalised board room or committee meeting. However, it is none of these things; it is simply a mechanism to ensure that the OH&S system is kept in good working order.

There are generally two types of people who should be involved in the management review process. Firstly, people who have the right information about the OH&S system (for example the Management Representative) and secondly, people who can make decisions (such as the Managing Director).

When deciding the frequency of management reviews, consider what currently works for company. It is however worthy of note that Health and Safety Legislation is released twice a year, in April and October, as such you may wish to co-ordinate you management review meetings to coincide with such changes.

Regardless of the approach you take, make sure that someone takes notes on what issues were discussed, what decisions were arrived at, and what action items were selected with time-scales. Management reviews should be documented and the records stored accordingly.

The management review should assess how changing circumstances might influence the suitability, effectiveness or adequacy of your OH&S system. Changing circumstances may be internal to your organization (e.g., new materials or changes in products or services) or may be external factors (such as new regulations or new customers).

Once you have documented the action items arising from your management review, be sure that someone follows-up. Progress on these items should be tracked.

Common non-conformances

Potential non-conformances include:

- The frequency of management reviews is not clearly stipulated in the procedure
- The agenda of the management review does not include an examination of the effectiveness of the OH&S system in delivering the policy
- Information gathered to review the OH&S system is insufficient
- Failure to document and follow up actions agreed action of the management review

- Does your management team review the adequacy of your OH&S system at regular intervals?
- Do your procedures ensure that adequate information is provided for management review purposes?
- Are the conclusions and actions required by the management review properly documented in the form of minutes?

Helpful sources of information



NQA

Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, Beds. LU5 5ZX Tel: +44 08000 522 424 | Fax: +44 (0)1582 539090 E-mail: ohsas@nqa.com | Website: www.nqa.com

Consultancy

NQA is not allowed to provide a consultancy service but can provide information on a large number of local consultants who can provide specialist advice on health and safety management issues. Please contact NQA for details of consultants in your area.

British Standards Institute

Copies of international standards can be purchased from BSI at the following address:

Website: www.bsi.org.uk

Health and Safety Executive (HSE)

As well as enforcing statutory legislation, the HSE also aims to encourage improved health and safety performance by providing guidance and assistance on legislation. Coupled with this, the HSE produces a wide range of free leaflets which could be used as part of your health and safety training and communication programme. The HSE can be contacted at the following address:

HSE Infoline, Caerphilly Business Park, Caerphilly CF83 3GG

 Tel:
 08701 545500

 Fax:
 02920 859260

 E-mail:
 hseinformationservices@natbrit.com

 Website:
 www.hse.gov.uk

Health and Safety Executive for Northern Ireland

Enforces health and safety law in Northern Ireland, which can be contacted by using the following details:

 Tel:
 +44 (0)28 9024 3249

 Fax:
 +44 (0)28 9023 5383

 Website:
 www.hseni.gov.uk

Incident Contact Centre

National centre for employers in England, Scotland and Wales to report RIDDOR accidents, cases of ill health and dangerous occurrences. They can be contacted by using the following details:

 Tel:
 0845 300 9923

 Fax:
 0845 300 9924

 E-mail:
 riddor@natbrit.com

 Website:
 www.riddor.gov.uk

Institution of Occupational Safety and Health (IOSH)

IOSH is Europe's leading body for health and safety professionals. We have over 34,000 members worldwide, including 13,000 Chartered Safety and Health Practitioners. IOSH can be contacted using the following details:

Tel: 0116 257 3100 Fax: 0116 257 3101 www.iosh.co.uk

HSE Books

Free and priced guidance leaflets and books and can be contacted by using the following details:

Website: www.hsebooks.co.uk

RoSPA (The Royal Society for the Prevention of Accidents)

The Royal Society for the Prevention of Accidents is a registered charity which was established over 80 years ago. Providing information, advice, resources and training, RoSPA is actively involved in the promotion of safety in all areas of life - at work, in the home, and on the roads, in schools, at leisure and on or near water. RoSPA aims to campaign for change, influence opinion, contribute to debate, educate and inform - for the good of all. RoSPA can be contacted at the following address:

Website: www.rospa.com

Trades Union Congress (TUC)

Runs health and safety campaigns and provides information and training to workplace safety representatives. The TUC can be contacted at the following address:

Congress House, Great Russell Street, London WC1B 3LS

Tel: +44 (0)20 7636 4030 Fax: +44 (0)20 7636 0632 Website: www.tuc.org.uk