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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2016. It was prepared by Subcommittee SES/1/1, *Environmental management systems*, under the authority of Technical Committee SES/1, *Environmental management*. A list of organizations represented on these committees can be obtained on request to their secretary.

Supersession

This British Standard supersedes BS 8555:2003, which is withdrawn.

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- phases and stages updated to reflect changes in BS EN ISO 14001:2015; and
- removal of phase 6 and associated guidance.

Relationship with other publications

This British Standard is related to BS EN ISO 14001, but is not equivalent in technical content.

Use of this document

As a guide, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification or a code of practice and claims of compliance cannot be made to it.

Presentational conventions

The guidance in this standard is presented in roman (i.e. upright) type. Any recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

0 Introduction

0.1 General

This British Standard provides guidance for organizations on the phased development, implementation, maintenance and improvement of an environmental management system (EMS).

0.2 Benefits of an EMS

Many organizations have some form of environmental management as part of their overall business management process. However, many face challenges when implementing a formal EMS. These challenges are often around limited resources (financial and/or human) and difficulty in implementing all the requirements of standards or schemes such as BS EN ISO 14001 or the eco-management and audit scheme (EMAS) [1)].

The benefits of implementing a structured EMS include:

a) meeting compliance obligations;

b) improved financial performance;

c) being able to proactively monitor and measure environmental performance;

d) improved internal and external communication;

e) understanding and managing risks and opportunities within supply and value chains;

f) adapting to and mitigating change (e.g. climate and economic);

g) meeting the needs and expectations of relevant interested parties;

h) enhancing co-operation with interested parties;

i) integration of performance evaluation techniques (e.g. as set out in BS EN ISO 14031); and

j) co-ordination of environmental management with other management disciplines and systems (e.g. energy, quality, health and safety and/or food assurance).

0.3 Advantages of a phased approach

This British Standard is applicable to any organization, regardless of the business activity undertaken, size, complexity or level of maturity. However, organizations with limited resources and/or organizations new to environmental management might find the approach particularly useful. The flexibility offered by a phased approach can be helpful in driving positive culture change within an organization and in motivating top management to see the business value of improved environmental performance.

The phased approach allows organizations to:

a) choose the pace of implementation of their EMS;

b) decide which phase they want to reach and by when;

c) develop an EMS to match the size, complexity and risks of their business;

d) identify and maximize the areas of greatest potential return on investment;

[1)] EMAS is a trademark owned by the European Commission and is an example of a suitable scheme available commercially. This information is given for the convenience of users of this standard and does not constitute an endorsement by BSI of these schemes.

e) ensure progress and self-declare or seek voluntary recognition at specified points during development and implementation of the EMS; and

f) meet the requirements of BS EN ISO 14001 when all phases have been successfully implemented.

0.4 Structure of this British Standard

There are five phases (see Figure 1) with a number of step-by-step stages within each phase. At the end of each phase and prior to embarking on the next, organizations might consider undertaking an internal audit to satisfy themselves that the stages are complete, and that the associated guidance has been considered and, where appropriate, implemented. Each stage sets out:

a) an introduction to explain why it is required;

b) achievement criteria and the evidence needed to ensure the criteria have been met;

c) how the stage should be carried out and suggested inputs; and

d) expected example outputs.

An integral part of completing each stage is the generation and, where appropriate, documentation, of evidence needed to ensure meeting achievement criteria and delivering expected outputs. Internal (and external) audit criteria are based on identifying and evaluating this evidence.

1 Scope

This British Standard provides guidance for all organizations, particularly small and medium-sized enterprises (SMEs), on the phased development, implementation, maintenance and improvement of an EMS. It also includes guidance on the:

a) integration and use of environmental performance evaluation (EPE) techniques during the implementation process; and

b) co-ordination of such an EMS with other management systems, where appropriate.

The guidance in this British Standard is applicable to any organization, regardless of the nature of the business activity undertaken, location, or level of maturity.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 audit
systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled

*NOTE 1 "Evidence" consists of records, statements of fact or other information which are relevant to the audit criteria and are verifiable; and "audit criteria" are the set of policies, procedures or requirements used as a reference against which audit evidence is compared, as defined in BS EN ISO 19011:2011, **3.3** and **3.2** respectively.*

NOTE 2 An internal audit is conducted by the organization itself, or by an external party on its behalf.

NOTE 3 An audit can be a combined audit (combining two or more disciplines).

NOTE 4 Independence can be demonstrated by the freedom from responsibility for the activity being audited or freedom from bias and conflict of interest.

[SOURCE: BS EN ISO 14001:2015, **3.4.1**, modified]

3.2 compliance obligations
legal requirements and other requirements (admitted term) legal requirements that an organization has to comply with and other requirements that an organization has to or chooses to comply with

NOTE 1 Compliance obligations are related to the environmental management system.

NOTE 2 Compliance obligations can arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments, such as organizational and industry standards, contractual relationships, codes of practice and agreements with community groups or non-governmental organizations.

[SOURCE: BS EN ISO 14001:2015, **3.2.9**]

3.3 continual improvement
recurring activity to enhance performance

NOTE 1 Enhancing performance relates to the use of the environmental management system to enhance environmental performance consistent with the organization's environmental policy.

NOTE 2 The activity need not take place in all areas simultaneously, or without interruption.

[SOURCE: BS EN ISO 14001:2015, **3.4.5**]

3.4 environment
surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation

NOTE 1 Surroundings can extend from within an organization to the local, regional and global system.

NOTE 2 Surroundings can be described in terms of biodiversity, ecosystems, climate or other characteristics.

[SOURCE: BS EN ISO 14001:2015, **3.2.1**]

3.5 environmental aspect
element of an organization's activities, products or services that interacts or can interact with the environment

NOTE 1 An environmental aspect can cause (an) environmental impact(s). A significant environmental aspect is one that has or can have one or more significant environmental impact(s).

NOTE 2 Significant environmental aspects are determined by the organization applying one or more criteria.

[SOURCE: BS EN ISO 14001:2015, **3.2.2**]

3.6 environmental impact
change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects

[SOURCE: BS EN ISO 14001:2015, **3.2.4**]

3.7 environmental management system (EMS)
part of the management system used to manage environmental aspects, fulfil compliance obligations, and address risks and opportunities

[SOURCE: BS EN ISO 14001:2015, **3.1.2**]

3.8 environmental objective
objective set by the organization consistent with its environmental policy

[SOURCE: BS EN ISO 14001:2015, **3.2.6**]

3.9 environmental performance
performance related to the management of environmental aspects

NOTE For an environmental management system, results can be measured against the organization's environmental policy, environmental objectives or other criteria, using indicators.

[SOURCE: BS EN ISO 14001:2015, **3.4.11**]

3.10 environmental performance evaluation (EPE)
process to facilitate management decisions regarding an organization's environmental performance by selecting indicators, collecting and analysing data, assessing information about environmental performance criteria, reporting and communicating, and periodically reviewing and improving this process

[SOURCE: BS EN ISO 14031:2013, **3.10**]

3.11 environmental performance indicator (EPI)
indicator that provides information about an organization's environmental performance

[SOURCE: BS EN ISO 14031:2013, **3.11**]

3.12 environmental policy
intentions and direction of an organization related to environmental performance, as formally expressed by its top management

[SOURCE: BS EN ISO 14001:2015, **3.1.3**]

3.13 interested parties
persons or organizations that can affect, be affected by, or perceive themselves to be affected by a decision or activity

NOTE 1 Examples can include customers, communities, suppliers, regulators, non-governmental organizations, investors and employees.

NOTE 2 To "perceive themselves to be affected" means the perception has been made known to the organization.

[SOURCE: BS EN ISO 14001:2015, **3.1.6**, modified]

3.14 life cycle
consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal

NOTE The life cycle stages include acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment and final disposal.

[SOURCE: BS EN ISO 14001:2015, **3.3.3**]

3.15 nonconformities
any non-fulfilment of a requirement

NOTE Nonconformity relates to requirements in BS EN ISO 14001 and additional environmental management system requirements that an organization establishes for itself.

[SOURCE: BS EN ISO 14001:2015, **3.4.3**, modified]

3.16 organization
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

NOTE The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

[SOURCE: BS EN ISO 14001:2015, **3.1.4**]

3.17 prevention of pollution
use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts

NOTE Prevention of pollution can include source reduction or elimination; process, product or service changes; efficient use of resources; material and energy substitution; reuse; recovery; recycling, reclamation; or treatment.

[SOURCE: BS EN ISO 14001:2015, **3.2.7**]

3.18 risks and opportunities
potential adverse effects (threats) and potential beneficial effects (opportunities)

[SOURCE: BS EN ISO 14001:2015, **3.2.11**]

3.19 value chain
entire series of activities that create and build value at every step

4 Overview of the phased approach

The overall phased approach is shown in Figure 1.

Each phase is shown in a figure that sets out the stages in the order of implementation.

Each implementation stage is arranged under headings as follows:

a) stage heading;

b) introduction which includes the reason(s) for the stage and when it should be completed;

c) achievement criteria for the stage;

d) how to do the stage which includes inputs and who should be involved; and

e) example outputs.

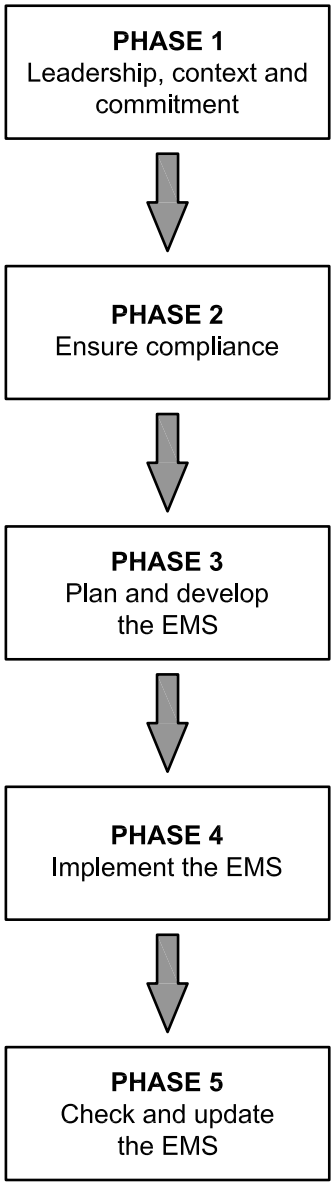
The successful completion of each phase is based upon the completion of each of the stages within that phase, following corrective action if necessary.

An internal audit at the end of each phase ensures that all the stages in that phase have been completed. Audits of phases should also review any earlier phases.

In addition to the phases:

1) Annex A provides sources of information on the EMAS regulation [1]; and
2) Annex B shows correspondence between the achievement criteria of this British Standard and BS EN ISO 14001:2015.

Figure 1 **Overview of the phased implementation of an environmental management system**



5 Phase 1: Leadership, context and commitment

*COMMENTARY ON CLAUSE **5***

This phase describes the initial building blocks of an organization's EMS. It covers:

a) the importance of leadership and securing top management commitment in the successful implementation of an EMS;

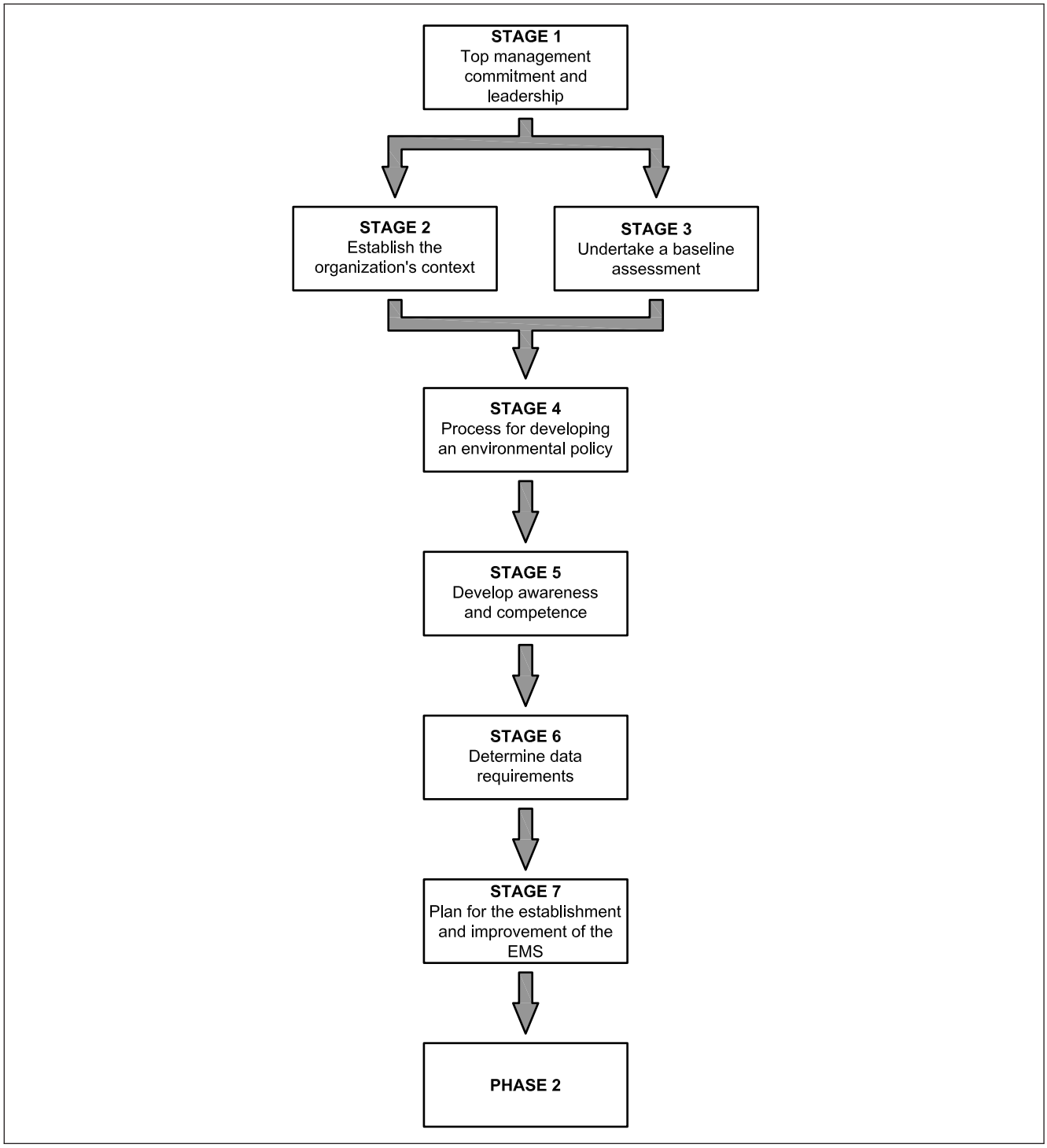
b) the need for an organization to understand its context, including the issues it faces and the views of its interested parties;

c) the baseline assessment of the organization's environmental impacts; and

d) the priorities an organization included in its environmental policy and the need to change people's behaviour by raising awareness of the EMS and its aims.

See Figure 2 for an overview of phase 1.

Figure 2 **Phase 1: Leadership, context and commitment**



5.1 Phase 1, stage 1: Top management commitment and leadership

5.1.1 Introduction

Top management commitment is essential to the implementation of an EMS; leadership of the EMS should:

a) establish the importance of the EMS within the organization;

b) encourage a consistent approach to the EMS throughout the organization;

c) gain the commitment of key individuals working for, or on behalf of, the organization; and

d) approve any necessary resources and changes.

5.1.2 Achievement criteria for phase 1, stage 1

The organization should:

a) ensure that top management provides leadership of the EMS;

b) ensure that top management:

1) is accountable for the effectiveness of the EMS;

2) ensures that the resources needed for the EMS are provided;

3) ensures that the EMS achieves its intended outcomes;

4) directs and supports persons to contribute to the effectiveness of the EMS;

5) supports other relevant management roles to ensure leadership as it applies to their area of responsibility; and

c) draft an outline of the environmental management structure and responsibilities.

5.1.3 How to do phase 1, stage 1

Inputs should include:

a) meeting with management to explain the benefits of an EMS;

b) information regarding potential benefits and costs;

c) the results of initial research;

d) any information on available resources and budgets;

e) relevant publications and guidance, for e.g., on environmental standards and obligations; and

f) information on formal EMS(s), for e.g., BS EN 14001 or EMAS.

Using the information gathered from the inputs, the organization should:

1) recognize the specific drivers for the organization to implement an EMS;

2) identify potential benefits and barriers;

3) present the case for an EMS to top management highlighting the advantages of improving environmental performance through a staged approach;

4) establish an EMS implementation team;

5) outline the management structure that can support the EMS implementation;

6) outline the responsibilities of managers and other key individuals working for, or on behalf of, the organization, under the EMS implementation;

7) maintain top management support and commitment by regularly reporting on progress; and

8) identify and communicate benefits accruing from EMS activity.

The following people should be involved:

i) top management;

ii) line managers; and

iii) the EMS implementation team.

5.1.4 Example outputs

The following are example outputs that should be achieved from phase 1, stage 1:

a) a clear statement of commitment and allocation of any required resources;

b) commencement of EMS implementation; and

c) establishment of a formal EMS implementation team.

5.2 Phase 1, stage 2: Establish the organization's context

5.2.1 Introduction

Before planning the EMS, the organization should first understand its own context, in terms of the internal and external issues it faces, environmental conditions and the views of interested parties relevant to its EMS.

NOTE Internal issues might include: activities; products and services; strategic direction; organizational culture; and capabilities. External issues might include: cultural; social; political; legal; regulatory; financial; technological; economic; natural; and competitive circumstances. Environmental conditions might include issues related to: climate change; air quality; water quality; land use; land contamination; natural resource availability; and biodiversity.

5.2.2 Achievement criteria for phase 1, stage 2

The organization should ensure an understanding of the:

a) internal and external issues, including environmental conditions relevant to the organization; and

b) interested parties relevant to the organization, as well as their needs and expectations.

5.2.3 How to do phase 1, stage 2

Inputs should include:

a) meetings with management and staff about the organization, its activities, products and services;

b) activity, product and service details;

c) supplier and customer information;

d) information from interested parties;

e) information on environmental issues; and

f) information on compliance obligations.

Using the information gathered from the inputs, the organization should:

1) establish who the interested parties of the organization are and gather their views;

2) identify the needs and expectations of interested parties from the information gathered;

3) undertake a review of the internal and external issues relevant to the organization;

4) gather information about the environmental issues relevant to the organization and its activities, products and services;

5) analyse the gathered information to establish a context of the organization; and

6) communicate the analysed information to all relevant people in the organization.

All those working on the EMS implementation should be involved.

5.2.4 Example outputs

The following are example outputs that should be achieved from phase 1, stage 2:

a) information on the views of interested parties; and

b) information on the internal and external issues affecting environmental management of the organization.

5.3 Phase 1, stage 3: Undertake a baseline assessment

5.3.1 Introduction

The organization should undertake a baseline assessment to obtain the evidence needed to understand its environmental context and existing level of environmental performance before building its EMS.

NOTE A baseline assessment provides a quick and easy approach to establish relevant information and considers existing management practices, environmental aspects and associated impacts, environmental costs and any key compliance obligations.

5.3.2 Achievement criteria for phase 1, stage 3

By undertaking a baseline assessment, the organization should establish environmental risks and opportunities including:

a) the environmental aspects of the organization;

b) compliance obligations;

c) the site, the history of the site, and any environmental implications; and

d) potential emergency situations, including those that can have an environmental impact.

The organization should identify data required to monitor and provide information on a) to d) as appropriate to the organization.

*NOTE See **5.6** for how to determine data requirements.*

5.3.3 How to do phase 1, stage 3

Inputs should include:

a) top management commitment; and

b) time and resources.

Using the information gathered from the inputs, the organization should:

1) establish the scope of the baseline assessment;

2) establish site information and environmental history appropriate to the nature of the organization;

3) identify the likely significant environmental aspects and associated impacts related to activities, products and services;

4) identify key compliance obligations; and

5) review existing management practices and processes.

NOTE Organizations might also consider a general assessment of potential environmental costs and benefits and identification of potential opportunities and barriers.

The following people should be involved:

i) management team;

ii) those working on the EMS implementation; and

iii) other key information providers involved with the organization, such as suppliers, maintenance and/or customers.

5.3.4 Example outputs

The following are example outputs that should be achieved from phase 1, stage 3:

a) a general scope of EMS;

b) a list of likely significant environmental aspects and associated impacts;

c) a list of compliance obligations; and

d) identification of initial opportunities, (e.g. to make cost savings, improve environmental performance or address the concerns of interested parties).

5.4 Phase 1, stage 4: Process for developing an environmental policy

*COMMENTARY ON **5.4***

An environmental policy is a short public declaration that states the organization's intentions and direction related to environmental performance. It also provides the focus for the development and operation of the EMS.

The policy is a dynamic document that is updated as the EMS develops and as the context of the organization changes.

Initially, an organization has not gathered all the necessary information (e.g. compliance obligations) and established all the necessary EMS elements (e.g. environmental objectives) needed to establish a finalized and fully informed environmental policy.

This stage establishes a process for ensuring that an environmental policy is developed, taking into account the current status of the EMSs development.

5.4.1 Achievement criteria for phase 1, stage 4

The organization should establish a formal process that ensures an environmental policy is developed in line with the development of the EMS. The process should ensure that, as appropriate to the current status of the EMSs development, the environmental policy:

a) is established by top management;

b) is appropriate to and compatible with the purpose, strategic direction and context of the organization, including the nature, scale and environmental impacts of its activities, products and services;

c) provides a framework for setting environmental objectives;

d) includes a commitment to the protection of the environment, including:

1) the prevention of pollution;

2) other specific commitment(s) relevant to the context of the organization;

3) a commitment to fulfil the organization's compliance obligations; and

4) a commitment to continual improvement of the EMS to enhance environmental performance.

This should be documented.

5.4.2 How to do phase 1, stage 4

The following should be used:

a) any environmental views or values relating to the organization;

b) any existing environmental policies or commitments made to date; and

c) any current environmental issues identified from the baseline assessment.

Using the information gathered from the inputs, the organization should:

1) identify what commitments might be included for the organization;

2) introduce the organization, briefly describing its activities and any further relevant information; and

NOTE This provides the reader with an idea of the nature and scale of the organization.

3) gain feedback on the policy from key interested parties.

The following people should be involved:

i) top management; and

ii) those involved in the baseline assessment.

5.4.3 Example outputs

The following are example outputs that should be achieved from phase 1, stage 4:

a) a process for the development of an environmental policy that outlines the organization's intentions and direction related to environmental performance, as appropriate to the current status of the EMSs development; and

b) an environmental policy appropriate to the current status of the EMSs development.

5.5 Phase 1, stage 5: Develop awareness and competence

5.5.1 Introduction

An important part of implementing an EMS is developing a culture in which the people working for, or on behalf of, the organization know what to do and why; personnel working for the organization should be aware of the EMS and its aims, as well as possessing the knowledge and competence to enable them to get it right the first time.

NOTE The more informed and competent the organization's people are on their roles in the EMS, the higher the chances are for the EMS delivering environmental performance improvements and other benefits.

5.5.2 Achievement criteria for phase 1, stage 5

The organization should ensure that:

a) it has planned and initiated awareness raising and environmental training within the organization as appropriate; and

b) top management have:

1) communicated the importance of effective environmental management and of conforming to the EMS; and

2) promoted continual improvement.

5.5.3 How to do phase 1, stage 5

Inputs should include:

a) top management commitment;

b) information about the benefits of environmental management; and

c) results from the baseline assessment.

Using the information gathered from the inputs, the organization should:

1) assess the culture(s) within the organization and identify activities to raise the profile and importance of environmental management (e.g. posters, presentations, newsletters and quizzes);

2) raise awareness throughout the organization about the environmental issues/pressures facing the organization, the environmental aspects of its activities, products and services and the importance of meeting compliance obligations;

3) inform all those working for, or on behalf of, the organization about the commitment to environmental management and how important it is for the organization in terms of protecting against risks and realizing benefits;

4) involve those working for, or on behalf of, the organization in EMS project activity as soon as practicable.

NOTE 1 The baseline assessment benefits from involving a wide range of people from different parts of the organization.

5) conduct an initial training needs analysis for those working for, or on behalf of, the organization which enables the organization to assess competence, progress the project and meet initial goals;

NOTE 2 It might be possible to use existing practices to assist in this.

6) schedule awareness activity and specific training for those working for, or on behalf of, the organization as identified in the training needs analysis and check that it supports the implementation plan; and

7) actively obtain feedback from people throughout the organization.

Everyone within the organization should be involved.

5.5.4 Example outputs

The following are example outputs that should be achieved from stage 1, phase 5:

a) initiation of an environmental awareness raising programme;

b) an initial training needs analysis focused on personnel competence; and

c) a plan for environmental training activity.

5.6 Phase 1, stage 6: Determine data requirements

*COMMENTARY ON **5.6***

The collection and use of data relating to key environmental issues helps an organization to operate an effective EMS, measure and evaluate its environmental performance, and demonstrate how it is meeting its stated policy aims and objectives.

Environmental performance data can be used to support environmental reporting and communication both within and outside the organization.

Data can be used to develop environmental performance indicators (EPIs), which can be effective in maintaining the organization's focus on its environmental goals and driving continual improvement in environmental performance.

5.6.1 Introduction

The organization should determine and review the data that exists on the environmental issues identified in the baseline review and determine the data (sets) needed to track its environmental performance. In doing so, the organization should identify any gaps in data and establish the means to generate/collect additional data sets.

5.6.2 Achievement criteria for phase 1, stage 6

The organization collects data on key environmental issues that enable it to evaluate its environmental performance.

5.6.3 How to do phase 1, stage 6

Inputs should include:

a) top management commitment;

b) environmental policy and objectives developed in support of the policy;

c) findings of the baseline assessment;

d) existing information within the organization; and

e) the needs and expectations of interested parties.

Using information from the inputs, the organization should determine data to demonstrate the key areas of environmental performance related to its operational activities and value chain.

The following people should be involved:

1) top management;

2) the EMS implementation team;

3) interested parties; and

4) any other information providers.

5.6.4 Example outputs

The following are example outputs that should be achieved from phase 1, stage 6:

a) processes for data collection, conversion, storage, assessment/analysis, verification and communication;

b) records of environmental performance in specified areas of the organization;

c) information on (meeting) performance against the environmental policy and supporting objectives; and

d) summaries of environmental performance to assist communication.

5.7 Phase 1, stage 7: Plan for the establishment and improvement of the EMS

5.7.1 Introduction

*COMMENTARY ON **5.7.1***

This stage establishes how the organization uses its EMS to improve environmental performance by setting out a plan covering the scope, processes, activities, responsibilities, timescales, resource inputs, costs and benefits of the EMS.

This stage should be revisited throughout the course of the implementation.

5.7.2 Achievement criteria for phase 1, stage 7

The organization should ensure that:

a) the scope of the EMS has been determined and documented;

b) a structured and realistic plan, detailing the timescales and responsibilities for the achievement of stated EMS implementation goals, is in place; and

c) the management system is:

1) established, implemented and maintained in line with the above plan, whilst considering the knowledge gained in **5.2** and **5.3**;

2) continually improved to enhance environmental performance; and

3) integrated into the organization's processes.

5.7.3 How to do phase 1, stage 7

Inputs should include:

a) initial top management commitment;

b) an understanding of the actions required and their sequencing; and

c) findings of the baseline assessment and information relating to organizational context.

Using the information gathered from the inputs, the organization should:

1) define the boundaries and applicability of the EMS to establish its scope;

2) identify the actions required to implement an EMS to the required level;

3) identify any timescale targets (milestones) or aspirations for the EMS;

4) identify actions and targets to enhance environmental performance;

5) develop an outline plan showing tasks and timescales;

6) identify responsibilities, specifying those working for, or on behalf of, the organization where possible;

7) ensure that planned timescales and assumptions are realistic; and

8) develop an initial approach that can be used to present and communicate the plans, and for the management of the EMS implementation.

The following people should be involved:

i) individuals involved in EMS implementation;

ii) top management; and

iii) any other key information providers.

5.7.4 Example outputs

The following are example outputs that should be achieved from phase 1, stage 7:

a) a defined and documented scope statement; and

b) an outline plan of activities required for the implementation of an EMS (to required level) detailing:

   1) activities;

   2) timescales and milestones;

   3) responsibilities; and

   4) identification of an environmental management representative.

6 Phase 2: Ensure compliance

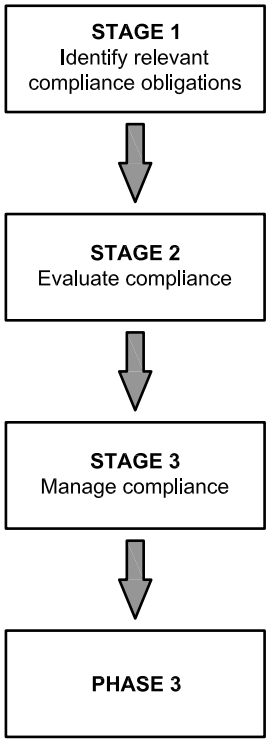
*COMMENTARY ON CLAUSE **6***

This phase describes how the organization ensures that it meets its compliance obligations by actively managing its interaction with the environment. Simply knowing that these requirements exist is not enough. Ensuring compliance is the minimum level of environmental management.

This phase covers: the identification and updating of legal and other compliance obligations; establishing a means to monitor and evaluate the level of compliance (compliance status); and the means by which compliance is maintained including the identification and resolution of any non-compliances, e.g. breaches of permit conditions or other legal requirements, or non-fulfilment of other obligations.

Completion of phase 2 provides assurance to regulators and other interested parties that compliance is being effectively managed. See Figure 3 for an overview of phase 2.

Figure 3 **Phase 2: Ensure compliance**



6.1 Phase 2, stage 1: Identify relevant compliance obligations

6.1.1 Introduction

The organization should identify all relevant compliance obligations regarding its interaction with the environment. It should determine all requirements from environmental permits for site and process specific operations and any other obligations covering its interactions with air, land, waste and water.

NOTE Relevant compliance obligations are unique to each organization and site.

6.1.2 Achievement criteria for phase 2, stage 1

The organization should provide:

a) documented information which shows that the organization has identified relevant compliance obligations and determined how they apply to the organization; and

b) a defined process for identifying, having access to and updating compliance obligations which are applicable to the organization.

6.1.3 How to do phase 2, stage 1

Inputs should include:

a) information from the baseline assessment;

b) information from regulatory/enforcement bodies;

c) relevant permits, (e.g. relevant licences, authorizations, any local bye-laws applicable to the site, planning consents);

d) relevant codes of practice and/or conduct;

e) the needs and expectations of interested parties;

f) client/customer contractual agreements; and

g) sector/organizational standards.

Using the information gathered from the inputs, the organization should:

1) list all relevant compliance obligations;

2) describe how these obligations apply to the organization; and

3) document the process for keeping up-to-date with all relevant compliance obligations.

The following people should be involved:

i) the EMS representative;

ii) nominated individuals working for, or on behalf of, the organization; and

iii) any specialist contributors and regulators.

6.1.4 Example outputs

The following are example outputs which should be achieved from phase 2, stage 1:

a) documented information on relevant compliance obligations and an understanding of how they apply to the organization; and

b) a defined process for identifying, having access to and updating the organization's records and information relating to compliance obligations.

6.2 Phase 2, stage 2: Evaluate compliance

6.2.1 Introduction

The organization should establish a process for evaluating its compliance status on an ongoing basis.

6.2.2 Achievement criteria for phase 2, stage 2

The organization should ensure that it:

a) has an established process for evaluating compliance with relevant compliance obligations at determined frequencies;

b) has evaluated its level of compliance with relevant compliance obligations; and

c) maintains knowledge and understanding of its compliance status.

6.2.3 How to do phase 2, stage 2

Inputs should include:

a) details of compliance obligations and how these apply to the organization;

b) monitoring records of past performance where appropriate;

c) relevant legal documents/records;

d) information from regulatory body public registers; and

e) requirements within permits, consents, exemptions and/or authorizations.

Using the information gathered from the inputs, the organization should:

1) review findings from baseline assessment (see **5.3**);
2) review how each of the compliance obligations identified in **6.1** applies in the organization, consulting the regulator(s) as appropriate;
3) review the specific details required for the organization's compliance with its obligations against its current practice and assess its performance, identifying:
    i) any regulatory non-compliances;
    ii) whether existing controls are adequate to help prevent non-compliance, including those related to abnormal and emergency situations;
    iii) areas where further information is required to confirm compliance; and
4) regularly undertake site inspections.

The following people should be involved:

i) top management;
ii) the EMS representative; and
iii) any other key individuals working for, or on behalf of, the organization.

6.2.4 Example outputs

The following are example outputs which should be achieved from phase 2, stage 2:

a) a documented record showing the level of compliance against each compliance obligation;
b) evidence that records were checked to enable the organization to ensure its compliance status; and
c) a documented process for evaluating compliance.

6.3 Phase 2, stage 3: Manage compliance

6.3.1 Introduction

To support the commitment made in the environmental policy (see **5.4**), the organization should establish the controls and actions required to help ensure ongoing compliance with its obligations.

NOTE Actions might include regular checking of the compliance obligations by reviewing current information available, site inspections and changes to process.

6.3.2 Achievement criteria for phase 2, stage 3

The organization should ensure that:

a) it plans, implements and evaluates actions to fulfil its compliance obligations; and
b) person(s) doing work under the organization's control which can affect its ability to fulfil its compliance obligations are competent.

6.3.3 How to do phase 2, stage 3

Inputs should include:

a) information from the evaluation of compliance (see **6.2**);

b) relevant existing operational control processes;

c) existing emergency plans;

d) existing training records and environmental training plans from Clause **5**; and

e) guidance from regulators on requirements and/or expected standards for environmental compliance, including aspects such as operational control measures, emergency planning and technical competence.

Using the information gathered from the inputs, the organization should:

1) produce an action plan to address issues identified in the evaluation (see **6.2**), prioritizing any non-compliant or poorly controlled situation(s);

2) identify operational controls and processes relating to the organization's emergency preparedness and response that are required within the plan;

3) identify competence and training requirements for those working for, or on behalf of, the organization; and

NOTE This might help ensure legal compliance.

4) determine how the organization periodically reviews its legal compliance which should be documented as appropriate.

The following people should be involved:

i) top management;

ii) the EMS representative; and

iii) any key individuals working for, or on behalf of, the organization.

6.3.4 Example outputs

The following are example outputs that should be achieved from phase 2, stage 3:

a) an action plan for addressing issues identified by evaluation of compliance;

b) documented control processes to ensure ongoing compliance;

c) reviews of, and any necessary changes to:

1) operational control processes;

2) emergency preparedness and response;

3) monitoring and measurement of processes; and

4) competence requirements.

7 Phase 3: Plan and develop the environmental management system

*COMMENTARY ON CLAUSE **7***

Phase 3 covers activities needed to plan and develop the EMS. It includes stages to:

a) finalize roles and responsibilities;

b) determine significant environmental aspects;

c) consider risks and opportunities;

d) finalize the environmental policy;

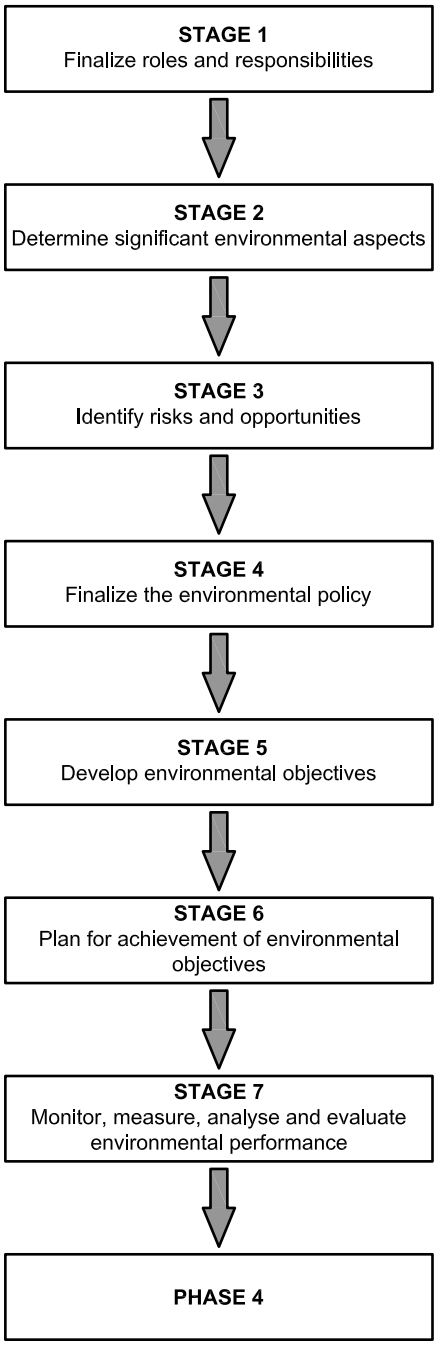
e) develop environmental objectives;

f) establish a plan for achieving environmental objectives; and

g) develop monitoring and measuring for the EMS.

See Figure 4 for an overview of phase 3.

Figure 4 **Phase 3: Plan and develop the environmental management system**



7.1 Phase 3, stage 1: Finalize roles and responsibilities

7.1.1 Introduction

The organization should have clearly defined responsibilities with regards to the EMS and all other environmental initiatives in order to successfully implement them.

7.1.2 Achievement criteria for phase 3, stage 1

The organization should ensure that:

a) top management have assigned the necessary responsibilities and authorities for relevant roles, including for:

   1) ensuring that the EMS is operated as intended and conforms to prescribed requirements; and

   2) reporting environmental performance and performance of the EMS to top management;

b) assigned roles, responsibilities and authorities have been established and communicated within the organization.

7.1.3 How to do phase 3, stage 1

Inputs should include:

a) outline management structure and responsibilities as in **5.2**; and

b) define responsibilities with regards to compliance management in Clause **6**, operational and emergency processes, the environmental management programmes and objectives as in Clause **7**.

Using the information gathered from the inputs, the organization should:

1) review the management structure as in Clause **5** and assess whether this is suitable for the ongoing operation of the EMS so that:

   i) management responsibility for the EMS has been clearly identified; and

   ii) EMS roles for those working for, or on behalf of, the organization are clear;

2) identify additional roles if required, to ensure the EMS works effectively, and assign responsibilities for these new roles if necessary;

3) gain agreement for any changes made to the management structure, document assigned roles, responsibilities and authorities and communicate them as appropriate; and

4) secure the availability of resources (those working for, or on behalf of, the organization, infrastructure, equipment, financial, etc.) for the implementation and operation of the EMS.

The following people should be involved:

i) top management;

ii) line managers; and

iii) those working for, or on behalf of, the organization with designated roles within the EMS.

7.1.4 Example outputs

The following are example outputs that should be achieved from phase 3, stage 1:

a) a clearly defined management structure that identifies the top level manager(s) accountable for EMS and environmental performance;

b) documented definitions of management roles, responsibilities and authorities under the EMS; and

c) communication of roles and responsibilities for the EMS to relevant personnel working for, or on behalf of, the organization.

7.2 Phase 3, stage 2: Determine significant environmental aspects

7.2.1 Introduction

Organizations should identify their aspects and determine their significance.

NOTE 1 Organizations can have a number of environmental aspects related to their activities, products and services. Some are directly within their control (e.g. direct aspects) and some are of a nature that can only be indirectly influenced (e.g. indirect aspects).

NOTE 2 Environmental aspects can lead to environmental impacts (positive or negative).

NOTE 3 Once environmental aspects have been evaluated for significance it is possible to prioritize action to address them.

7.2.2 Achievement criteria for phase 3, stage 2

The organization should ensure that:

a) aspects and associated impacts have been identified considering:

1) a life cycle perspective; and

2) normal and abnormal conditions, emergency situations and changes;

b) documented information on environmental aspects and associated impacts is available;

c) it has communicated internally its significant environmental aspects; and

d) it has planned to take actions to address its significant environmental aspects, integrated and implemented the actions, and evaluated the effectiveness of the actions.

7.2.3 How to do phase 3, stage 2

Inputs should include information:

a) relating to the context of the organization (see Clause **5**);

b) from the baseline assessment (see Clause **5**);

c) relating to compliance obligations (see Clause **6**); and

d) relating to environmental costs and benefits, and any other environmental criteria to be addressed.

Using the information gathered from the inputs, the organization should:

1) identify the environmental aspects and associated impacts related to the organization's activities, products and services, considering a life cycle perspective;

2) identify the environmental aspects and associated impacts related to any new or modified projects undertaken by the organization;

3) identify the environmental aspects and associated impacts related to historical activities on the organization's site;

4) identify the environmental aspects and associated impacts associated with

any abnormal conditions, as well as any potential and actual emergency situations in the organization, and organizational changes;

5) select an approach and establish and maintain a process for the assessment of significant aspects and associated impacts;

6) evaluate the significance of the aspects and associated impacts identified, including collection of additional information where required;

7) determine significant aspects and associated impacts on which the organization is going to focus; and

8) plan for and take effective actions to address the significant environmental aspects.

The following people should be involved:

i) the EMS implementation team;

ii) those working for, or on behalf of, the organization; and

iii) any specialist contributors.

7.2.4 Example outputs

The following are example outputs that should be achieved from phase 3, stage 2:

a) a process for the identification of those aspects that an organization can control and over which it has an influence;

b) a list of environmental aspects and associated impacts;

c) a defined methodology for assessing the significance of aspects and associated impacts that can be applied on an ongoing basis; and

d) a list of significant impacts.

7.3 Phase 3, stage 3: Identify risks and opportunities

7.3.1 Introduction

The organization should identify and manage risks and opportunities to ensure that the EMS can achieve its intended outcomes, to prevent or reduce undesired effects, and to achieve continual improvement.

The organization should consider risks and opportunities when determining the controls required for operations, and in the establishment and improvement of other elements of the EMS.

7.3.2 Achievement criteria for phase 3, stage 3

The organization should ensure:

a) documented information exists in which the organization has determined the risks and opportunities to be addressed related to its:

   1) environmental aspects;

   2) compliance obligations; and

   3) any other issues and requirements identified in **5.3**; and

b) it has planned to take actions to address its risks and opportunities, integrated and implemented the actions, and evaluated the effectiveness of the actions.

7.3.3 How to do phase 3, stage 3

Inputs should include information relating to:

a) environmental aspects;

b) compliance obligations (see Clause **6**); and

c) the context of the organization (see Clause **5**).

Using the information gathered from the inputs, the organization should:

1) review the environmental aspects, compliance obligations and other issues and requirements identified in **5.3** and determine the risks and opportunities associated with them; and

2) plan for and take effective actions to address the risks and opportunities.

The following people should be involved:

i) top management;

ii) the EMS implementation team; and

iii) those working for, or on behalf of, the organization.

7.3.4 Example outputs

The following are example outputs that should be achieved from phase 3, stage 3:

a) a list of risks and opportunities regarding environmental management attention are focused; and

b) a list of appropriate planned actions to address the risks and opportunities.

7.4 Phase 3, stage 4: Finalize the environmental policy

*COMMENTARY ON **7.4***

Having completed phase 1 and phase 2, and having identified its significant aspects and associated impacts, the organization would be in a position to review its policy, make any necessary amendments and launch it.

Some organizations might have already finalized their policy in phase 1.

7.4.1 Achievement criteria for phase 3, stage 4

The organization should ensure that:

a) a documented policy exists which meets the achievement criteria of **5.5**; and

b) this policy has been communicated within the organization and made available to interested parties.

7.4.2 How to do phase 3, stage 4

Inputs should include:

a) the existing environmental policy (see Clause **5**);

b) information from the baseline assessment (see Clause **5**);

c) information from the review of compliance obligations (see Clause **6**); and

d) evaluation of environmental aspects and/or associated impacts (see **7.1**).

Using the information gathered from the inputs, the organization should:

1) ensure that policy meets all the requirements of **5.4**;

2) ensure that the policy covers the key issues and significant aspects and associated impacts of the organization, as previously identified;

NOTE It is not essential to list these individually in the policy.

3) ensure that the policy makes commitments that are realistic and appropriate to the organization;

4) ensure that the policy is flexible enough to accommodate change within the organization;

5) amend the policy as necessary, inviting input from interested parties;

6) ensure the policy is signed and dated by top management; and

7) ensure the policy is made available to the public.

The following people should be involved:

i) the EMS implementation team;

ii) top management; and

iii) any other individuals working for, or on behalf of, the organization.

7.4.3 Example outputs

A finalized environmental policy, signed by the top management, should be created and made available to the public.

7.5 Phase 3, stage 5: Develop environmental objectives

7.5.1 Introduction

Environmental objectives should be developed to support the broad aims stated in the organization's environmental policy. They form a central part of the EMS and therefore should be related to the organization's significant aspects, risks and opportunities.

NOTE Objectives can provide a clear focus for EMS activity.

Intermediate milestones against which to track and benchmark performance should be included where possible.

7.5.2 Achievement criteria for phase 3, stage 5

The organization should ensure that it has:

a) documented objectives which are measurable (if practicable) and appropriate to and compatible with the scale, nature, strategic direction and context of the organization, its policy commitments, its significant environmental aspects and associated compliance obligations, and its risks and opportunities; and

b) communicated its environmental objectives as necessary.

7.5.3 How to do phase 3, stage 5

Inputs should include:

a) a finalized environmental policy;

b) information from Clause **5** and Clause **6**, **7.1** and **7.2**;

c) any significant environmental aspects; and

d) the views of interested parties.

Using the information gathered from the inputs, the organization should:

1) identify the broad aims stated in the environmental policy;

2) identify factors that have the greatest influence over the performance of the organization in relation to these aims including the list of significant aspects developed in **7.1**;

3) establish and/or review the needs and expectations of interested parties;

4) establish objectives to improve performance against policy objectives and the significant aspects; and

5) establish detailed targets, where feasible, to directly support the achievement of each objective. The objectives should be given a timeframe and someone should be made responsible for their delivery.

*NOTE In many organizations Clause **7**, Clause **8** and Clause **9** (stages 3, 4 and 5) run in parallel because some objectives are only set once the implications of the environmental management programme or achievable EPIs have been identified.*

The following people should be involved:

i) the EMS implementation team;

ii) interested parties; and

iii) top management.

7.5.4 Example outputs

A range of objectives for the organization which support the broad aims stated in the environmental policy, and the continual improvement in environmental performance linked to the most significant aspects should be created.

7.6 Phase 3, stage 6: Plan for achievement of environmental objectives

*COMMENTARY ON **7.6***

*The planning actions taken to achieve the organization's environmental objectives can build upon the outline plans produced under Clause **5**, providing a clear and defined plan of future proposed activity and responsibilities.*

7.6.1 Achievement criteria for phase 3, stage 6

The organization should ensure evidence of planning to ensure achievement of environmental objectives, including:

a) the assignation of specific actions;

b) required resources;

c) responsibilities;

d) timescales; and

e) processes and procedures where necessary.

7.6.2 How to do phase 3, stage 6

Inputs should include:

a) an outline plan as in Clause **5**;

b) training needs analysis and competence information for those working for, or on behalf of, the organization;

c) details of objectives; and

d) resource availability (e.g. those working for, or on behalf of, the organization).

Using the information gathered from the inputs, the organization should:

1) review the outline plan as in Clause **5**;

2) identify actions required to achieve objectives;

3) identify timescale targets for achieving objectives;

4) identify resource requirements for carrying out actions within specified timescales;

5) identify awareness, skills, and knowledge building activity required;

6) identify individuals or groups responsible for actions and achieving objectives; and

7) develop the organization's environmental management programme incorporating all the requirements identified from the tasks above.

The following people should be involved:

i) the EMS implementation team; and

ii) associated key individuals.

7.6.3 Example outputs

A clear and detailed plan should be established which identifies the proposed means by which objectives can be achieved.

7.7 Phase 3, stage 7: Monitor, measure, analyse and evaluate environmental performance

7.7.1 Introduction

In order to track performance of the organization against both stated environmental objectives and for other key characteristics of its operations that can have a significant impact on the environment, measures of key indicators should first be established.

NOTE Evaluation of these measures and the communication of performance can be greatly assisted through the development of a range of EPIs.

7.7.2 Achievement criteria for phase 3, stage 7

The organization should ensure that:

a) it has monitored, measured, analysed and evaluated its environmental performance in accordance with a determined methodology, including defined criteria for the evaluation of environmental performance and appropriate EPIs;

b) it has evaluated the effectiveness of the EMS;

c) it has internally communicated its environmental performance; and

d) monitoring and measurement equipment as relevant is maintained and calibrated or verified.

7.7.3 How to do phase 3, stage 7

*COMMENTARY ON **7.7.3***

Users might wish to reference BS EN ISO 14031, a standard that provides a methodology for environmental performance evaluation including the definition and construction of environmental performance indicators.

Inputs should include:

a) details of objectives established;

b) details of any EPIs developed;

c) information on significant aspects and associated impacts; and

d) details about the needs and expectations of interested parties.

Using the information gathered from the inputs, the organization should:

1) establish data collection and conversion methods;
2) identify how EPI information is expected to be used;
3) develop practices and processes for the handling, storage, and communication of data;
4) propose approaches for the analysis and assessment of the data provided; and
5) establish data verification practices.

The following people should be involved:

i) the EMS implementation team;
ii) interested parties; and
iii) top management.

7.7.4 Example outputs

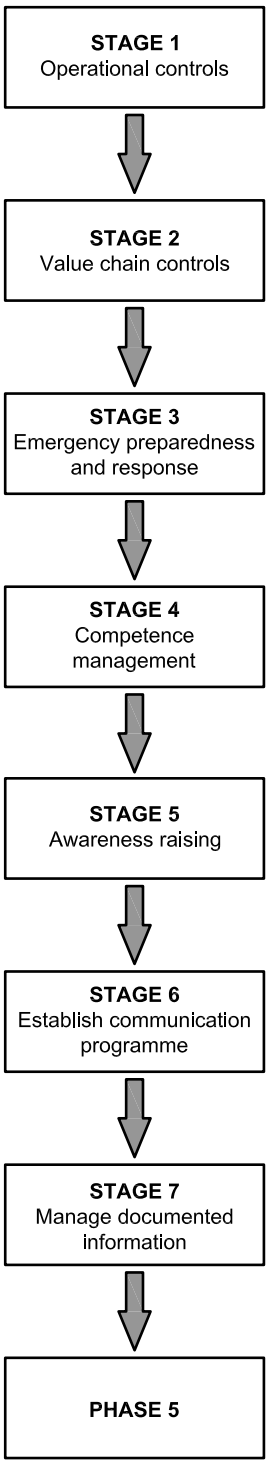
The organization should establish process(s) for monitoring, measuring, analysing and evaluating environmental performance which provides information on performance against the objectives established to support the environmental policy.

8 Phase 4: Implement the environmental management system

*COMMENTARY ON CLAUSE **8***

This phase describes how an organization implements the EMS following planning and development activities. This phase covers controls for operational activities and the value chain, emergency planning and response and supporting activities to manage staff competences, manage documentation and information and provide effective communication. See Figure 5 for an overview of phase 4.

Figure 5 **Phase 4: Implement the environmental management system**



8.1 Phase 4, stage 1: Planning and controlling operational processes

8.1.1 Introduction

Planning and controlling operational processes, including those covering contractors and suppliers, should be established to ensure that significant aspects and associated impacts are being managed to minimize the impact on the environment and any risks to the environment. Control processes should also support the achievement of objectives, which in turn supports the organization's policy commitments to continual improvement and compliance with relevant compliance obligations.

8.1.2 Achievement criteria for phase 4, stage 1

The organization should ensure that:

a) effective and practical operational control processes established in accordance with specified criteria are in place to address the actions required to meet the EMS and to address risks and opportunities, significant environmental aspects, compliance obligations and environmental objectives;

b) planned changes are controlled and the consequences of unintended changes are reviewed; and

c) outsourced processes are controlled or influenced, and that operational control processes are communicated effectively to suppliers and contractors as necessary.

8.1.3 How to do phase 4, stage 1

Inputs should include:

a) information on significant aspects and associated impacts and causal factors;

b) information of risks and opportunities; and

c) current management practices or processes.

Using the information gathered from the inputs, the organization should:

1) identify the activities related to each significant aspect, and risks and opportunities;

2) identify existing operational control processes or work instructions relating to these significant aspects;

3) identify possible maintenance issues that should be managed within operational control;

4) identify environmental requirements relevant to contractors and suppliers and communicate these with the target audience;

5) identify any designated calibration needs, equipment and processes which might affect operational controls;

6) develop processes (or modify existing ones where appropriate) which address the above issues and factors as identified, with a view to minimizing the actual or potential for environment harm and/or maximizing any benefit;

7) ensure that processes support continual improvement;

NOTE Attention is also drawn to legal compliance.

8) identify the areas, individuals and groups where processes should be applied;

9) assess awareness and training needs to support the introduction of processes;

10) implement processes, and establish checks on their application; and

11) ensure amendments to processes are made as necessary.

The following people should be involved:

i) the EMS implementation team;

ii) others who work for, or on behalf of, the organization; and

iii) those with direct influence over significant aspects and impacts.

8.1.4 Example outputs

The organization should establish operational control processes where necessary to implement the EMS in order to reduce the actual or potential for harm to the environment and/or maximize benefit.

8.2 Phase 4, stage 2: Value chain controls

8.2.1 Introduction

Operational controls in relation to the organization's value chain should be established to address significant environmental aspects identified from a life cycle perspective.

NOTE These aspects include those created when its products and services are designed, developed, used or disposed of, and those arising from any outsourced processes or from the procurement of goods and services within its value chain.

8.2.2 Achievement criteria for phase 4, stage 2

The organization should ensure that:

a) environmental requirements are addressed in the design and development processes for the organization's product(s) or service(s);

b) environmental requirements for the procurement of products and services, as appropriate are established;

c) the environmental requirements have been communicated to external providers (e.g. contractors); and

d) it has provided information about the potential significant environmental impacts associated with its products and services, including their transportation or delivery, use, end-of-life treatment and final disposal, where it is considered necessary.

8.2.3 How to do phase 4, stage 2

Inputs should include information:

a) on significant aspects and associated impacts;

b) from the review of compliance obligations;

c) about the needs and expectations of interested parties;

d) relating to existing processes for design and development, and procurement.

Using the information gathered form the inputs, the organization should:

1) identify any environmental requirements relevant to the organization's product(s) or service(s) and the product(s) and service(s) procured by the organization;

2) implement appropriate controls to ensure that the environmental requirements relevant to the organization's product(s) or service(s) are addressed in the design and development processes;

3) implement appropriate controls in relation to the environmental requirements relevant to the product(s) and service(s) procured by the organization;

4) implement a process for ensuring that environmental requirements are communicated to relevant external providers;

5) consider whether it is necessary to provide information about the potential significant environmental impacts associated with its products and services; and

6) implement a process for the provision of information about the potential significant environmental impacts associated with its products and services where it has been deemed necessary.

The following people should be involved:

i) the EMS implementation team; and

ii) others who work for, or on behalf of, the organization.

8.2.4 Example outputs

The following are example outputs which should be achieved from phase 4, stage 2:

a) design and development processes which address the environmental requirements related to the organization's product(s) or service(s);

b) a procurement process which considers environmental requirements;

c) a process for communicating environmental requirements to external providers; and

d) provision of information on the potential significant environmental impacts associated with its products and services.

8.3 Phase 4, stage 3: Review and test emergency preparedness and response

*COMMENTARY ON **8.3***

It is important to prevent accidents or emergencies to avoid any adverse environmental impacts that might occur. If they do occur, minimizing the impacts becomes paramount. Being well prepared and ensuring that those working for, or on behalf of, the organization know what to do in such circumstances can reduce the impacts on the environment and save the organization clean-up costs, fines, prosecution, and negative publicity.

8.3.1 Achievement criteria for phase 4, stage 3

The organization should ensure that it has:

a) established processes for the preparation and effective response to emergency situations. The processes should ensure action is taken to prevent or mitigate the consequences of these situations;

b) information and training related to emergency preparedness and response is available, as appropriate. This should be provided to relevant parties;

c) periodic testing of emergency processes where practicable; and

d) periodic review of emergency preparedness and response processes, particularly following an emergency situation or test.

8.3.2 How to do phase 4, stage 3

Inputs should include:

a) site and drainage maps from baseline assessment;

b) processes related to emergency preparedness and response;

c) any existing occupational health and safety (OHS) emergency processes; and

d) relevant contact details of, for e.g. fire services, regulators, utilities and local authority.

Using the information gathered from the inputs, the organization should:

1) identify emergency processes already developed and implemented;

2) identify whether any emergency or accident scenarios with major environmental impacts have not yet been covered;

3) develop and implement emergency processes for these scenarios;

4) ensure that training needs and competencies have been assessed for those working for, or on behalf of, the organization involved with emergency processes;

5) establish processes to ensure that emergency preparations are implemented and maintained (e.g. test drills);

6) establish a process for identifying requirements for emergency processes for existing or new operations or areas; and

7) establish a process for recording, reporting and investigating incidents and near misses, to assist in reducing future risks.

The following people should be involved:

i) all those working for, or on behalf of, the organization in areas where accidents or emergency situations might occur; and

ii) all those working for, or on behalf of, the organization involved in the emergency response.

8.3.3 Example outputs

The following are example outputs that should be achieved from phase 4, stage 3:

a) emergency preparedness and response processes;

b) training and guidance for those working for, or on behalf of, the organization on what to do in an emergency;

c) records of any checks and/or emergency drills;

d) records of any incidents and responses; and

e) records of any reviews of emergency preparedness and response processes.

8.4 Phase 4, stage 4: Competence management

8.4.1 Introduction

In order to implement the EMS effectively, the organization should ensure that operational and supporting processes impacting on the environment are carried out by appropriately competent and trained staff. Management should ensure that staff competence and training requirements for environment are periodically reviewed and updated. Evidence of competence and training should be recorded and made accessible to management and others as needed.

NOTE Environmental competence and training may be combined or integrated with other disciplines if practical and appropriate.

8.4.2 Achievement criteria for phase 4, stage 4

The organization should ensure:

a) that competence criteria have been developed for persons under the organization's control who are doing work which can affect its environmental performance and ability to fulfil its compliance obligations;

b) that it has documented information that only competent persons are doing work which can affect the organization's environmental performance and ability to fulfil its compliance obligations;

c) that persons under the organization's control have received appropriate training on the organization's environmental aspects and operation of its EMS;

d) that training needs associated with the organization's environmental aspects and EMS have been determined and that plans for delivery of appropriate training have been developed; and

e) competence and training requirements are periodically reviewed and updated as needed.

8.4.3 How to do phase 4, stage 4

Inputs should include information regarding:

a) previous training carried out as in Clause **5**, Clause **6** and Clause **7**;

b) any existing training processes, training needs analysis forms and record systems;

NOTE These can be from quality or OHS management systems, investors in people, national vocational qualifications, etc.

c) operational control processes; and

d) defined roles and responsibilities.

Using the information gathered from the inputs, the organization should:

1) establish competence criteria;

2) establish a process to evaluate competence against these criteria;

3) establish and conduct a training and competence needs analysis for those working for, or on behalf of, the organization if appropriate;

4) establish a process for recording the details of any training or competence building activity conducted to date, and in the future;

5) develop a plan for additional training, or skills building as identified;

6) prioritize the training starting with those working for, or on behalf of, the organization who have the greatest influence over significant aspects as identified (see Clause **7**);

7) secure resources to undertake training, i.e. trainers, time;

8) initiate training activity in line with the organization's plan; and

9) establish and implement a process for monitoring ongoing competence.

The following people should be involved:

i) training manager; and

ii) the EMS representative (see **8.1**).

8.4.4 Example outputs

The following are example outputs that should be achieved from phase 4, stage 4:

a) competence criteria;

b) method for evaluation of competence;

c) training and development needs analysis process for all relevant personnel; and

d) plans, programmes and records process for training, development, review and refresher training.

8.5 Phase 4, stage 5: Awareness raising

8.5.1 Introduction

Those working for, or on behalf of, the organization should be aware of the influence of their activities on the organization's EMS and environmental performance. They should know what to do and how to do it.

NOTE 1 Those working for, or on behalf of, the organization are better motivated to do things if they understand why they are doing it, and they get feedback on what has been achieved.

NOTE 2 Awareness raising activities have been incorporated throughout this British Standard to support those working for, or on behalf of, the organization. In view of this it is important that the means for communicating information exists and that communications are regular.

8.5.2 Achievement criteria for phase 4, stage 5

The organization should ensure those working for, or on behalf of, the organization understand their roles and responsibilities for:

a) delivering the environmental policy;

b) meeting the organizations compliance obligations;

c) managing the significant environmental aspects and impacts associated with their work;

d) improving environmental performance and how they contribute to the effectiveness of the EMS; and

e) the implications of not conforming with the EMS requirements.

8.5.3 How to do phase 4, stage 5

The organization should:

a) raise awareness and understanding of the EMS for those working for, and on behalf of, the organization;

b) record the details of any awareness raising activity conducted to date, and in the future;

c) schedule regular communications; and

d) identify successful awareness raising methods and styles.

The following people should be involved:

1) everyone within the organization; and

2) external interested parties.

8.5.4 Example outputs

The following are example outputs which should be achieved from phase 4, stage 5:

a) an awareness raising strategy for the organization's EMS; and

b) information to demonstrate the role and benefits of the EMS to internal stakeholders (e.g. an environmental statement).

8.6 Phase 4, stage 6: Establish a communication programme

8.6.1 Introduction

The organization should communicate with stakeholders and interested parties all information on their EMS and environmental performance.

Getting feedback is also very important, so provision should be made for two-way dialogue.

NOTE External communication can provide a good opportunity to promote the organization's achievements and environmental performance and consult with customers and other external interested parties.

8.6.2 Achievement criteria for phase 4, stage 6

The organization should:

a) make provision for communicating information relating to the EMS between various levels and functions within the organization;

b) establish two-way communication with interested parties;

c) determine what information is relevant to the EMS, ensure this information is reliable and communicate effectively; and

d) provide evidence that relevant communication has been conducted, including responses to questions or queries from interested parties on the EMS.

NOTE The communications programme helps to demonstrate continual improvement of the organization's EMS and environmental performance.

8.6.3 How to do phase 4, stage 6

The organization should:

a) review communications established as in Clause **5**, Clause **6** and Clause **7** and identify what information should be communicated to whom, in what level of detail, and how often; and

b) schedule regular communications.

The following people should be involved:

1) everyone within the organization; and

2) external interested parties.

8.6.4 Example outputs

The following are example outputs which should be achieved from phase 4, stage 6:

a) a communication strategy for the organization's EMS and the organization's environmental performance;

b) a process for handling internal and external communications; and

c) information to demonstrate the role and benefits of the EMS to internal and external stakeholders, e.g. an environmental statement.

8.7 Phase 4 stage 7: Manage documented information

8.7.1 Introduction

Documented information is used to help the organization understand and implement the EMS by setting out how the EMS should be operated within the business and by providing evidence of the EMS being consistently implemented as intended.

8.7.2 Achievement criteria

The organization should ensure that:

a) documented information determined by the organization as being necessary for the effectiveness of the environmental management system is included within the EMS;

b) when documented information is created and updated, it contains appropriate identification and description, is in an appropriate format, and is reviewed for approved suitability and adequacy; and

c) documented information is controlled to ensure that it is available and suitable, when and where it is needed, and adequately protected.

8.7.3 How to do phase 4, stage 7

Inputs should include:

a) documented information (procedures, instructions, templates or any other form of documentation developed in previous stages, including electronic files); and

b) any existing organizational document control, or record keeping procedures or approaches which could be of use for the EMS.

Using the information gathered from the inputs, the organization should:

1) identify what documented information already exist within the EMS;

2) identify what the organization needs and any formal standards requirements if appropriate;

3) compare the results of 1) and 2) with existing document control mechanisms or procedures; and

4) develop and introduce the organization's document control system (to identify, document, maintain, store and dispose as appropriate) and ensure that this is applied to any new documentation. The document control system should also enable all personnel to have the correct documents.

The following people should be involved:

i) EMS managers and any other relevant managers/administrators; and

ii) those working for, or on behalf of, the organization who record data and information on the operation of the EMS.

8.7.4 Example outputs

The following are example outputs that should be achieved from phase 4, stage 7:

a) a system for the control of documented information;

b) a records management system;

c) documents which are used to operate and communicate the EMS (e.g. procedures, instructions, templates); and

d) documented information that demonstrate effective implementation of the EMS such as:

1) operational control logs;

2) status of compliance obligations, policy objectives;

3) non-compliances and nonconformities and actions taken to remedy and prevent re-occurrence;

4) internal and external audit findings/reports including independent verification/assurance; and

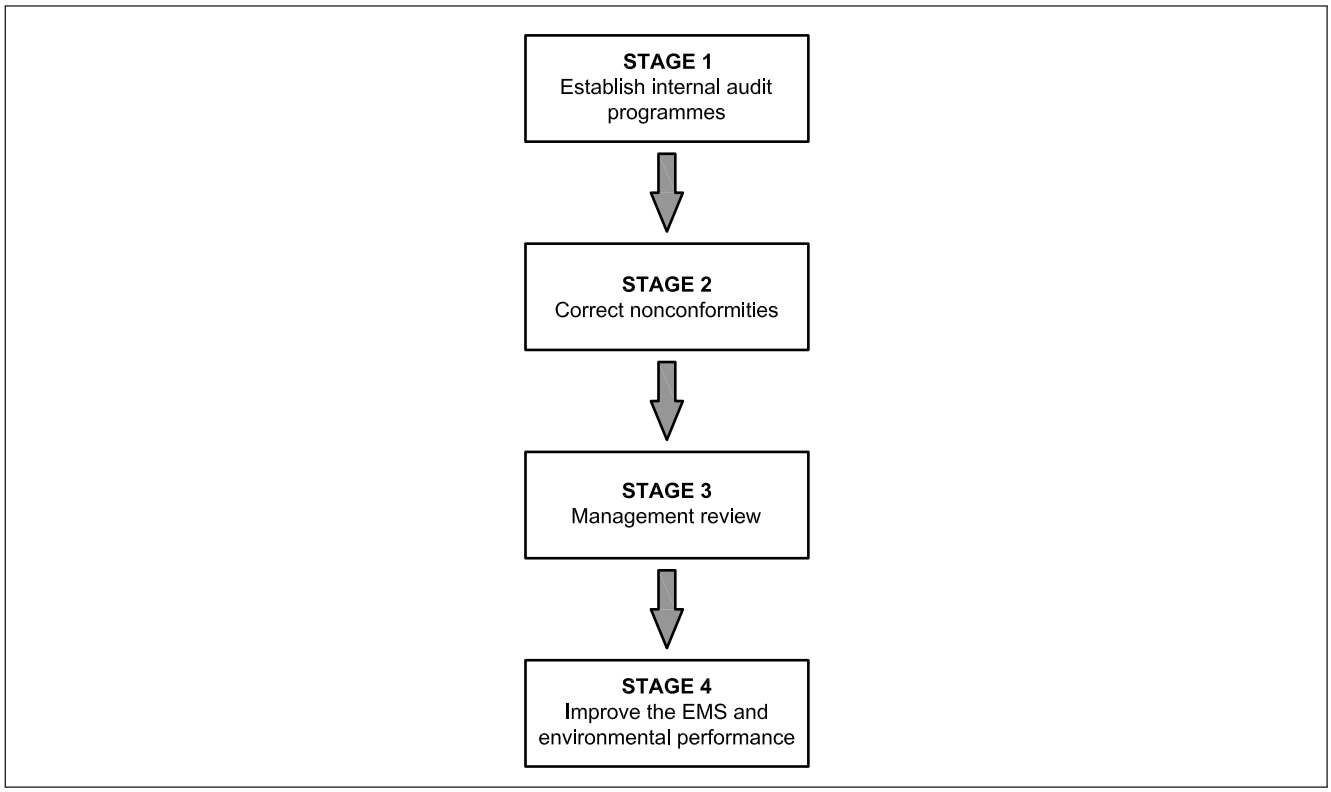
5) management reviews and recommended changes.

9 Phase 5: Check and update the environmental management system

*COMMENTARY ON CLAUSE **9***

*Building on the work carried out in Clause **8** to implement the EMS, phase 5 focuses on the maintenance of the EMS, which includes establishing internal audit programmes, correcting nonconformities, reviewing the EMS's performance and identifying opportunities to improve performance of the EMS and the organization's environmental performance. Completion of phase 5 provides an organization with an EMS confirming to the requirements of BS EN ISO 14001. See Figure 6 for an overview of phase 5.*

Figure 6 **Phase 5: Check and update the environmental management system**



9.1 Phase 5, stage 1: Establish internal audit programmes

*COMMENTARY ON **9.1***

Internal system and performance audits are structured reviews of the various elements of the EMS that give an indication of whether prescribed processes and practices have been implemented and how well they are being adhered to. In addition to this, audits help the organization to gauge how well its EMS is achieving its objectives. The results of the audits provide information for management to make further decisions.

9.1.1 Achievement criteria for phase 5, stage 1

The organization should ensure that:

a) a suitable programme for a comprehensive, periodic internal audit of the EMS exists, and is being followed;

b) the results of audits are communicated to management and interested parties as appropriate; and

c) audits are conducted by independent and competent people.

9.1.2 How to do phase 5, stage 1

Inputs should include information from:

a) compliance evaluation, e.g. non-compliances;

b) actively implemented elements of the EMS, e.g. maintenance records, operational control logs, emergency/incident response checks and reviews, competence reviews; and

c) any previous internal and external audits.

Using the information gathered from the inputs, the organization should:

1) determine what should be audited to provide a comprehensive review of the EMS (e.g. processes, training, documents and records);

2) determine where and when these elements are to be audited (e.g. by site, department, team, product or service and based environmental importance and previous audit findings;

3) determine how all elements and areas are audited (e.g. by process, by department) considering the audit time requirement;

4) develop audit processes and communicate these as necessary;

5) determine whether internal or external auditors conduct the audits;

6) identify competence criteria and auditor training requirements;

7) compile an audit schedule and circulate as necessary;

8) conduct audits and report results; and

9) review results of audits and follow up corrective actions.

The following people should be involved:

1) top management;

2) those working for, or on behalf of, the organization involved in EMS implementation; and

3) any internal or external auditors.

9.1.3 Example outputs

The following are example outputs which should be achieved from phase 5, stage 1:

a) an audit schedule defining the audit scope, timing, and auditors;

b) a defined audit process including competence criteria for auditors;

c) appointed auditors;

d) audit results; and

e) a log of audit findings and actions taken to address them.

9.2 Phase 5, stage 2: Correct nonconformities

9.2.1 Introduction

Where nonconformities with the requirements of the EMS are identified, corrective action should be taken.

NOTE 1 This is a fundamental element of any successful system and is at the heart of continual improvement.

Where the organization, or a third party, identifies non-compliances, the root cause(s) within the environmental management system should be determined and any system nonconformities corrected.

NOTE 2 The term (non) conformance refers to whether a requirement of the EMS is being met (or not). The process used to determine conformity is termed conformity assessment.

NOTE 3 The term (non) compliance refers to whether a compliance obligation is being met (or not). The process used to determine compliance is termed compliance assessment.

Nonconformities can be identified in a number of ways, and reporting these should not be restricted to the audit process.

9.2.2 Achievement criteria for phase 5, stage 2

The organization should ensure:

a) that responsibilities and processes have been defined for dealing with nonconformities identified, undertaking appropriate action to:

   1) control and correct the identified nonconformities;

   2) determine their cause(s) and whether similar nonconformities exist;

   3) implement corrective action;

   4) verify the effectiveness of such corrective actions; and

b) that where nonconformities are identified, suitable corrective actions are agreed, with responsibilities and appropriate timescales and any resulting changes made to the EMS documented.

9.2.3 How to do phase 5, stage 2

Inputs should include:

a) details of EMS processes and requirements (see Clause **6**, Clause **7** and Clause **8**);

b) nonconformities and corrective actions agreed through audits (see **9.2**);

c) details of communication and feedback mechanisms (see **8.3**);

d) document control and records processes (see **8.4**);

e) details of management structures and responsibilities (see **8.1**), and reviews (see **9.3**); and

f) details of environmental management programmes (see **7.5**).

Using the information gathered from the inputs, the organization should:

1) develop a process for communicating nonconformities that have been identified;

2) define processes for the:

   i) receipt and recording of identified nonconformities; and

   ii) development and implementation of corrective actions (defining responsibilities and timescales);

3) ensure that processes developed allow for quick and appropriate response to nonconformities that have been identified;

4) communicate information regarding agreed corrective actions to relevant parties quickly and often; and

5) review nonconformities and agreed corrective actions for completion against target timescales and also for effectiveness.

9.2.4 Example outputs

The following are example outputs which should be achieved from phase 5, stage 2:

a) non-conformance identification;

b) an established reporting and handling process;

c) corrective action reports (including plans, responsibilities and target timescales);

d) communications of responses to nonconformities identified; and

e) follow-up reports on effectiveness and timeliness of actions.

9.3 Phase 5, stage 3: Management review

*COMMENTARY ON **9.3***

Management reviews provide top management with a structured opportunity for reviewing the performance of the EMS, and its continuing suitability, adequacy and effectiveness. It allows management to address the need for changes to central elements of the EMS such as policy, objectives in light of experience and changing circumstances.

9.3.1 Achievement criteria for phase 5, stage 3

The organization should ensure:

a) that management reviews assess the continuing suitability, adequacy and effectiveness of the EMS by considering:

   1) the status of actions from previous reviews;

   2) changes in external and internal issues, needs and expectations of interested parties, significant environmental aspects and risks and opportunities;

   3) the extent of achievement of environmental objectives;

   4) the organization's environmental performance, including:

      i) nonconformities and corrective action;

      ii) results of monitoring and measurement activities;

iii) fulfilment of compliance obligations;

iv) audit results;

5) adequacy of resources;

6) relevant communications;

7) opportunities for continual improvement; and

b) that any necessary actions or changes have been identified, implemented or planned.

9.3.2 How to do phase 5, stage 3

Inputs should include:

a) feedback and communications from interested parties (see **8.3**);

b) inputs from other forums and groups established within the EMS;

c) EPE information (see **7.4**);

d) audit results (see **9.2**);

e) details of corrective and preventative actions planned and taken (see **9.3**); and

f) policy, objectives, environmental management programmes, aspect significance assessment.

Using the information gathered from the inputs, the organization should:

1) identify the required frequency of environmental management reviews;

NOTE This might be determined by existing structures for reviews and/or meetings.

2) identify who, in addition to top management, should be involved in the reviews;

3) determine what should be covered and then draft an agenda, ensuring it includes a review of the organization's environmental policy;

4) develop and communicate the schedule and agenda(s) for reviews to all interested parties;

5) determine what information is required by attendees for the review (e.g. audit reports, EPE information) and notify providers;

6) hold reviews to schedule, actions should be agreed, assigned, and allocated target timescales, with follow up on previous agreed actions; and

7) circulate minutes of reviews, and keep on record.

Key managers should be involved.

9.3.3 Example outputs

The following are example outputs which should be achieved from phase 5, stage 3:

a) a defined process for management reviews including:

1) review information requirements;

2) a management review schedule;

3) records of review meetings with actions and any supporting information; and

4) management review reports including a list of attendees.

9.4 Phase 5, stage 4: Improve the EMS and environmental performance

9.4.1 Introduction

Improving environmental performance should be an aim of the organization. The EMS should be developed to support that aim.

NOTE The purpose of system improvement is focused on better support and control of the organization's environmental performance.

9.4.2 Achievement criteria for phase 5, stage 4

The organization should ensure:

a) that opportunities for improvement have been determined and the actions needed to achieve the intended outcomes of the EMS have been implemented;

b) that EMS improvement actions are agreed, responsibilities and realistic timescales are allocated, and that provision for the verification of effective completion has been made; and

c) continual improvement of the EMS for the purpose of enhancing environmental performance.

9.4.3 How to do phase 5, stage 4

Inputs should include:

a) information derived from EPIs;

b) feedback and communications from interested parties;

c) tests and drills, e.g. for equipment, operational controls, emergency response;

d) staff competence and training/development reviews;

e) results of regulatory compliance evaluation;

f) audit findings/reports including any EMS nonconformities; and

g) management review findings/reports.

Using the information gathered from the inputs, the organization should:

1) analyse and assess EMS related EPI information;

2) review feedback and communications from interested parties (internally and externally);

3) review audit findings, results of regulatory compliance evaluation, and identified non-conformance tests and drills, and general observations;

4) regularly review all elements of the EMS for suitability, adequacy and effectiveness;

5) provide relevant training and skills building support for all those working for, or on behalf of, the organization on an ongoing basis;

6) provide necessary resources and equipment to facilitate the effective operation of the EMS;

7) take action quickly to investigate and remedy non-conforming situations;

8) take proactive approaches to continually identify, develop and implement improvement initiatives; and

9) review suitability and effectiveness of specific actions and initiatives.

9.4.4 Example outputs

The following are example outputs which should be achieved from phase 5, stage 4:

a) structured plans for corrective and proactive initiatives; and

b) evidence of system improvements attributable to specific initiatives.

Annex A (informative) The EMAS Regulation

*COMMENTARY ON **ANNEX A***

The EMAS Regulation [1] builds on the requirements of BS EN ISO 14001.

This annex provides guidance for those organizations seeking to extend their EMS in order to comply with the requirements of the EMAS Regulation [1]. Organizations already operating an EMS in line with BS EN ISO 14001 meet the management system requirements (Annex IIA) of the Regulation, but also need to address those additional elements covered in Annex IIB. Additional requirements within the regulation might affect outputs and elements of that system. The EMAS Regulation [1] is revised periodically, particularly to take account of changes to BS EN ISO 14001. Therefore users are advised to ensure that they have the current version of the regulation.

Annex A is intended to be used in conjunction with:

a) guidance available from the UK EMAS competent body, the Institute of Environmental Management and Assessment (IEMA) [2)];

b) guidance available from EMAS verifiers [3)]; and

c) EMAS Regulation [1] and associated guidance, including the sector guidance notes if applicable [4)].

A.1 Review of baseline assessment

A.1.1 Introduction

The EMAS Regulation [1] specifies that an organization, unless it is certified to BS EN ISO 14001, undergoes an initial environmental review to ensure that it meets the EMAS requirements. To fulfil this requirement, a review of the organization's baseline assessment is conducted. The purpose of this review is to identify any issues that need to be addressed to ensure the EMS meets the requirements of the EMAS Regulation [1].

A.1.2 Achievement criteria for review of baseline assessment

The organization provides evidence that:

a) a review of the baseline which considers the requirements of EMAS has taken place; and

b) an assessment has been made of suppliers and contractors regarding their impact on the organization's environmental performance.

A.1.3 How to do the review of baseline assessment

The following people are involved:

a) those working for, or on behalf of, the organization involved in EMS implementation; and

b) any other key information providers.

The organization:

1) carries out a gap analysis to identify the EMAS requirements under the initial environmental review that might not be covered by the organization's EMS;

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2) www.iema.net. Last accessed 22nd November 2016.
3) www.ukas.com. Last accessed 22nd November 2016.
4) http://ec.europa.eu/environment/emas/index_en.htm. Last accessed 22nd November 2016.

2) ensures that the organization's significance assessment methodology takes into account the additional EMAS requirements; and

3) identifies the key suppliers, contractors and subcontractors that have an influence on the organization's environmental performance and ensure that they have been included in the scope of the baseline assessment.

Inputs include:

i) participation of the EMS implementation team, those working for, or on behalf of, the organization, and those responsible for the original baseline assessment;

ii) existing EMS baseline assessment information, documentation and records;

iii) significance assessment methodology; and

iv) guidance on the EMAS Regulation [1].

A.1.4 Example outputs

The following are example outputs which are achieved:

a) gap analysis between the organization's baseline assessment and the initial review of the requirements of the EMAS Regulation [1]; and

b) records of supplier and contractor assessment.

A.2 Review of implementation

A.2.1 Introduction

Undertaking a review of phases 1-5 of this British Standard and identifying any gaps ensures that the additional EMAS requirements have been addressed. In addition, the baseline assessment might have identified new actions to bring the existing EMS in line with EMAS requirements.

A.2.2 Achievement criteria for review of implementation

The organization provides evidence:

a) that the gap analysis has taken place;

b) that issues arising from the gap analysis have been addressed;

c) of involvement of those working for, or on behalf of, the organization;

d) of open dialogue with interested parties;

e) of communication with suppliers and contractors of legal compliance; and

f) of legal compliance.

A.2.3 How to do the review of implementation

Those working for, or on behalf of, the organization involved in EMS implementation are involved.

An organization:

a) carries out a review using the planning and implementation phases of this British Standard;

b) identifies actions to meet EMAS requirements;

c) ensures that suppliers and contractors have been made aware of the organization's environmental policy and are operating in line with it;

d) ensures that communications are in place with the public and other interested parties;

e) checks for evidence of involvement of those working for, or on behalf of, the organization, in the process of implementing the EMS; and

f) checks for evidence of continual improvement of environmental performance.

Inputs include:

1) an action plan developed from the results of the review of the baseline assessments;

2) environmental policy;

3) environmental management programmes from EMS; and

4) significance assessment criteria.

A.2.4 Example outputs

An example output is a plan which identifies:

a) timescales;

b) responsibilities;

c) required actions and implementation plans;

d) a list of objectives; and/or

e) revised environmental policy and environmental management programmes.

A.3 Developing reportable information

A.3.1 Introduction

Since the public might view the EMAS environmental statement, it is important that the data published in the statement present an accurate picture of the organization's environmental performance.

An EMAS statement or other environmental report is intended to show how the organization has performed against its objectives in relation to its significant environmental aspects and associated impacts. It is therefore necessary to define the environmental data to be collected and ensure that they are comparable over time. This in turn requires data collection, transfer, handling, storage, and communication process and in the case of EMAS this is backed up by validation by the verifier.

A.3.2 Achievement criteria for developing reportable information

The organization provides evidence that:

a) data are chosen appropriately to represent the objectives (especially those that might have been established in Clause **6**);

b) processes for data collection, recording and storing have been developed; and

c) the data gives an accurate measurement of the organization's environmental performance.

A.3.3 How to do developing reportable information

Those working for, or on behalf of, the organization involved in EMS implementation are involved.

The organization:

a) develops new data if existing information does not reflect the newly identified significant aspects;

b) for EMAS statements, uses the baseline assessment checklist to check if all data meets EMAS requirements;

c) develops processes for collecting, recording and storing the data;

d) assigns responsibilities for individuals to collect and record data;

e) ensures that data are presented in clear and appropriate units of measurement; and

f) establishes an internal verification process for ensuring data reliability and accuracy.

Inputs include:

1) if applicable, the requirements for the EMAS statement (Annex IV of the EMAS Regulation [1]);

2) list of EPIs developed in previous phases;

3) action plan developed in Clause **7**;

4) objectives; and

5) the environmental management programme.

A.3.4 Example outputs

The following are example outputs which are achieved:

a) comprehensive list of data that are used in the environmental statement; and

b) criteria for data collection and analysis.

A.4 Auditing for EMAS

A.4.1 Introduction

A new or existing audit process is reviewed to ensure that it meets the requirements stated in the EMAS Regulation [1] (Annex III). This review helps to identify the additional requirements and areas of the audit process that need to be modified.

A.4.2 Achievement criteria for auditing for EMAS

The organization provides evidence that:

a) a review of the audit process has taken place;

b) the audit programme defines the audit cycle and frequency of assessment of data for the EPIs; and

c) spot checking of compliance is included in the audit to test the effectiveness of the EMS.

A.4.3 How to audit for EMAS

Those working for, or on behalf of, the organization involved in EMS implementation are involved.

The organization:

a) carries out a review to identify areas that are not fully covered in the organization's EMS internal audit process;

b) defines the audit cycle, the frequency of the audit process and the audit scope in the audit programme;

c) ensures that the audit process involves assessment of the data collected for the EPIs; and

d) ensures that the audit involves spot checking of compliance obligations and with the stated objectives.

Inputs include:

1) existing audit records, processes and programmes; and
2) involvement of internal auditors.

A.4.4 Example outputs

The following are example outputs:

a) a defined audit programme (audit cycle, frequency, scope, responsibilities and timescales);
b) processes for assessing data;
c) identification of resources for training and conducting internal audits; and
d) internal audit process implemented and audits carried out.

A.5 The EMAS environmental statement

A.5.1 Introduction

Under the EMAS Regulation [1], an organization that is seeking EMAS registration is required to produce an environmental statement that informs the public and other interested parties of the organization's products, services and activities, its EMS and its environmental performance over a specified period. This statement is validated by an accredited EMAS verifier.

A.5.2 Achievement criteria for the EMAS environmental statement

The organization provides evidence that a draft environmental statement ready for validation meets the requirements of the EMAS Regulation [1].

A.5.3 How to do the EMAS environmental statement

Those working for, or on behalf of, the organization involved in EMS implementation are involved.

The organization:

a) uses Annex IV of the EMAS Regulation [1] to identify the elements that the organization should cover in the environmental statement;
b) ensures that the performance data used in the environmental statement provide an accurate picture of the organization's environmental performance and is accessible for auditors to verify; and
c) ensures that all the applicable indicators as required in Annex IV are covered in the environment statement, or else include a justification for their omission.

Inputs include:

1) list of objectives, environmental management programmes and indicators as required in Annex IV;
2) environmental policy;
3) description of organization's EMS;
4) data collected; and
5) sector guidance notes if applicable.

A.5.4 Example outputs

The following are example outputs which are achieved:

a) environmental statement; and

b) an indication of the organization's progress towards environmental performance.

Annex B (informative) Correspondence between this British Standard and BS EN ISO 14001:2015

Table B.1 identifies correspondences between the achievement criteria used at each stage of this British Standard and BS EN ISO 14001.

NOTE A direct link between the clauses of the two standards has only been established where the two clauses are largely congruent in requirements. Beyond that, many further detailed cross connections of minor relevance exist, which could not be shown here.

Table B.1 **Correspondence between this British Standard and BS EN ISO 14001:2015** *(1 of 3)*

BS EN ISO 14001:2015 Clause no.	BS EN ISO 14001:2015 Clause title	Phase/stage	Phase title
4	Context of the organization (title only)	–	–
4.1	Understanding the organization and its context	Phase 1, stage 2	Establish the organization's context
4.2	Understanding the needs and expectations of interested parties	Phase 1, stage 2	Establish the organization's context
4.3	Determining the scope of the EMS	Phase 1, stage 7	Plan for the establishment and improvement of the EMS
4.4	EMS	Phase 1, stage 7	Plan for the establishment and improvement of the EMS
5	Leadership (title only)	–	–
5.1	Leadership and commitment	Phase 1, stage 1	Top management commitment and leadership
		Phase 1, stage 7	Plan for the establishment and improvement of the EMS
5.2	Environmental policy	Phase 1, stage 4	Process for developing an environmental policy
		Phase 3, stage 4	Finalize the environmental policy
5.3	Organizational roles, responsibilities and authorities	Phase 1, stage 1	Top management commitment and leadership
		Phase 3, stage 1	Finalize roles and responsibilities
6	Planning (title only)	–	–

Table B.1 **Correspondence between this British Standard and BS EN ISO 14001:2015** *(2 of 3)*

BS EN ISO 14001:2015 Clause no.	BS EN ISO 14001:2015 Clause title	Phase/stage	Phase title
6.1	Actions to address risks and opportunities (title only)	–	–
6.1.1	General	Phase 1, stage 3	Undertake a baseline assessment
		Phase 2, stage 3	Manage compliance
		Phase 3, stage 3	Identify risks and opportunities
6.1.2	Environmental aspects	Phase 1, stage 3	Undertake a baseline assessment
		Phase 3, stage 2	Determine significant environmental aspects
6.1.3	Compliance obligations	Phase 1, stage 3	Undertake a baseline assessment
		Phase 2, stage 1	Identify relevant compliance obligations
6.1.4	Planning action	Phase 2, stage 3	Manage compliance
		Phase 3, stage 2	Determine significant environmental aspects
		Phase 3, stage 3	Identify risks and opportunities
6.2	Environmental objectives and planning to achieve them (title only)	–	–
6.2.1	Environmental objectives	Phase 3, stage 5	Develop environmental objectives
6.2.2	Planning actions to achieve environmental objectives	Phase 3, stage 6	Plan for achievement of environmental objectives
7	Support (title only)	–	–
7.1	Resources	Phase 1, stage 1	Top management commitment and leadership
7.2	Competence	Phase 1, stage 5	Develop awareness and competence
		Phase 2, stage 3	Manage compliance
		Phase 4, stage 4	Competence management
7.3	Awareness	Phase 1, stage 5	Develop awareness and competence
		Phase 4, stage 5	Awareness raising
7.4	Communication (title only)	–	–
7.4.1	General	Phase 4, stage 6	Establish a communication programme
7.4.2	Internal communication	Phase 4, stage 6	Establish a communication programme

Table B.1 **Correspondence between this British Standard and BS EN ISO 14001:2015** *(3 of 3)*

BS EN ISO 14001:2015 Clause no.	BS EN ISO 14001:2015 Clause title	Phase/stage	Phase title
7.4.3	External communication	Phase 4, stage 6	Establish a communication programme
7.5	Documented information (title only)	–	–
7.5.1	General	Phase 4, stage 7	Manage documented information
7.5.2	Creating and updating	Phase 4, stage 7	Manage documented information
7.5.3	Control of documented information	Phase 4, stage 7	Manage documented information
8	Operation (title only)	–	–
8.1	Operational planning and control	Phase 4, stage 1	Planning and controlling operational processes
		Phase 4, stage 2	Value chain controls
8.2	Emergency preparedness and response	Phase 4, stage 3	Review and test emergency preparedness and response
9	Performance evaluation (title only)	–	–
9.1	Monitoring, measurement, analysis and evaluation (title only)	–	–
9.1.1	General	Phase 1, stage 6	Determine data requirements
		Phase 3, stage 7	Monitor, measure, analyse and evaluate environmental performance
9.1.2	Evaluation of compliance	Phase 2, stage 2	Evaluate compliance
9.2	Internal audit (title only)	–	–
9.2.1	General	Phase 5, stage 1	Establish internal audit programmes
9.2.2	Internal audit programme	Phase 5, stage 1	Establish internal audit programmes
9.3	Management review	Phase 5, stage 3	Management review
10	Improvement (title only)	–	–
10.1	General	Phase 5, stage 4	Improve the EMS and environmental performance
10.2	Nonconformities and corrective action	Phase 5, stage 2	Correct nonconformities
10.3	Continual improvement	Phase 1, stage 7	Plan for the establishment and improvement of the EMS
		Phase 5, stage 4	Improve the EMS and environmental performance

Bibliography

Standards publications

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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