EMS Manual

ISO 14001:2015

Contents

4 About Our Organization

4.1 Organizational Context

Your organization is committed to defining our position in the marketplace and understanding how relevant factors arising from legal, political, economic, social, and technological issues influence our strategic direction and our organizational context.

Your organization identifies, analyzes, monitors, and reviews factors that may affect our ability to satisfy our stakeholders, as well as; factors that may adversely affect the stability and integrity of our processes and our management system.

To ensure that our organizational context is aligned with our strategy whilst taking account of relevant, influential, internal, and external factors; your organization collates and analyzes information pertinent to those influential factors to identify issues that have the potential to be affected by our activities, products, and services.

Figure 2: Context Discovery Process

Similarly, we identify internal and external issues that could be capable of affecting our organization's ability to deliver products, services, or activities. Broadly, these issues are defined as:

Internal issues – conditions related to our organizational activities, products, services, strategic direction, culture, people, knowledge, processes and systems. Using _SWOT analysis_ provides our organization with framework for reviewing and evaluating our strategies, and the position and direction of our organization, business propositions and other ideas.

External issues – conditions related to cultural, social, political, legal, regulatory, financial, technological, economic, competition at local, national or international levels. Using _PESTLE analysis_ provides our organization with framework for measuring our market and growth potential.

Environmental issues – conditions related to climate, air quality, water quality, land use, natural resource availability or biodiversity that can either affect our organization's purpose, or be affected by the impacts of our environmental aspects, which your organization must manage.

The output from this activity is evident as an input to the consideration of risks and opportunities and the actions that we take to address them. For more information about our risk and opportunity management framework, refer to Section 6.1.

Although we acknowledge that ISO 14001 does not require our organizational context to be maintained as documented information, we maintain and retain, in addition to this document, the following documented information that describes our organizational context:

1. Analysis of business plans, strategies, and statutory and regulatory commitments;
2. Analysis of technology and competitors;
3. Technical reports from experts and consultants;
4. SWOT analysis reports or schedules for internal issues;
5. PESTLE analysis reports or schedules for external issues;
6. Minutes of meetings (management and design review minutes), process maps and reports, etc.

SWOT analysis provides our organization with a framework for reviewing and evaluating our strategies and the position and direction of our organization, business propositions, and other ideas.

Similarly, PESTLE analysis provides our organization with a framework for measuring our market and growth potential according to external political, economic, social, technological, legal and environmental factors.

4.2 Relevant Interested Parties

Your organization recognizes that we have a unique set of interested parties whose needs and expectations change and develop over time and that only a limited set of their respective needs and expectations apply to our operations or our EMS management system. Such needs and expectations broadly include those shown in the table below.

Interested Party	Requirements	EMS Critical	Compliance Obligation
Customers	Supply of goods and services to specification	Yes	Contractual
Employees	Continued employment	No	Contractual
	Safe working environment	Yes	Legal
Regulatory	Compliance with the law and regulatory reporting	Yes	Legal
Community	Social responsibility	Yes	Voluntary

To ensure that our products and processes continue to meet all relevant requirements, we identify and assess the potential impact of any relevant needs and expectations that may be elicited from interested parties.

Where appropriate, to ensure that our processes are aligned to deliver the requirements of our interested parties, we convert relevant needs and expectations into requirements that become inputs to our EMS management system and to our product and service designs.

Prioritized relevant needs or expectations are converted into requirements which become inputs to EMS management system planning, and product, or service designs. The outputs from this process are typically used to inform the following sections and processes of this document:
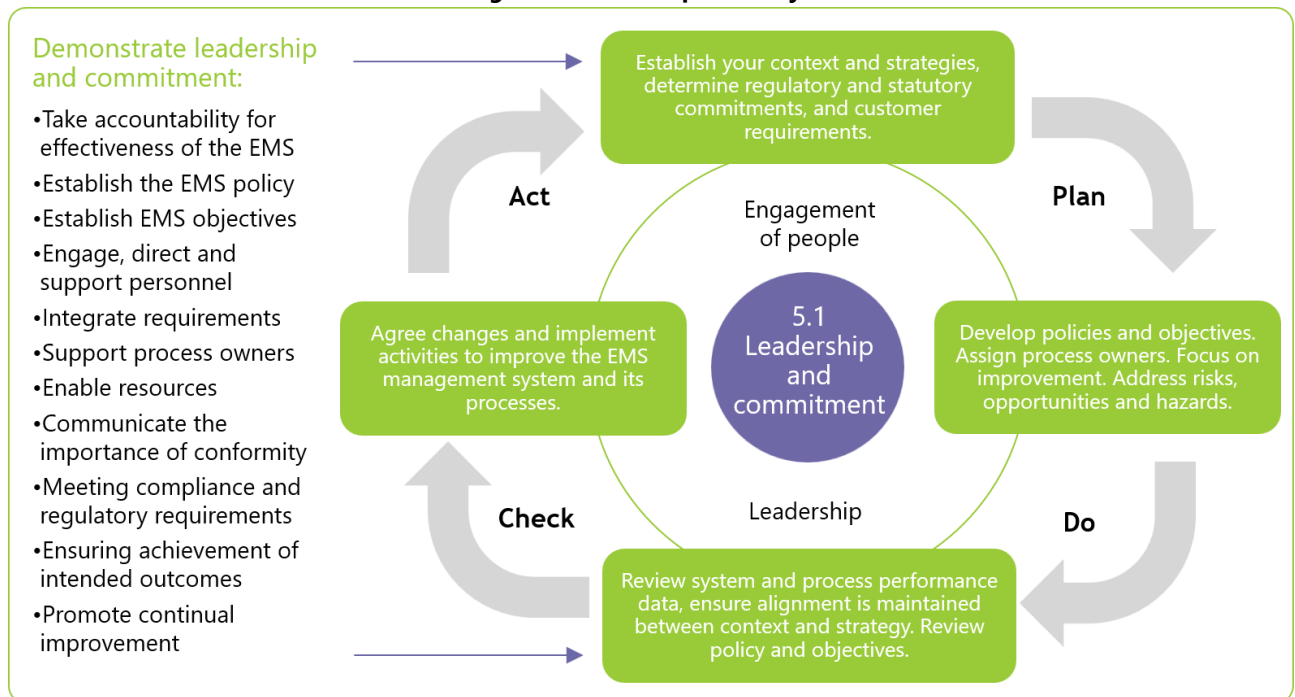
5   Leadership

5.1 Leadership & Commitment

Your organization's leadership is responsible for implementing our EMS management system, including the development and deployment of our EMS policies, subsequent objectives and targets, and product or project-specific plans which are stakeholder and environmentally-focused.

Top management provides accountability and governance to all activities related to the lifecycle processes, including defining the strategic direction, responsibility, authority, and communication to assure safe and effective performance.

Figure 5: Leadership PDCA Cycle

Demonstrate leadership and commitment:
- Take accountability for effectiveness of the EMS
- Establish the EMS policy
- Establish EMS objectives
- Engage, direct and support personnel
- Integrate requirements
- Support process owners
- Enable resources
- Communicate the importance of conformity
- Meeting compliance and regulatory requirements
- Ensuring achievement of intended outcomes
- Promote continual improvement

Establish your context and strategies, determine regulatory and statutory commitments, and customer requirements.

Develop policies and objectives. Assign process owners. Focus on improvement. Address risks, opportunities and hazards.

Review system and process performance data, ensure alignment is maintained between context and strategy. Review policy and objectives.

Agree changes and implement activities to improve the EMS management system and its processes.

Act — **Plan** — **Do** — **Check**

Engagement of people

5.1 Leadership and commitment

Leadership

Top management have appointed the EMS Manager to ensure that the necessary financial, technological and organizational resources, including the services of specialists and competent EMS Coordinators and advisors are available to implement monitor, maintain and report upon the status of the EMS management system.

Top management has delegated the responsibility and authority for managing our health safety, and quality-related processes used to deliver stakeholder satisfaction are implemented and maintained by the EMS Manager.

Cross-functional committees that comprise various organizational levels, functions and work areas are established to support the active management of our integrated system. The Cross-functional committees oversee the implementation of improvement plans. The Cross-functional committees report to Top management and the EMS Manager.

Governance activities include the systematic verification of EMS management system effectiveness by undertaking internal audits and, analyzing performance data, reviewing trends and KPIs. Regular reviews and reporting ensure that our EMS management system is effective and can react to emerging issues.

considered when determining the significance of each impact. This process is controlled and communicated using the _Environmental Aspects Procedure_.
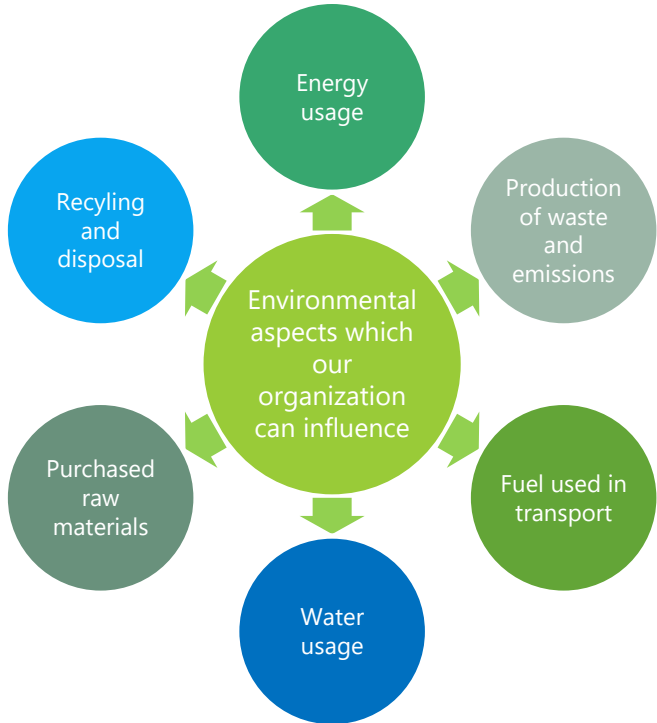
The subsequent output from this identification process takes account of the severity of pertinent environmental aspects and our organization's ability to influence them, in order to determine key issues and requirements that pose adverse or beneficial effects in a prioritized way to:

1. Ensure that the EMS can achieve its intended outcomes;
2. Prevent or reduce undesired effects;
3. Achieve continual improvement.

Environmental aspects that we address include:

1. Those with significant environmental impacts;
2. Those that affect compliance with our obligations;
3. Those which are priority issues for the organization (e.g. which affect strategy, policy or objectives).

Figure 7: Significant Environmental Aspects

Environmental aspects which pose a significant impact are subject to risk management, corrective action, and monitoring and measurement as appropriate. The EMS is structured to identify and manage these aspects in order to control or limit potential impacts and risks that may affect our organization or EMS conformity.

The significance of our organization's aspects is reviewed bi-annually, including proposals for new processes, services or developments and environmental aspects arising are also considered and assessed for significance by the EMS Manager. New aspects are added to the _Environmental Aspects Register_ as necessary and operational control is altered accordingly.

Supporting documentation:

Doc No.	Title & Description
P0612-01	Environmental Aspects Procedure

6.1.3 Legal & Compliance Obligations

Top management and the EMS Manager review all relevant occupational environmental related legal requirements, compliance obligations, regulations and Approved Codes of Practice (ACoPs) using http://www.legislation.gov.uk.

All relevant legislation and other requirements applicable to your organization's environmental aspects are compiled into a _Compliance Obligations Register_. The introduction of new legislation and changes to current legislation is principally monitored through following sources of information:
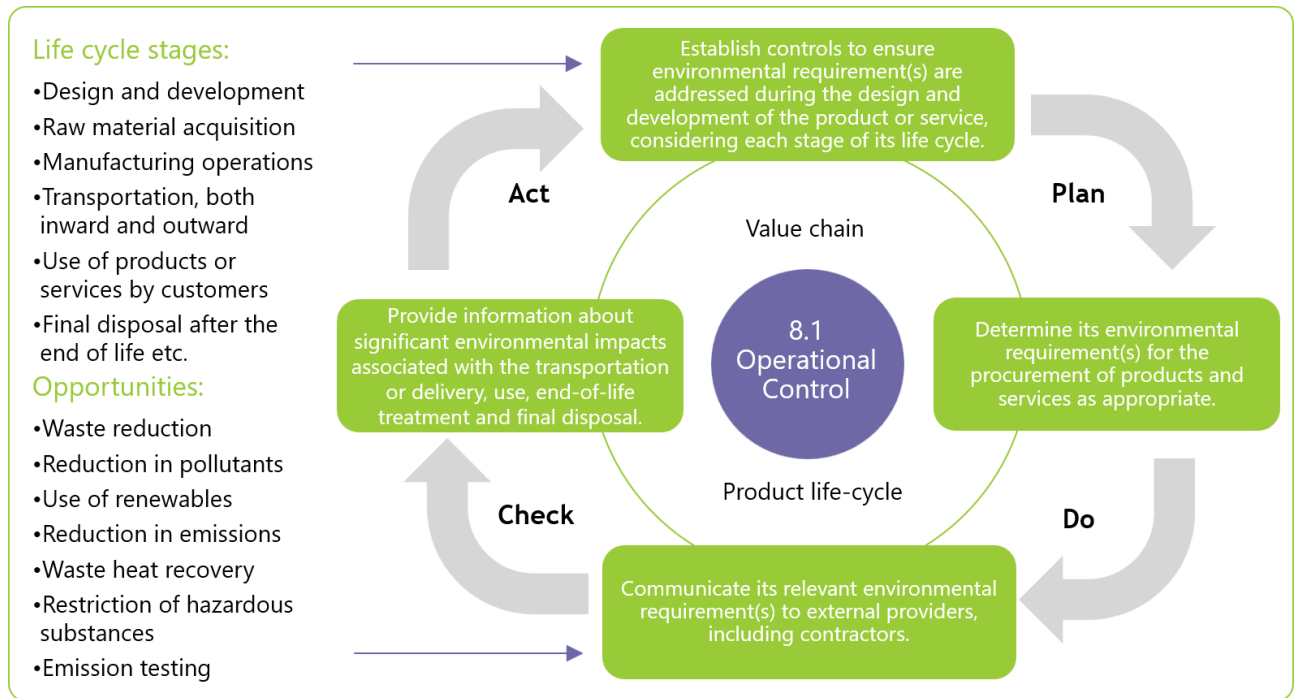
1. NETRegs service www.netregs.gov.uk

8   Operations

8.1 Operational Planning & Control

Your organization undertakes analysis to map out the high-level life cycle of our organization's products and services using the *Life Cycle Analysis Template*. By identifying and documenting information about the relevant environmental aspects, we can prevent or mitigate adverse environmental impacts during each life cycle phase.

Figure 8: Life-cycle Approach

Life cycle stages:
- Design and development
- Raw material acquisition
- Manufacturing operations
- Transportation, both inward and outward
- Use of products or services by customers
- Final disposal after the end of life etc.

Opportunities:
- Waste reduction
- Reduction in pollutants
- Use of renewables
- Reduction in emissions
- Waste heat recovery
- Restriction of hazardous substances
- Emission testing

Act — Establish controls to ensure environmental requirement(s) are addressed during the design and development of the product or service, considering each stage of its life cycle.

Plan — Determine its environmental requirement(s) for the procurement of products and services as appropriate.

Do — Communicate its relevant environmental requirement(s) to external providers, including contractors.

Check — Provide information about significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal.

Value chain — 8.1 Operational Control — Product life-cycle

Your organization considers the environmental requirements and aspects that can be controlled and influenced during each phase of the product life-cycle. Where applicable, a life cycle approach is taken within our operational controls so that the environmental impacts at each stage of the life-cycle are identified, assessed, and controlled, or influenced.

By identifying and documenting information about the relevant environmental aspects (6.1.2) and the relevant legal and compliance requirements (6.1.3), we are able to prevent or mitigate adverse impacts during each life-cycle phase:

1. Design phase;
2. Procurement phase;
3. Manufacturing phase;
4. Packaging, transport and delivery phase;
5. Intended use;
6. End of life treatment and final disposal.

The relevant environmental management operational procedures are also applicable to outsourced processes including those undertaken by contractors, the level and extent of control or influence is defined. The controls

3. They retain documented information such as audit checklists and audit reports as evidence of the effective implementation of the audit programme in respect of each audit.

Internal auditors are selected to ensure objectivity and impartiality of the audit process. This is achieved by selecting a team of auditors from cross-functional departments who have received the appropriate training in the auditing process.

The audit is conducted according to the _Internal Audit Procedure_ to ensure that timely corrective actions are implemented to correct any deficiencies found. The results of the audits are recorded and submitted to the personnel having responsibility in the area audited. The results of the internal quality audits are summarized for discussion at management reviews.

Supporting documentation:

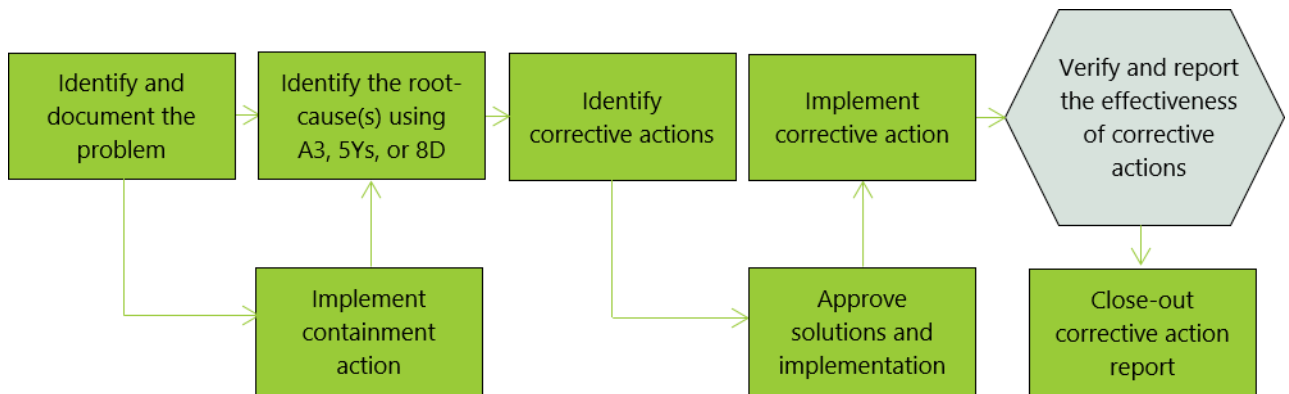| Doc No.	Title & Description
P0920-01	Internal Auditing Procedure

9.3 Management Review

9.3.1 General

To ensure the continuing suitability, adequacy and effectiveness of our EMS management system in meeting our organization's strategies, Top management conducts formal management review meetings at planned internals. The requirements for conducting a management review are defined and communicated using the _Management Reviews Procedure_.

Each management review meeting may require multiple subjects and departmental input and rely upon multiple metrics and data analysis. When more frequent meetings are conducted, the meeting agenda is reduced to focus on stakeholder -critical issues, with the full review cycle of the EMS occurring annually.

Agenda Item (9.3.2)	Impact on Customer or Business	Frequency	Type of Meeting
Previous actions	High	Monthly	Functional review
Changes to the EMS	Low	Six-monthly	EMS review
Significant aspects	Very High	Weekly/Daily	EMS review
Performance of the EMS	High	Monthly	Functional review
Stakeholder satisfaction	High	Monthly	Functional review
Compliance obligations	Medium	Quarterly	Planning review
EMS objectives	Low	Six-monthly	Functional review
Product/Process conformity	Very High	Weekly/Daily	Quality review
NCR/CAR/Incident root-causes	Medium	Quarterly	Planning review
Monitoring and measurement results	Very High	Weekly/Daily	EMS review
Internal audit results	Low	Six-monthly	EMS review
Consultation and participation	Medium	Quarterly	Planning review
External providers	Medium	Quarterly	Planning review
Resources required	Low	Six-monthly	EMS review
Actions to address risk	High	Monthly	Functional review

In response to changing or special conditions and events, the frequency of management review activities will increase.

Figure 9: Corrective Action Process

Corrective Action Reports are issued for repetitive, ongoing problems during our production processes and issues having a major impact on the stakeholder and management system noncompliances. Other nonconformities outside these criteria are controlled through the remedial action system. All corrective action reports raised are categorized:

High - A problem that results in major/significant impact or is a repetitive problem. Requires a root-cause analysis, corrective and preventative action(s). The eight disciplines (8D) are commonly used to discover and eliminate multiple and complex root-causes.
Medium - A problem that results in moderate impact. Requires containment and root-cause analysis, and corrective actions when appropriate. Use 5-Whys for troubleshooting, quality improvement, and problem-solving.
Low - A low-level problem typically closed to 5-whys or 8D, requires cause analysis, containment and trending. Use the A3 method when the issue is small and the solution is obvious, a formal analysis is not required.
OFI - Improvement opportunity that does not need correction but rather, can be enhanced, improved, or made more efficient. Does not require problem-solving.

Based upon the information captured from the _Corrective Action Report_, the _Corrective Action Tracker_ prompts the user to use 1 of 3 increasingly detailed problem-solving methods (e.g. A3, 5-whys, or 8D), depending on severity or complexity of the nonconformity. This ensures the appropriate tools and techniques are applied for problem-solving and the formulation of corrective action.

Where applicable, any corrective action taken and controls implemented to eliminate the cause of nonconformity is applied to other similar processes and is controlled by the EMS Manager in liaison with affected process owners. Significant actions are entered into the _Corrective Action Tracker_.

For the analysis of nonconformity, appropriate statistical and non-statistical techniques can be applied. The organization will select the appropriate methodology based on the problem's complexity. Examples of statistical techniques are:

1. Statistical Process Control (SPC) charts;
2. Pareto analysis, and data trending;
3. Linear and non-linear regression analysis;
4. Experimental design (DOE – Design of Experiments) and analysis of variance;
5. Graphical methods (histograms, scatter plots, etc.).