

**Clause 1: Scope** This clause relates to the scope or coverage of the standard to help organizations achieve the intended outcomes of its EMS.

**Clause 2: Normative reference** There are no normative references, for example other additional requirements in other standards, that have to be considered. The clause is retained in order to maintain the same numbering scheme as all the other management system standards.

**Clause 3: Terms and definitions** at first sight, the listing of terms and definitions seems confusing as they are not in alphabetical order. Instead, the approach stipulated by ISO is that terms and definitions are in the order that they appear in the standard. It may be easier to use this listing in conjunction with the alphabetical listing in Annex C.

An organization will also need to identify the 'interested parties' relevant to their EMS and their needs. These could include customers, communities, suppliers and non-government organizations and may change over time. Finally, the last requirement is to establish, implement, maintain and continually improve the EMS in accordance with the requirements of the standard.

## High-Level Structure (HLS)

1 | Scope

2 | Normative references

3 | Terms and definitions

4 | Context of the Organisation

5 | Leadership

6 | Planning

7 | Support

8 | Operation

9 | Performance Evaluation

10 | Improvement

## Clause 4: Context of the organization

This is a new clause that establishes the context of the EMS and how the business strategy supports this. 'Context of the organization' is the clause that underpins the rest of the standard. It gives an organization the opportunity to identify and understand the factors and parties that can affect, either positively or negatively, the EMS. Firstly, the organization will need to determine external and internal issues that are relevant to its purpose i.e. what are the relevant issues, both inside and out, that have an impact on or affect its ability to achieve the intended outcome(s) of the EMS. Importantly, issues should include not only environmental conditions that the organization affects but also those that it is affected by.

Clause 4	Clause number
Understanding the organization and its contents	4.1
Understanding the needs and expectations on interested parties	4.2
Developing the scope of the environmental management system	4.3
Environmental Management System	4.4

## Clause 5: Leadership

This clause is all about the role of "top management" which is the person or group of people who directs and controls the organization at the highest level. The purpose is to demonstrate leadership and commitment by integrating environmental management into business processes. Top management must demonstrate a greater involvement in the management system and need to establish the environmental policy, which can include commitments specific to an organization's context beyond those directly required, such as the 'protection of the environment'. There is greater focus on top management to commit to continual improvement of the EMS. Communication is key and top management have a responsibility to ensure the EMS is made available, communicated, maintained and understood by all parties. Finally, top management need to assign relevant responsibilities and authorities, highlighting two particular roles concerning EMS conformance to ISO 14001 and reporting on EMS performance.

Clause 5	Clause number
Leadership (title only)	5
Leadership and commitment	5.1
Environmental policy	5.2
Organizational roles, responsibilities and authorities	5.3

## Clause 6: Planning

This clause focuses on how an organization plans actions to address both risks and opportunities which have been identified in Clause 4. It focuses the organization on the development and use of a planning process, rather than a procedure to address both a range of factors and the risk associated with such factors. Consideration of risks needs to be proportionate to the potential impact they may have, and opportunities could include substitute raw materials for example. For the first time, there is an explicit reference to abnormal and emergency situations. Even more importantly, the reference to a consideration of a life cycle perspective and the clause notes highlights that significant aspects can give rise to risks that are both beneficial and adverse. Another key area of this clause is the need to establish measurable environmental objectives. Finally, this clause covers what is referred to as “planning of changes”. This has to be done in a systematic manner. Organizations should consider identifying who is involved, when changes are to take place and the potential consequences of change.

<b>Clause 6</b>	<b>Clause number</b>
<b>Planning (title only)</b>	<b>6</b>
<b>Actions to address risks and opportunities (title only)</b>	<b>6.1</b>
General	6.1.1
Environmental aspects	6.1.2
Compliance obligations	6.1.3
Planning	6.1.4
<b>Environmental objectives and planning to achieve them (title only)</b>	<b>6.2</b>
Environmental Objectives	6.2.1
Planning actions to achieve environmental objectives	6.2.2

## Cause 7: Support

This clause is all about the execution of the plans and processes that enable an organization to meet their EMS. Simply expressed, this is a very powerful requirement covering all EMS resource needs. Organizations will need to determine the necessary competence of people doing work that, under its control, affects its environmental performance, its ability to fulfil its compliance obligations and ensure they receive the appropriate training. In addition, organizations need to ensure that all people doing work under the organization’s control are aware of the environmental policy, how their work may impact this and implications of not conforming with the EMS. Finally, there are the requirements for ‘documented information’ which relate to the creation, updating and control of specific data.

<b>Clause 7</b>	<b>Clause number</b>
<b>Support (title only)</b>	<b>7</b>
<b>Resources</b>	<b>7.1</b>
<b>Competence</b>	<b>7.2</b>
<b>Awareness</b>	<b>7.3</b>
<b>Communication (title only)</b>	<b>7.4</b>
General	7.4.1
Internal communication	7.4.2
External communication	7.4.3
<b>Documented information (title only)</b>	<b>7.5</b>
General	7.5.1
Creating and updating	7.5.2
Control of documented information	7.5.3

## Clause 8: Operation

This clause deals with the execution of the plans and processes that enable the organization to meet their environmental objectives. There are specific requirements that relate to the control or influence exercised over outsourced processes and the requirement to consider certain operational aspects 'consistent with a life cycle perspective'. This means giving serious consideration to how actual or potential environmental impacts happening upstream and downstream of an organization's site-based operations are influenced or (where possible) controlled.

Finally, the clause also covers the procurement of products and services, as well as controls to ensure that environmental requirements relating to design, delivery, use and end-of-life treatment of an organization's products and services are considered at an appropriate stage.

Clause 8	Clause number
<b>Operational (title only)</b>	<b>8.</b>
<b>Operational planning and control</b>	<b>8.1</b>
<b>Emergency preparedness and response</b>	<b>8.2</b>

## Clause 9: Performance Evaluation

This is all about measuring and evaluating your EMS to ensure that it is effective, and it helps you to continually improve. You will need to consider what should be measured, the methods employed and when data should be analysed and reported on. As a general recommendation, organizations should determine what information they need to evaluate environmental performance and effectiveness. Internal audits will need to be carried out, and there are certain "audit criteria" that are defined to ensure that the results of these audits are reported to relevant management. Finally, management reviews will need to be carried out and "documented information" must be kept as evidence.

Clause 9	Clause number
<b>Performance and evaluation (title only)</b>	<b>9</b>
<b>Monitoring measuring, analysis and evaluation (title only)</b>	<b>9.1</b>
General	9.1.1
Evaluation of compliance	9.1.2
<b>Internal Audit (title only)</b>	<b>9.2</b>
General	9.2.1
Internal audit program	9.2.2
<b>Management review</b>	<b>9.3</b>

**Clause 10: Improvement**

This clause requires organizations to determine and identify opportunities for continual improvement of the EMS. The requirement for continual improvement has been extended to ensure that the suitability and adequacy of the EMS—as well as its effectiveness—are considered in the light of enhanced environmental performance. There are some actions that are required that cover handling of corrective actions. Firstly, organizations need to react to the nonconformities and take action.

Secondly, they need to identify whether similar nonconformities exist or could potentially occur. This clause requires organizations to determine and identify opportunities for continual improvement of the EMS. There is a requirement to actively look out for opportunities to improve processes, products or services; particularly with future customer requirements in mind.

<b>Clause 10</b>	<b>Clause number</b>
<b>Improvements</b>	<b>10</b>
<b>General</b>	<b>10.1</b>
<b>Non-conformity and corrective action</b>	<b>10.2</b>
Continual improvement	10.3



**NOTES:**