

An overview of forthcoming Revision to International Standard on EMS-ISO 14001

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INTRODUCTION

The technical committees of International Organisation for Standardisation (ISO) need to review the standards developed by them within five years of their publication and to decide whether to revise, confirm or withdraw them, to ensure that ISO standards represent the state of the art. Revision of the International Standard on EMS (i.e. Environmental Management System) , ISO-14001:1996, is no exception to this rule of ISO and hence continues to be a curiosity among most users of this standard for quite a few years now, as it was due since the year 2001-02.

THE REVISION PROCESS

For revision of ISO's environmental management system (EMS) standards ISO 14001 (EMS specification and guidance for use) and ISO 14004 (general guidelines on EMS principles, systems and supporting technologies) published in 1996, by ISO technical committee ISO/TC 207, Environmental management, which developed the original versions, the following issues gained importance during the discussions preceding the review :

- keen desire of the committee members responsible for drafting the standards to ensure compatibility with the ISO 9000 series standards, which were undergoing a major revision at the time ISO 14001 and ISO 14004 were first published ;
- need to ensure that the standards are clear in their requirements and content ;
- need to reflect experiences already gained in the use of ISO 14001 and ISO 14004 ;
- need to ensure that the standards can be used, understood and implemented by all shapes and sizes of organizations across the world.

Initially in 1998, ISO/TC207 preferred to see a wide-ranging Revision of ISO 14001 and ISO 14004. However, there were concerns that an early revision could cause confusion or uncertainty among the potential users of the standards. Hence it was decided to limit the revisions to:

- enhance compatibility between ISO 14001 and ISO 9001:2000, (Years ago, during the revision activity of ISO-9000, a joint group was established from members of both the committees ISO/TC 176– the subcommittee responsible for ISO 9001:2000 & ISO/TC 207- the subcommittee responsible for ISO 14001,to deal with compatibility issues.)
- and improve the clarity of the 1996 texts.

This was contemplated to reassure the marketplace, assist existing users and help countries only recently becoming aware of and involved in the development and use of the standards.

In the case of ISO 14004, the scope of the revision was decided as under:

- consistency with the revisions of ISO 14001,
- improvement of clarity of the text,
- considerations for experience of users,
- Suitability for use by and relevant to small and medium enterprises (SME's).

Terms of reference for the revisions gained consensus and the work commenced in 1999-2000. Originally the task was scheduled to be completed during 2003. It is now likely that the task might be completed during 2004.

CURRENT STATUS

ISO/TC 207 Technical Committee has since released the DIS (i.e. draft international standard) for the revised version of ISO 14001.

It is contemplated that comments would be reviewed within a few months and FDIS (i.e. final draft international standard) would be circulated soon after. FDIS ballots are scheduled for return in July, 2004 and publication of the revised standard is slated by the end of 2004.

The revision as revealed in DIS indicates only a few minor substantive and cosmetic changes without any major issue. It appears that intent is to help users implement an environmental management system (EMS) without resulting in additional or diminished requirements in comparison with ISO 14001:1996.

Once the second edition is published, ISO 14001 registered organizations most likely will have a year or two to upgrade/modify their existing EMSs to conform to the revised standard.

KEY REVISIONS & CHANGES REVEALED FROM DIS-ISO14001

Definitions (Section 3)

The list of definitions has now 4 more terms, as under:

Auditor--person with the competence to conduct an audit.

Document--information and its supporting media.

Procedure--specified way to carry out an activity or a process.

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

In this section and section 4, the additions of new numbers make all subsequent numbers to advance. Thus, "auditor" becomes definition 3.1 and "continual improvement," which was definition 3.1 in the original standard, moves forward to 3.2 in the DIS.

Changes to the definitions in the original standard are meant to clarify rather than to modify. The definition of "continual improvement" is depicted below as an example:

ISO 14001: 1996

3.1 continual improvement

Process of enhancing the environmental management system to achieve improvements in overall environmental performance *in line* with the organization's environmental policy.

ISO/DIS 14001

3.1 continual improvement

Recurring process of enhancing the environmental management system *in order* to achieve improvements in overall environmental performance *consistent* with the organization's environmental policy.

The word "recurring" was added to stress on that continual improvement is an ongoing process. The words "in line with" have been replaced by "consistent with." Neither of these changes modifies the definition in a substantive manner; rather, these throw light on original intentions.

General Requirements

Clause 4.1 on EMS requirements has been elaborated. In 1996 version, this clause states an organization shall establish and maintain an EMS that conforms to the requirements presented in clause 4. The DIS modifies language to explicitly state what was earlier implied--an organization shall establish, document, implement, maintain and continually improve an EMS.

This clause also expands that requires an organization to define the scope of its EMS. Although this may look like a new requirement, organizations earlier had to define system scope for internal understanding and implementation and as part of the application process associated with a certification audit.

Environmental Policy

3 changes appear in **clause 4.2** on environmental policy. The first sentence of this clause links the policy to the defined scope of the EMS.

Para c has replaced "relevant environmental legislation and regulations" with "applicable environmental legal requirements."

Para e is split into two paras. New para in e requires the policy to be documented, implemented and maintained. A new para f requires communication of the policy.

The original standard wants the policy to be communicated to all employees. The DIS needs it be communicated to all persons working for or on behalf of the organization. This change covers people who may not be employees, such as suppliers/contractors/ subcontractors, whose work may affect the scope of an EMS.

Planning

This section of the DIS has been diminished **from 4 to 3 clauses**. Clause 4.3.4 on environmental management programme(s) has been removed, though the requirements exist. This is now covered in the clauses on environmental aspects and objectives and targets.

With lot of rewordings in **clause 4.3.1** on environmental aspects the basic intent continues to be the same. In order to clear some ambiguity, organizations are now required to identify environmental aspects they "can influence" in place of those aspects over which they can "be expected to have an influence." It will be perhaps more convenient for organizations to identify what can be influenced rather than to identify expectations.

Extracting the words from clause 4.3.4 in the original standard, clause 4.3.1 further adds on that identification of aspects must take into account planned or new developments or new or modified activities, products and services.

The DIS explicitly needs organizations to document information about environmental aspects. While there might be arguement in favour of this as a new requirement as the original standard did not call for documentation, the fact is all organizations without exception have adopted a practice to document their exercises on aspects identification.

The wordings of this clause in DIS also require organizations to consider their environmental aspects in developing, implementing and maintaining an EMS. Although the concept appears to be newly introduced in this clause, in fact it is not, an EMS cannot conform to ISO 14001 without paying heed to environmental aspects in its development, implementation and maintenance.

Similar wordings appear also in DIS-**Clause 4.3.2** on legal and other requirements- organizations shall ensure applicable environmental legal requirements and other environmental requirements to which they subscribe are considered in developing, implementing and maintaining an EMS.

DIS-**Clause 4.3.3** on objectives and targets has been broadened to include wordings of clause 4.3.4 of the original ISO-14001 standard. The requirement brought into this clause addresses the programme for achieving objectives and targets, including defining responsibility, means and timeframe. As stated earlier this led to make **clause 4.3.4 now redundant**.

Implementation and Operation

The seven clauses of this section in ISO-14001 practically continue to be unchanged. A few changes may be worth noting.

The original title of the ISO-14001 **Clause 4.4.2** - "training, awareness and competence" has been reordered in DIS as- "competence, training and awareness." The sequence of paras has also been changed accordingly, such that the last paragraph in ISO 14001:1996 is now the first in ISO/DIS 14001, presumably indicating more stress on ensuring competence.

The next modification of his clause is the rewordings from "personnel" and "employees or members" to "persons working for the organization or on its behalf." This is meant to consider suppliers/contractors/subcontractors in addition to employees in respect of evaluating competence, identifying training needs and providing training.

The last para of DIS-**clause 4.4.3**, on communication, is significantly modified. It requires an organization to "decide whether to communicate externally" & if so, to 'establish methods to communicate' on its significant environmental aspects, which is pretty well self-explanatory as compared to the original ISO-14001 requirement for considering processes for external communication.

In DIS, **Clause 4.4.4**, on system documentation, has been enlarged. The DIS indicates a list of EMS documents:

i)Environmental policy, objectives and targets-

This can't be considered as a new requirement, rather it is a repetition , since the clauses on policy and objectives and targets in both the original standard and DIS require all these to be documented.

ii)Description of the main elements of the EMS and their interaction and reference to related documents-

This is same as described in original Standard as ‘the core elements of the EMS’.

iii) Documents and records required by this international standard-

These are basically requirements in various clauses that an item be documented ,such as outputs/results of the management review.

iv) Documents and records determined by the organization as necessary-

Here an organization, like ISO-9001:2000 Standard clause No. 4.2.1d, needs to identify the documentation it requires for its EMS, over and above the documentation specified in the ISO/DIS-14001 standard.

DIS-**Clause 4.4.5** on document control has been modified to correspond to the new requirement of DIS-clause 4.4.4, as explained in item (iv) above. The original standard needs control of all documents required by ISO 14001. The DIS further needs control of documents required by the organization for maintaining EMS in addition to those required by the standard. Thus, documents identified by an organization as necessary must also be controlled, even if those are not stated in the standard explicitly.

Another important change in the clause on document control is that ‘documents of external origin’, deemed necessary by the organization are to be identified and their distribution controlled.

Checking and Corrective Action

The wordings in ISO-14001 **clause 4.5.1** on monitoring and measurement are practically not changed in DIS, but clause is **now split into two clauses**. The last para on periodic evaluation of compliance with legislation and regulations has been moved into a separate clause.

The DIS has **now a separate clause 4.5.2, on evaluation of legal compliance**. The words of the original standard are maintained here. However, this requirement is traced back to the environmental policy with a statement that purpose of evaluating legislative & regulatory compliance is to meet an organization's commitment to compliance.

DIS **clause 4.5.3** on nonconformity and preventive and corrective action appears to have undergone a significant change. Now this clause, like ISO 9001:2000 clause 8.5.3, needs an organization to determine and take actions to prevent the causes of potential nonconformities.

DIS **clause 4.5.4** on records has been amended to highlight that the need for records is to demonstrate conformity to requirements of the standard, providing evidence that the EMS is in place.

The **clause 4.5.5** on EMS audits has been renamed in DIS as ‘Internal Environmental Management System Audit.' Requirements of objectivity and impartiality in the audit process are also emphasized here.

Management Review

The concluding **DIS clause 4.6** of the standard has been enlarged to include, like ISO 9001:2000 clause 5.6.2 & 5.6.3, inputs to the review, e.g. EMS audit results, changing circumstances, follow-up actions from previous reviews etc. and outputs resulting from the review e.g. decisions and actions consistent with the commitment to continual improvement etc.

This is to stress on the management review as a process intended to assess the continuing suitability, adequacy and effectiveness of the EMS.

- **Annex A:** the guidance for use of ISO 14001, has now been revised to suit the changes to the requirements and to provide guidance on the basis of experience and need, and
- **Annex B:** Cross-reference tables depicting linkage between ISO 9001:2000 and ISO 14001:200X would be updated as the revision progresses.

Conclusion:

The users of ISO 14001 standard would get the revised edition later than originally expected, but considering the magnitude, complexity and nature of the task, surely this was not entirely unexpected.

It appears that most organizations with EMS conforming to ISO 14001:1996 should not have much difficulty in resorting to necessary modifications in their procedures and practice when the next revised standard is published. The changes are contemplated as mostly cosmetic involving renumbering of clauses in various EMS documents and the broadening of activities in certain areas, such as for competence & training, suppliers/contractors/subcontractors are required to be considered now.

It seems that basic structure initially established by ISO/TC 207 will continue to reign over at least another five years.

Acknowledgement:

The author is grateful to the management of JENTEK, MISSIONARIES OF QUALITY, for according permission to prepare and publish this paper.