New ISO 14000 standard on environmental assessment of sites and organizations

The need to assess the business consequences of environmental aspects related to activities, products and services is increasingly frequent in a variety of scenarios including compliance with legislation, reducing pollution, improving environmental performance, risk assessment, obtaining loans and insurance, property evaluations and within the context of acquisitions and mergers. The new standard ISO 14015, *Environmental assessment of sites and organizations*, promises, therefore, to prove to be a major and timely tool for businesses.

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In recent years, it has become clear that organizations are paying more and more attention to the busi-

ness consequences of environmental aspects related to their activities, products and services. These consequences may include the cost of eliminating or reducing sources of environmental pollution in order to comply with legal requirements, to

maintain business relationships, or to enhance the general corporate image.

Systematic management of the environmental aspects of business becomes part of the normal conduct

of the business of an organization, as well as in the case of acquisition or divestiture of assets. Two developments are important in this respect:

- the increasing number of international takeovers and mergers in which the environmental aspects play a significant part in establishing the related business risks, and
- more stringent environmental legislation and regulations worldwide.

Organizations are paying more and more attention to the business consequences of environmental aspects related to their activities, products and services

ISO has therefore developed ISO 14015 to give guidance on how to conduct environmental assessments of sites and organizations (EASO), published on 15 November 2001. The new standard is the work of ISO technical committee ISO/TC 207.

Environmental management, Subcommittee SC 2, Environmental auditing and related environmental investigations.

The basics of an EASO

The environmental assessment of sites and organizations (EASO) is an assessment that may be carried out during operations, or on the acquisition or divestiture of assets, or conducted as part of a broader business assessment often referred to as "due diligence". Therefore, EASO is also frequently referred to as an environmental due diligence assessment. Increasingly, such assessments are also being conducted in connection with the granting of credit facilities, or prior to contracting insurance and also within the context of a property evaluation.

The basic aim of an EASO is to establish the relationship between the environmental aspects of an enterprise or location, and the environmental issues (risks/opportunities) and their ensuing business consequences (financial or other) as part of the preparations for a proposed business transaction. This is portrayed in Figure 1.



Figure 1 - Basic aim of an EASO

Basic principles of ISO 14015

ISO 14015 is based on the following principles:

- the standard provides guidance on the assessment process and does not establish quantitative or other criteria for what should be regarded as significant business consequences;
- therefore, the standard is flexible allowing it to accommodate a wide variety of situations and clients;
- the client leads the process; the client determines the objectives and scope of the assessment and the criteria to be applied by the assessor;
- the client decides whether the identification of business opportunities is part of the assessment process, and
- the scope of this standard does not include the conduct of measurements (intrusive investigation).

Structure and content of ISO 14015

ISO 14015 distinguishes the following phases in the conduct of an EASO:

- planning of the assessment;
- information gathering and validation;
- evaluation of the information, and
- reporting of the results.

ISO 14015 provides detailed guidance on the activities to be undertaken in these phases and also clearly defines the roles and responsibilities of the following parties involved in an EASO:

- the client, the organization commissioning the EASO;
- the assessee, the organization that is assessed, and
- the assessor, the person (organization) competent and qualified to conduct the EASO.

This is depicted in Fig. 2 (overleaf).

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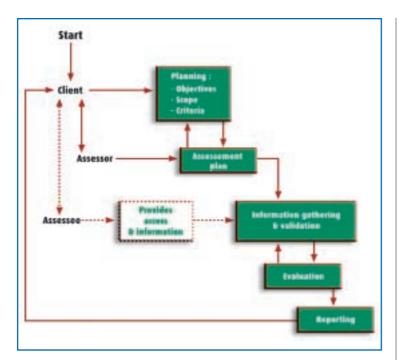


Figure 2 – Phases of an EASO and parties involved

Note: the dotted lines indicate that the assessee is not always involved in the conduct of an EASO

Planning an EASO

Planning the assessment includes the following stages:

- determination of the objectives, scope and criteria of the assessment, and
- establishment of the assessment plan.

The establishment of the scope and objectives of any EASO is a key issue and the prime responsibility of the client. Usually, the objectives of an EASO include the identification of environmental aspects and issues associated with the site/organization and the resulting business consequences.

The scope of an EASO defines the boundaries and focus of the assessment and this may involve consideration of the categories of environmental aspects to be considered (e.g., potential impacts on soil, air and water quality), the physical and organizational boundaries of the site/organization to be assessed and the time period covered (e.g., past, present and/or future activities).

Assessment criteria are used to assess the information gathered and may include current and future legal

requirements, industry codes of practice, requirements of stakeholders – such as financial institutions – and technological options.

Gathering information

The process of gathering data and information includes interviews, document reviews and observations. The support provided by the standard to the process of gathering and validating information is relatively slight. The assumption is made that the way in which documents are to be reviewed, or how an interview should be conducted or observations made are known quantities. However, various useful "help boxes" have been included in the standard as an aid to the selection of the type and possible sources of information. For example, documents that may be considered are: maps, historical records, hydrogeological records, monitoring records, accident records, permits, audit reports and complaints.

Sources for such documents may be external (e.g., governmental agencies, archives and emergency services) or internal (e.g., health, safety and environment departments, legal departments or facility management). Observations may include activities (such as waste and waste water management, materials and product handling, process operations) and physical conditions (e.g., storage containers and soil conditions)

The result of the process is information about the environmental aspects of the location and/or organization. This information should be validated before it is further evaluated.

Evaluation and reporting

Evaluation of the available information includes two steps: defining the issues (problems and/or opportunities) and determining their consequences. This part of the assessment is the very heart of the standard – see Figure 3.

Environmental issues are identified by comparing the validated information on environmental aspects with the assessment criteria established in the planning stage of the project. Environmental issues are those aspects that may result in liabilities, costs and/or effects on the organization's public image because assessment criteria are not met - for example, when legal requirements are not complied with.

The issues identified require solutions (e.g., mitigating measures or corrective actions). These solutions, often only broadly outlined, subsequently provide the basis for evaluating the business consequences (qualitative/quantitative, financial or other, positive/negative), that is, the actual or potential impact on the business related to the environmental issues.

Business consequences may, for example, be costs through incurred complying with current permit requirements, by implementing new environmental technology in order to comply with upcoming legislation, or costs involved with mitigating local environmental impacts to enhance the corporate image among local residents or

customers.

Business consequences may also be positive - cost savings - such as the application of new technology, re-use of waste and waste water, sharing of waste water treatment costs with neighbours, or organizational measures such as the restructuring of the environmental functions and/or operational procedures.

The standard contains an example of an EASO report table of contents and clearly identifies what type of information is suggested for inclusion.

Use of the standard

The business consequences identified can play a part in any negotiations related to business transactions, such as the ones mentioned earlier in this article (e.g., takeovers, mergers, or establishing financial partnerships). Traditionally, the potential buyer or the organization providing financial credit takes the initiative of conducting an EASO. However, an EASO is increasingly performed on a regular basis by the current owner or operator of a company to provide a situation report as part of a more comprehensive evaluation.

There are also specific situations where the conduct of an EASO by the current owner has proved to be beneficial, for example, when more than one party is strongly considering a takeover (which is usually the

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case in the privatisation of a company), or as a supporting tool for decisionmaking on major investments to limit liability or take optimal advantage of opportunities arising.

Obviously, the EASO guideline can also be used to determine the environmental issues only. In the guide-

line, various tools and sources of information are provided that support the identification of environmental issues connected to, for example, waste water discharges, gas emissions, waste generation or organizational bottlenecks.

ISO 14015 will facilitate international trade in the broadest sense, including takeovers and mergers of organizations and sites, while maintaining due care of the environment.

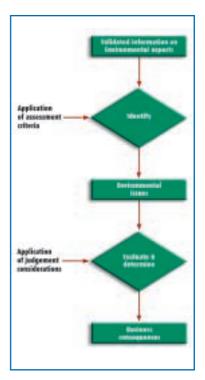


Figure 3 - Evaluation phase of an EASO