



ISO, ISO 9000, ISO 14000

ISO – the organization behind ISO 9000 and ISO 14000

The ISO 9000 series of International Standards for quality management and quality assurance has been adopted in more than 90 countries and is being implemented by thousands of manufacturing or service organizations in both public and private sectors.

One of the most successful series of standards in the history of ISO (International Organization for Standardization), ISO 9000 has generated much publicity and made the name of ISO known to a wider business community than the specialists directly concerned with technical standards. The publication in September 1996 of the first standards in the ISO 14000 series on environmental management, and the speed with which they are being taken up by the business community, promises more publicity for the name "ISO". However, many members of the business community may have less of an idea of what the organization behind ISO 9000 and ISO 14000 is and what it does.

More than ISO 9000 and ISO 14000

ISO 9000 and ISO 14000 are two series among more than 11 000 International Standards published by ISO since it began operations in 1947. ISO develops standards for the following technical fields: mechanical engineering; basic chemicals; non-metallic materials; ores and metals; information processing, graphics and photography; agriculture; building; special technologies; health and medicine; basic subjects; environment; and the packaging and distribution of goods.

ISO's name

ISO is the International Organization for Standardization. "ISO" is not an acronym, but a name, derived from the Greek word *isos*, meaning "equal", which is the root of the prefix "iso-" that occurs in a host of terms, such as "isometric" (of equal measure or dimensions), and "isonomy" (equality of laws, or of people before the law).

From "equal" to "standard", the line of thinking that led to the choice of "ISO" as the name of the organization is easy to follow. In addition, the name ISO is used around the world to denote the organization, thus avoiding a plethora of acronyms resulting from the translation of "International Organization for Standardization" into the different national languages of members, e.g. IOS in English, OIN in French (from *Organisation internationale de normalisation*). Whatever the country, the short form of the Organization's name is always ISO.

Non-governmental	ISO is a non-governmental organization. It is not part of the United Nations Organization (although it has strong links with nearly all bodies and specialized agencies of the UN family). Its membership, which is currently drawn from some 120 countries, is not composed of government delegations, but is made up of national standards institutes or organizations, on a one member organization per country basis.
Voluntary	All the standards developed by ISO are voluntary. ISO has no power to enforce their implementation. A certain percentage of its standards – mainly those concerned with health, safety or the environment – has been adopted in some countries as part of their regulatory framework, or is referred to in legislation for which it serves as the technical basis. However, such adoptions are sovereign decisions by the regulatory authorities or governments of the countries concerned. ISO itself has no regulatory or legislative powers.
Consensus	ISO standards are market-driven. They are developed by international consensus among experts drawn from the industrial, technical or business sectors which have expressed the need for a particular standard. They may be joined by experts from government, regulatory authorities, testing bodies, academia, consumer groups or other organizations with relevant knowledge, or which have expressed a direct interest in the standard under development. Although ISO standards are voluntary, the fact that they are developed in response to market demand, and are based on consensus among the interested parties, ensures widespread use of the standards.
ISO's job	ISO develops worldwide technical agreements which are published as International Standards. This is a major operation. It is estimated that every working day of the year, there are 15 meetings around the world of ISO technical groups in which the standards-development work is actually carried out. In all, there are more than 2 850 of these groups in which some 30 000 experts participate annually. This technical work is coordinated from ISO Central Secretariat in Geneva, which also publishes the standards.
Conforming to standards	It is not part of ISO's mission to verify that its standards are being implemented by users in conformity with the requirements of the standards. Conformity assessment – as this verification process is known – is a matter for suppliers and their clients in the private sector, and of regulatory bodies when ISO standards have been incorporated into public legislation.

In addition, there exist many testing laboratories and auditing bodies which offer independent (also known as “third party”) conformity assessment services to verify that products, services or systems measure up to ISO standards. Such organizations may perform these services under a mandate to a regulatory authority, or as a commercial activity of which the aim is to create confidence between suppliers and their clients. In some countries, ISO members carry out conformity assessment, either on behalf of their respective governments, or as a business operation. ISO itself, however, has no authority to control these activities.

What ISO *does* is develop – in partnership with the IEC (International Electrotechnical Commission) – ISO/IEC Guides covering various aspects of conformity assessment activities and the organizations that perform them. The voluntary criteria contained in these Guides represent an international consensus on what constitutes acceptable practice. Their use contributes to the consistency and coherence of conformity assessment worldwide and so facilitates trade across borders.

ISO 9000 and ISO 14000 certification

As will be gathered from the above, ISO operates no system for verifying the conformance of organizations’ quality systems with standards in the ISO 9000 series, or of environmental management systems against the ISO 14000 requirements. ISO itself carries out no ISO 9000 or ISO 14000 audits and awards no certificates attesting to conformity with the standards – commonly known as “ISO 9000 certificates” or “ISO 14000 certificates”. There is no such thing as “ISO certification”*, whether in relation to ISO 9000, ISO 14000 or any other ISO standard.

ISO 9000 and ISO 14000 certificates are issued by certification bodies (in some countries, they are called “registration” bodies) independently of ISO, even when a particular body may be part of a national standards organization that is an ISO member. ISO has no authority to oversee the work of quality management system or environmental management system certification bodies. However, the relevant ISO/IEC Guides form a basis for acceptable practice by such bodies. A certification body’s adherence, or the lack of it, to these guidelines may be used by a company as one of its criteria for choosing a certification body to audit its quality or environmental management system and issue an ISO 9000 or ISO 14000 certificate.

* A simple exercise to demonstrate why “ISO certification” is a misleading abbreviation for “ISO 9000 certification” or “ISO 14000 certification” is to substitute the name of another institution for “ISO”. For example, the phrase “US Government certification” clearly gives the impression that it is the US Government which is carrying out the certification. This impression is wrong. ISO 9000 and ISO 14000 certification services are carried out in the United States by independent certification bodies, not by the US Government. And not by ISO either, whether in the United States or elsewhere, which is why “ISO certification” is an unacceptable abbreviation for “ISO 9000 certification” or “ISO 14000 certification”.

In a growing number of countries, accreditation bodies are being set up (sometimes, but not always, with a government mandate) to

exercise a degree of control over the “ISO 9000 and ISO 14000 certification industry”. Certification bodies which fulfill the criteria of the accreditation system are duly accredited – which can increase market confidence in the value of the ISO 9000 or ISO 14000 certificates issued by that registrar. The relevant ISO/IEC Guides (adopted by the European Union as the EN 45000 series) are among the criteria applied by these accreditation bodies.

Therefore, while ISO does not perform ISO 9000 or ISO 14000 certification and exercises no authority over bodies that are engaged in these activities, its voluntary guidelines are widely used and help ensure good practice by those involved.

ISO 9000 family

The ISO 9000 family of standards represents an international consensus on good management practice. Its primary aim is to give organizations guidelines on what constitutes an effective quality management system, which in turn can serve as a framework for continuous improvement. The standard ISO 9004-1 (and the other parts of ISO 9004) gives guidelines on the elements of quality management and a quality system.

The family also includes three quality assurance models – ISO 9001, ISO 9002 and ISO 9003 – against which the quality system can be audited to see that it complies with ISO 9000 requirements. The organization should carry out this auditing itself to verify that it is managing its processes effectively. In addition, it may invite its clients to audit the quality system in order to give them confidence that the organization is capable of delivering products or services that will meet their needs.

Lastly, the organization may engage the services of an independent quality system certification body to obtain an ISO 9000 certificate of conformity. This last option has proved extremely popular because of the perceived credibility of an independent verification. It may thus avoid multiple audits by the organization’s clients, or reduce the frequency or duration of client audits. The certificate can also help establish the organization’s credentials as a reliable business partner to potential clients, especially when supplier and customer are new to each other, or far removed geographically, as in an export context.

In some countries, government departments and public authorities are requiring companies bidding for procurement contracts to be ISO 9000 certificate holders.

In some industrial sectors, major companies are requiring their suppliers to comply with ISO 9000. The client company may verify compliance itself, or may require the supplier to have an ISO 9000 certificate issued by an independent certification body.

ISO 14000 family

The ISO 14000 family, of which the first standards were published in September and October 1996, addresses various aspects of environmental management. The very first two standards, ISO 14004 and ISO 14001, deal with environmental management systems. These are management tools to enable an organization of any size or type to control the impact of its activities, products or services on the environment. An environmental management system represents a structured approach to setting environmental objectives and targets, to achieving these and demonstrating that they have been achieved.

The standards do not specify levels of environmental performance – a fact which allows them to be implemented by a wide variety of organizations, whatever their current level of environmental maturity. However, a commitment to compliance with applicable environmental legislation and regulations is required, along with commitment to continual improvement – for which the environmental management system provides the framework.

ISO 14004 provides guidelines on the elements of an environmental management system and its implementation, and discusses principal issues involved.

ISO 14001 specifies the requirements for such an environmental management system. Fulfilling these requirements demands objective evidence which can be audited to demonstrate that the environmental management system is operating effectively in conformance with the standard. ISO 14001 can thus be used for internal purposes – to provide assurance to the organization's management – and for external purposes – to provide assurance to interested parties. In the external context, conformance to ISO 14001 can be used to support what an organization claims about its own environmental policies and actions. It is suitable for both supplier's declarations of conformity, assessment of conformity by an external stakeholder – such as a business client – and for certification of conformity by an independent certification body.

Not product labels

ISO 9000 is not a product quality label or guarantee. ISO 14000 is not a "green" or "environmentally friendly" label for products. When an organization has a management system certified to an ISO 9000 or ISO 14000 standard, this means that an independent auditor has checked that the processes influencing quality (ISO 9000), or the processes influencing the impact of the organization's activities on the environment (ISO 14000), conform to the relevant standard's requirements. In plain language, ISO 9000 and ISO 14000 relate to the making of products. They are not product labels.

ISO's logo

The ISO logo is a registered trademark. ISO does not authorize its logo to be used, either by quality system or environmental management system certification bodies, or by the companies to which the latter issue ISO 9000 or ISO 14000 certificates. Allowing the ISO logo to be used would give the impression that ISO carries out certification activities, or has approved or authorized the organization using its logo. Neither of these is the case.

ISO

To sum up, ISO (International Organization for Standardization) is a lot more than ISO 9000 and ISO 14000.

- ISO has developed more than 11 000 International Standards covering almost all technical fields.
- ISO is a non-governmental organization with members from some 120 countries.
- ISO standards are voluntary and ISO has no authority to enforce their implementation.
- ISO does not carry out conformity assessment activities, although it develops guidelines for these which establish the foundations for good practice.
- ISO does not issue ISO 9000 or ISO 14000 certificates.
- “ISO certification” does not exist, whether to ISO 9000, ISO 14000 or any other of the standards ISO has developed. The correct phrase is “ISO 9000 certification” or “ISO 14000 certification”, which are performed independently of ISO.
- ISO 9000 and ISO 14000 are not product labels.
- The ISO logo is a registered trademark and ISO does not authorize its use in connection with ISO 9000 or ISO 14000 certification.
- ISO standards are market-driven. They are developed on the basis of international consensus among experts from the sector which has expressed a requirement for a particular standard.

In other words, ISO's standards are used to the extent that people find them useful. In cases like ISO 9000 – which is the most visible current example, but not the only one – that can mean very useful !

For more information on ISO, ISO 9000 and ISO 14000

• *Contact*

your national standards institute or the Promotion and Press Services, ISO Central Secretariat.

• *Read*

– *ISO 9000 News* (six issues a year), which includes updates on the ISO 9000 family of quality management and quality assurance standards, and news on their implementation around the world, as well as related developments, such as ISO 9000 certification; coverage of ISO 14000 is being increased as these new standards are implemented;

– *ISO Bulletin* (monthly), which provides an overview of ISO's activities in international standardization over almost the entire range of technology, including articles on the ISO 14000 family of environmental management standards.

Both publications are available through ISO's national members and the Central Secretariat.

• *Connect*

with *ISO Online*, the electronic information service on Internet, accessible via the World Wide Web by connecting with the following Uniform Resource Locator (URL):

<http://www.iso.ch/>



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