



ISO 32000 - Document management

What is ISO 32000 -Document management?

A Document Management System (DMS) is a system used to receive, track, manage and store documents and reduce paper. Most are capable of keeping a record of the various versions created and modified by different users (history tracking). In the case of the management of digital documents such systems are based on computer programs. The term has some overlap with the concepts of content management systems. It is often viewed as a component of enterprise content management (ECM) systems and related to digital asset management, document imaging, workflow systems and records management systems.

History

Beginning in the 1980s, a number of vendors began to develop software systems to manage paper-based documents. These systems dealt with paper documents, which included not only printed and published documents, but also photographs, prints, etc.

Later developers began to write a second type of system which could manage electronic documents, i.e., all those documents, or files, created on computers, and often stored on users' local file-systems. The earliest electronic document management (EDM) systems managed either proprietary file types, or a limited number of file formats. Many of these systems later became known as document imaging systems, because they focused on the capture, storage, indexing and retrieval of image file formats. EDM systems evolved to a point where systems could manage any type of file format that could be stored on the network. The applications grew to encompass electronic documents, collaboration tools, security, workflow, and auditing capabilities.

These systems enabled an organization to capture faxes and forms, to save copies of the documents as images, and to store the image files in the repository for security and quick retrieval (retrieval made possible because the system handled the extraction of the text from the document in the process of capture, and the text-indexer function provided text-retrieval capabilities).

While many EDM systems store documents in their native file format (Microsoft Word or Excel, PDF), some web-based document management systems are beginning to store content in the form of HTML. These HTML-based document management systems can act as publishing systems or policy management systems. Content is captured either by using browser based editors or the importing and conversion of not HTML content. Storing documents as HTML enables a simpler full-text workflow as most search engines deal with HTML natively. DMS without an HTML storage format are required to extract the text from the proprietary format making the full text search workflow slightly more complicated.

Search capabilities including boolean queries, cluster analysis, and stemming have become critical components of DMS as users have grown used to internet searching and spend less time organizing their content.

Standardization

Many industry associations publish their own lists of particular document control standards that are used in their particular field. Following is a list of some of the relevant ISO documents. Divisions ICS 01.140.10 and 01.140.20. The ISO has also published a series of standards regarding the technical documentation, covered by the division of 01.110.

- ISO 2709 Information and documentation – Format for information exchange
- ISO 15836 Information and documentation – The Dublin Core metadata element set
- ISO 15489 Information and documentation – Records management
- ISO 21127 Information and documentation – A reference ontology for the interchange of cultural heritage information
- ISO 23950 Information and documentation – Information retrieval (Z39.50) – Application service definition and protocol specification
- ISO 10244 Document management – Business process baselining and analysis
- ISO 32000 Document management – Portable document format
- ISO/IEC_27001 Specification for an information security management system

Document control

Government regulations require that companies working in certain industries control their documents. These industries include accounting (for example: 8th EU Directive, Sarbanes–Oxley Act), food safety (e.g., Food Safety Modernization Act in the US), ISO (mentioned above), medical device manufacturing (FDA), manufacture of blood, human cells, and tissue products (FDA), healthcare (*JCAHO*), and information technology (*ITIL*). Some industries work under stricter document control requirements due to the type of information they retain for privacy, warranty, or other highly regulated purposes. Examples include protected health information (PHI) as required by HIPAA or construction project documents required for warranty periods. An information systems strategy plan (ISSP) can shape organisational information systems over medium to long-term periods.

Documents stored in a document management system—such as procedures, work instructions, and policy statements—provide evidence of documents under control. Failing to comply can cause fines, the loss of business, or damage to a business's reputation.

The following are important aspects of document control:

- reviewing and approving documents prior to release

- reviews and approvals
- ensuring changes and revisions are clearly identified
- ensuring that relevant versions of applicable documents are available at their "points of use"
- ensuring that documents remain legible and identifiable
- ensuring that external documents (such as customer-supplied documents or supplier manuals) are identified and controlled
- preventing "unintended" use of obsolete documents

List of International Organization for Standardization standards

This is a list of published International Organization for Standardization (ISO) standards and other deliverables. For a complete and up-to-date list of all the ISO standards, see the ISO catalogue.

The standards are protected by copyright and most of them must be purchased. However, about 300 of the standards produced by ISO and IEC's Joint Technical Committee 1 (JTC 1) have been made freely and publicly available.



ISO Brand

This is a dynamic list and may never be able to satisfy particular standards for completeness. You can help by adding missing items with reliable sources.

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Background

Organizations of all types and sizes increasingly want to reduce the amount of energy they consume. This is driven by the need or desire to:

- reduce costs,
- reduce the impact of rising costs,
- meet legislative or self-imposed carbon targets,
- reduce reliance on fossil fuels, and
- enhance the entity's reputation as a socially responsible organization.

In tandem, governments increasingly want to reduce the Greenhouse Gas Emissions of their citizens and industries, and are imposing legislative mechanisms to compel carbon reduction more and more frequently.

In response, a range of energy management standards, specifications and regulations were developed in Australia, China, Denmark, France, Germany, Ireland, Japan, Republic of Korea, Netherlands, Singapore, Sweden, Taiwan, Thailand, New Zealand and the USA.

Subsequently, the European Committee for Standardization (CEN) developed EN 16001:2009 *Energy management systems. Requirements with guidance for use* as a first international energy management standard. This was published in July 2009 and withdrawn in April 2012 as it had been superseded by ISO 50001.

Development

The United Nations Industrial Development Organization (UNIDO) recognized that industry around the world needed to mount an effective response to climate change.¹ It also noted a proliferation of national energy management standards that were emerging as a response to market demand for help with energy efficiency.

In April 2007, a UNIDO stakeholders meeting decided to ask ISO to develop an international energy management standard.

ISO for its part had identified energy management as one of its top five areas for the development of International Standards and, in 2008, created a project committee, ISO/PC 242, *Energy management*, to carry out the work.

ISO/PC 242 was led by ISO members for the United States (ANSI) and Brazil (ABNT). In addition, its leadership included the ISO members for China (SAC) and the United Kingdom (BSI Group) to ensure that developed and developing economies participated together in the project committee.

Experts from the national standards bodies of 44 ISO member countries participated and another 14 countries sent observers. Development organizations including UNIDO and the World Energy Council (WEC) were also involved.

ISO 50001 also drew on existing national and regional energy management codes and standards, including ones developed in China, Denmark, Ireland, Japan, Republic of Korea, Netherlands, Sweden, Thailand, the US and the European Union.

ISO published a revised version of ISO 50001 in 2018. The revision reflects a desire to promote adoption of the standard among small and medium sized enterprises. It also incorporates ISO's "high level structure" for use where organizations wish to integrate a number of management system standards together.

There are ten major components to ISO 50001:2018:

- 1.: Scope
- 2.: Normative references
- 3.: Terms and definitions
- 4.: Context of the organization
- 5.: Leadership
- 6.: Planning
- 7.: Support
- 8.: Operation
- 9.: Performance Evaluation

- 10.: Improvement

Method

ISO 50001 provides a framework of requirements that help organizations to:

- develop a policy for more efficient use of energy
- fix targets and objectives to meet the policy
- use data to better understand and make decisions concerning energy use and consumption
- measure the results
- review the effectiveness of the policy and
- continually improve energy management.

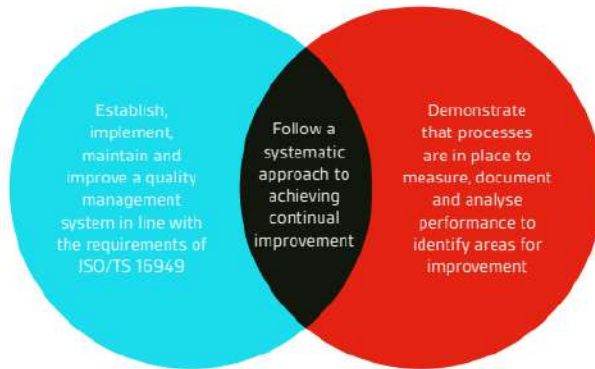
ISO 50001 focuses on a continual improvement process to achieve the objectives related to the environmental performance of an organization (enterprise, service provider, administration, etc.). The process follows a plan – do – check – act approach.



The 4 phases of the PDCA circle

The overall responsibility for the installed energy management system must be located with the top management. An energy officer and an energy team should be appointed. Furthermore, the organization has to formulate the energy policy in form of a written statement which contains the intent and direction of energy policy. Energy policy must be communicated within the organization. The energy team is the connection between management and employees. In this phase the organization has to identify the significant energy uses and prioritize the opportunities for energy performance improvement.

The principal requirements of the standard are illustrated below:



The next few pages of the guide takes you through the Plan-Do-Check-Act (PDCA) methodology, common in all ISO management systems and how DCS can help and support you on your ISO/TS 16949 journey.

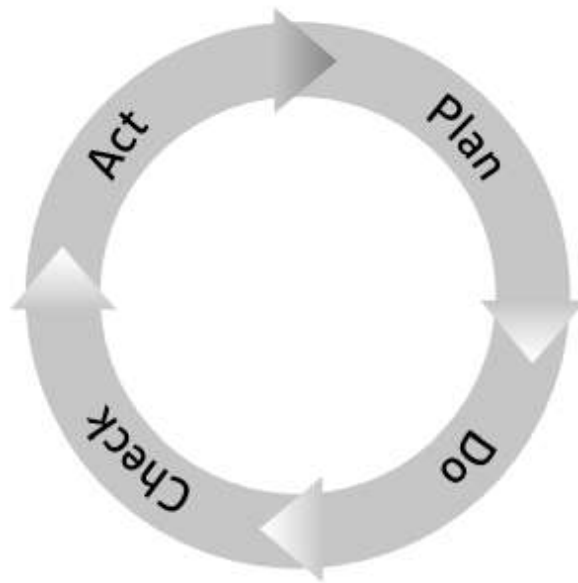
Understanding the principles of continual improvement

Act

Correct and improve your plans to meet and exceed your planned results

Check

Measure and monitor your actual results against your planned objectives



Plan

Establish objectives and draft your plans (analyse your organization's current systems, establish overall objectives, set interim targets for review and develop plans to achieve them)

Do

Implement your plans within a structured management framework