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**Systems and software engineering —
Requirements for acquirers and
suppliers of information for users**

*Ingénierie du logiciel et des systèmes — Exigences pour acquéreurs et
fournisseurs de documentation utilisateur*



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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The main task of ISO/IEC JTC 1 is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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This second edition of ISO/IEC/IEEE 26512 cancels and replaces ISO/IEC/IEEE 26512:2010 with minor revisions:

- removal of superfluous definitions;
- updated version of the information management process from the normative standard ISO/IEC/IEEE 15288:2015;
- the addition of cross-reference Table 1, Acquirer and supplier processes;
- updates to the Bibliography; and
- editorial changes.

Introduction

This document was developed to assist users of ISO/IEC/IEEE 15288:2015 or ISO/IEC 12207 to acquire or supply systems and software information for users and information services as part of the life cycle processes. It defines the information development process from the acquirer's standpoint and the supplier's standpoint. This document addresses the identification, definition, and fulfillment of requirements for information for users as part of the acquisition and supply processes.

This document covers the requirements for information items used in the acquisition of information for users: the acquisition plan, document specification, statement of work, request for proposals, and the proposal. It also discusses the use of a Document Plan in the acquisition and supply processes.

This document is independent of the software tools that can be used to produce information for users, and applies to both printed and on-screen material, and to other media such as video or augmented reality systems. Much of its guidance is applicable to information for users for systems including hardware as well as software.

Earlier standards tended to view the results of the information development process as a single book or multivolume set: a one-time deliverable. Increasingly, information acquirers and suppliers recognize that most information for users is now produced from managed re-use of previously developed information (single-source documentation) adapted for new software or system versions, or presentation in various on-screen and printed media. While this document does not describe how to set up a content management system, it is applicable for organizations practicing single-source documentation, as well as for acquirers and suppliers of one-time deliverables.

Anyone who uses products that contain software needs accurate information about how the software will help the user accomplish a task. Information for users can be the first tangible item that the user sees, and so influences the user's first impressions of the product. If the information is supplied in a convenient form and is easy to find and understand, the user can quickly become proficient at using the product. Therefore, well-designed information for users not only assists the user and helps to reduce the cost of training and support, but also enhances the reputation of the product, its producer, and its suppliers.

Although software developers intend to design user interfaces that behave so intuitively that very little separate information is needed, this is rarely possible. Today's software offers increasingly robust functionality, not only within applications, but also across applications which intelligently exchange information with one another. Further, most software includes underlying rules and calculations, or algorithms that affect the results a user can obtain when using the software. These underlying programming mechanics are discernable by users, but only through laborious testing. For these and other reasons, information for users remains an essential component of usable software products and systems.

Information for users is often regarded as something done after the system has been implemented. However, for high-quality information, its development needs to be regarded as an integral part of the software or system life cycle. In fact, quality information for users or information management services are important enough to require specific planning.

Related standards for those acquiring and supplying information for software users include ISO/IEC 26514:2008 (IEEE Std 26514-2010), *Systems and software engineering — Requirements for designers and developers of user documentation*, and ISO/IEC/IEEE 26513, *Systems and software engineering — Requirements for testers and reviewers of information for users*. Other International Standards address the information for users and information management processes from the viewpoint of managers and agile projects.

This document is consistent with ISO/IEC 12207 and ISO/IEC 15288:2015 as an implementation of the Acquisition and Supply processes, which comprise the Agreement processes, and of the Information Management process.

This document is intended for use in all types of organizations, whether they have a dedicated documentation department or not. It can be used as a basis for local standards and procedures. Readers are assumed to have experience or knowledge of general agreement processes for acquisition and supply of products and services.

The order of clauses in this document does not imply that the acquisition activities need to be performed in this order, nor that information for users needs to be developed in this order or presented to the user in this order.

In each clause, the requirements are media-independent, as far as possible.

The checklists in Annexes A and B can be used to track conformance with the requirements of this document for acquirers and suppliers of information products.

The Bibliography contains references to source material used in the development of this document, as well as sources of additional information that might be useful to acquirers and suppliers.

Systems and software engineering — Requirements for acquirers and suppliers of information for users

1 Scope

This document supports the interest of system users in having consistent, complete, accurate, and usable information. It addresses both available approaches to standardization: a) process standards, which specify the way that information products are to be acquired and supplied; and b) information product standards, which specify the characteristics and functional requirements of the information.

As defined in ISO/IEC/IEEE 12207 and ISO/IEC/IEEE 15288:2015, the acquisition and supply activities make up the agreement processes of the software or system life cycle. Acquisition and supply of information for users and related services are specializations of those processes. Such services can be acquired and supplied for any part of the information management process, such as the following:

- information management;
- information design and development;
- information editing and review coordination;
- information testing, particularly usability testing;
- information production and packaging;
- information distribution and delivery;
- advice on the selection and implementation of information development tools and supporting systems; and
- information development process improvement.

This document provides an overview of the information management processes that are relevant to the acquisition and supply of information for users. It applies the Agreement processes (acquisition and supply) to information for users, and addresses the preparation of requirements for this information. These requirements are central to the information for users specification and statement of work discussed in this document. This document also addresses requirements for primary document outputs of the acquisition and supply process: the request for proposal and the proposal for documentation products and services.

This document is intended for use in acquiring or supplying any type of information for users and is independent of information development or management tools or methodologies.

This document might be helpful for acquiring and supplying the following types of information, although it does not cover all aspects of them:

- multimedia systems using animation, video, and sound;
- computer-based training (CBT) packages and specialized course materials intended primarily for use in formal training programs;
- maintenance documentation describing the internal operation of systems software;
- collaboratively generated, often known as “wiki”, documentation, which will usually need to be curated periodically; and
- information for users incorporated into the user interface.

This document is applicable to acquirers and suppliers of information for users, including a variety of specialists:

- analysts (e.g., business analysts, human factors engineers) who identify the tasks that the intended users will perform with the system;
- managers of the software or system development process or the information management process;
- managers of the acquisition process, and those who authorize and approve acquisitions; and
- managers and authors involved in proposal preparation.

It can also be consulted by those with other roles and interests in the information development process:

- information designers and architects who plan the structure, format, and content requirements of information products;
- experienced authors and editors who develop the written content for information for users;
- graphic designers with expertise in electronic media;
- user interface designers and ergonomics experts working together to design the presentation of the information on the screen;
- usability testers, information development reviewers, technical contacts;
- developers of tools for creating on-screen information for users.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC/IEEE 12207, *Systems and software engineering — Software life cycle processes*

ISO/IEC/IEEE 15288:2015, *Systems and software engineering — System life cycle processes*