

Australian/New Zealand Standard™

**Systems and software engineering—
Content of systems and software life
cycle process information products
(Documentation)**



AS/NZS ISO/IEC 15289:2007

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-015, Software and Systems Engineering. It was approved on behalf of the Council of Standards Australia on 3 November 2006 and on behalf of the Council of Standards New Zealand on 17 November 2006.
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Australian Electrical and Electronic Manufacturers Association
Australian Society or Technical Communications
Australian Software Metrics Association
Engineers Australia/ACTS Joint Board in Software Engineering
Griffith University
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-015, Software and Systems Engineering.

The objective of this Standard is to provide Systems and Software Engineers with a set of processes for managing and performing the stages of a systems life cycle. This Standard assumes an organization is implementing life cycle processes in conformance with AS/NZS 15288:2003 or AS/NZS ISO/IEC 12207:1997, with Amendments 1 and 2.

This Standard is identical with, and has been reproduced from ISO/IEC 15289:2006, *Systems and software engineering—Content of systems and software life cycle process information products (Documentation)*.

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<i>Reference to International Standard</i>	<i>Australian/New Zealand Standard</i>
ISO/IEC	AS/NZS ISO/IEC
12207 Information technology—Software life cycle processes	12207 Information technology—Software life cycle processes
15288 Systems engineering—System life cycle processes	15288 Systems engineering—System life cycle processes

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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INTRODUCTION

This International Standard was developed to assist users of ISO/IEC 15288:2002 or ISO/IEC 12207:1995/AMD 1:2002/AMD 2, to manage information items as products of the system or software life cycle processes. In many cases, ISO/IEC 12207:1995 may state that the result of a process must be documented or may imply the need for a document (or information item). ISO/IEC 12207:1995 clauses often do not specify the contents of documents. The indicated information items in ISO/IEC 12207:1995 aid in planning, producing, and evaluating the results of the life-cycle processes. Information items are essential to preserving what transpired when using system life cycle processes, and may be identified as deliverable documents.

This International Standard may be used as a conformance or a guidance document for projects and organizations claiming conformance to ISO/IEC 15288:2002 and/or ISO/IEC 12207:1995 and amendments. This International Standard's nomenclature for information items, document titles and contents is informative.

AUSTRALIAN/NEW ZEALAND STANDARD

Systems and software engineering — Content of systems and software life cycle process information products (Documentation)

1 Scope

This International Standard assumes an organization is implementing life cycle processes in conformance with ISO/IEC 15288:2002 or ISO/IEC 12207:1995, with Amendments 1 and 2. ISO/IEC 15288:2002 defines a set of processes for managing and performing the stages of a systems life cycle. It defines an Information Management process, but “does not detail documentation in terms of name, format, explicit content, and recording media” (1.3). ISO/IEC 12207:1995 with AMD 1 and 2, establishes a common framework for software life cycle processes, and in passing identifies or requires a number of documentation items.

The purpose of this International Standard is to guide users of ISO/IEC 12207:1995 (with Amendments 1 and 2) and ISO/IEC 15288:2002 in identifying and planning the specific information items to be produced during systems and software life cycles. As stated in G.5 of IEEE/EIA 12207.0:1996,

The use of the Documentation process should achieve the following objectives:

- a) Identify all documents to be produced by the process or project;
- b) Specify the content and purpose of all documents and plan and schedule their production;
- c) Identify the standards to be applied for development of documents;
- d) Develop and publish all documents in accordance with identified standards and in accordance with nominated plans;
- e) Maintain all documents in accordance with specified criteria.

This International Standard identifies the purpose and content of all identified Systems and Software Life Cycle information items. The information item contents are defined according to generic document types, as presented in Clause 7, and the specific purpose of the document (Clause 10). The generic document types (which may be referred to as information item types to conform to [3]) are to be used to identify the information necessary to support the ISO/IEC 15288:2002 agreement, enterprise, project, and technical processes; and the ISO/IEC 12207:1995, primary, supporting, and organizational life cycle processes.

This International Standard identifies records and information items based on analysis of references in ISO/IEC 15288:2002 and ISO/IEC 12207:1995, which in some cases provide partial or complete outlines for the content of specific documents. However, the requirements for the life-cycle processes do not uniquely and unambiguously state the requirements for the information items contents or the information needed by a user of an information item. Moreover, the information from the life-cycle processes may overlap or may be created and revised at different times. In short, the analyzed references do not result in a logically complete list of information items. For example, for each life-cycle process, it would be possible to prepare a plan, procedures, and reports, as well as numerous records, requests, descriptions and specifications. Such an elaboration of a