

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.
This Standard was published on 17 January 2007.

The following are represented on Committee IT-015:

Australian Computer Society
Australian Electrical and Electronic Manufacturers Association
Australian Society of Technical Communications
Australian Software Metrics Association
Engineers Australia/ACTS Joint Board in Software Engineering
Griffith University
National Association of Testing Authorities Australia
National ICT Australia
New Zealand Organisation for Quality
Software Quality Association, ACT
Software Quality Association, NSW
Systems Engineering Society of Australia
The University of Queensland
University of Auckland, NZ
University of South Australia
University of Technology, Sydney
Vendor Interests, NZ

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 06503.

Australian/New Zealand Standard™

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

First published as AS/NZS ISO/IEC 15289:2007.

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 7973 5

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)*.

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<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.

CONTENTS

	<i>Page</i>
1	Scope 1
2	Applicability..... 3
3	Conformance 3
3.1	Definition of Conformance..... 3
3.2	Conformance Situations 4
3.3	Type of Conformance 4
4	Normative references 5
5	Terms and definitions..... 5
6	Life cycle data and information items 6
6.1	Life cycle data characteristics..... 6
6.2	Records compared to other information items (documents)..... 6
6.3	Management of life cycle data (records) 7
6.4	Management of information items (documents) 7
6.4.1	Developing the documentation plan..... 7
6.4.2	Managing and controlling information items..... 7
7	Generic information types and information items 8
7.1	Overview 8
7.2	Record – generic content guidelines 8
7.3	Description – generic content guidelines 9
7.4	Plan – generic content guidelines..... 10
7.5	Procedure – generic content guidelines 11
7.6	Report – generic content guidelines..... 12
7.7	Request – generic content guidelines 13
7.8	Specification – generic content guideline..... 14
8	Mapping of information items to the life cycle 14
8.1	Mapping of information items to the system life cycle..... 15
8.2	Mapping of information items to the software life cycle 20
9	Records..... 27
9.1	General..... 27
9.2	Specific record contents 27
10	Specific information item (document) contents 28
10.1	Acceptance plan 28
10.2	Acceptance procedure 29
10.3	Acceptance review and testing report..... 29
10.4	Acquisition plan 29
10.5	Acquisition report 29
10.6	Asset management plan 29
10.7	Audit acknowledgement report 30
10.8	Audit report 30
10.9	Change request..... 30
10.10	Configuration management plan..... 30
10.11	Configuration management procedures 31
10.12	Configuration status report 31
10.13	Contract 31
10.14	Database design description 31

10.15	Database detailed design description	32
10.16	Database test procedure	32
10.17	Database test report	32
10.18	Development plan	32
10.19	Documentation plan.....	33
10.20	Domain engineering plan	33
10.21	Evaluation report.....	33
10.22	High-level software design description	33
10.23	Infrastructure plan	34
10.24	Installation plan	34
10.25	Installation report.....	34
10.26	Integration and test report	34
10.27	Interface Description	35
10.28	Joint review minutes.....	35
10.29	Low-level software design description.....	35
10.30	Maintenance plan	35
10.31	Maintenance problem/ modification report	36
10.32	Maintenance procedures	36
10.33	Migration plan.....	36
10.34	Modification notification report	36
10.35	Modification requirement report.....	37
10.36	Modification test report	37
10.37	Monitoring and control report.....	37
10.38	Operational test procedures	37
10.39	Operations plan	37
10.40	Organizational procedures.....	38
10.41	Problem report.....	38
10.42	Problem resolution procedure.....	38
10.43	Process assessment procedure	39
10.44	Process improvement analysis report.....	39
10.45	Product need assessment.....	39
10.46	Production plan	39
10.47	Progress report	40
10.48	Project management plan	40
10.49	Proposal	40
10.50	Qualification test procedure	41
10.51	Qualification test report.....	41
10.52	Quality assurance plan.....	41
10.53	Quality management procedures	41
10.54	Release record	42
10.55	Request for proposal (RFP)	42
10.56	Retirement notification report.....	42
10.57	Retirement plan	42
10.58	Reuse plan	43
10.59	Risk management plan	43
10.60	Risk management procedures.....	43
10.61	Software integration test plan.....	43
10.62	Software requirements specification	44
10.63	Software unit description	44
10.64	Software unit test plan.....	44
10.65	Software unit test procedure	44
10.66	Software unit test report.....	44
10.67	Software user documentation.....	45
10.68	Strategic plan.....	45
10.69	Supplier selection procedure.....	45
10.70	System architecture description	45
10.71	System description	46
10.72	System element description	46
10.73	System life cycle description.....	46
10.74	System integration test procedure.....	46

10.75	System requirements specification	47
10.76	Training documentation	47
10.77	Training plan	47
10.78	User Documentation	47
10.79	Validation plan	48
10.80	Validation test specification	48
10.81	Validation report	48
10.82	Verification plan	48
10.83	Verification report	48
Annex A	(informative) Procedure for identifying information items and their contents	50
Annex B	(Informative) Bibliography	51

List of Tables

Table 1 – Mapping of ISO/IEC 15288:2002, Clauses to Information Items for Each System Life Cycle Process	16
Table 2 – Mapping of ISO/IEC 12207 Clauses to Information Items for Each Software Life Cycle Process	21
Table 3 – Record References and Contents.....	27

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

documentation schema would be more rigorous than specified by either ISO/IEC 15288:2002 or ISO/IEC 12207:1995. Thus, information items may be combined or subdivided as needed for project or organizational purposes, as further defined in Clause 2, Applicability, and Clause 3, Conformance.

NOTE ISO/IEC 15504-5 provides guidance on the content of work products as well as information items. Its guidance includes descriptions of a set of information items (documents), which an assessor may encounter. The information items in its guidance may be produced by combinations and subdivisions of the required information items in this International Standard.

This International Standard:

- a) Addresses the technical information needed by those involved in ISO/IEC 15288:2002 and ISO/IEC 12207:1995 (with Amendments 1 and 2) processes;
- b) Is intended for use in an agreement process as described in ISO/IEC 15288:2002 or a two-party situation as described in ISO/IEC 12207:1995. The two-party situation may range from an informal agreement within an organization or to a legally binding contract between organizations;
- c) May be used by a single party as self-imposed tasks;
- d) May be applied to any type of project and life-cycle process;
- e) May be applied to any of the activities and tasks of a project and system or software product or service life cycle;
- f) Is not limited by size, complexity or criticality of the project;
- g) May be applied to all forms of information items, information item content and document delivery media;
- h) May be used for information items described in Commercial-Off-the-Shelf (COTS) products when the COTS product is specified as an integral part of a deliverable under a two-party situation (See ISO/IEC 12207:1995, clause 1.2).
- i) May be used to develop information items that provide evidence for process assessment performed with respect to ISO/IEC 15504: Process Assessment, and to guide process improvement activities.

Not included in the scope of this International Standard are:

- Information items showing only approval of an ISO/IEC 12207:1995 subclause, such as ISO/IEC 12207:1995, 5.1.1.3;
- Any ISO/IEC 15288:2002 or ISO/IEC 12207:1995 subclause not explicitly or implicitly identifying the recording of information about an activity or task, for example, ISO/IEC 12207:1995, 5.1.1.4;
- The form and content of approving information items or organizational management information such as business strategies, human resources and investment policies, personnel selection criteria, or payroll data;
- Instructions on combining or subdividing information items and information item contents of a similar nature;
- Guidance on selecting an appropriate presentation format, delivery media, and maintenance technology for system and software life cycle data, records, information items, or documentation, such as electronic publishing systems or data repositories;

NOTE ISO/IEC 18019-2004 provides guidance on formats for software user documentation.

2 Applicability

This International Standard is applicable for use by:

- a) Project Managers responsible for the Information Management process of ISO/IEC 15288:2002 (5.4.8) during a system life cycle;
- b) Project Managers responsible for identifying information item requirements and document contents when using ISO/IEC 12207:1995, or any other software engineering life-cycle process, to help determine what should be documented, when the documentation should occur, and what the contents of the documents should be;
- c) Acquirers responsible for determining what information items are needed to ensure the quality of the project, or delivered system, product or service;
- d) Individuals who write or support the design and development of systems and software information items;
- e) Individuals responsible for identifying information items required to claim conformance with ISO/IEC 12207:1995 (and Amendments 1 and 2) or consistent with ISO/IEC 15288:2002;
- f) Individuals undertaking system or software process improvement in their organizations.

ISO/IEC 12207:1995 does not always specify when software information items are to be prepared, nor does it identify information item contents. This International Standard provides a mapping of ISO/IEC 15288:2002 and ISO/IEC 12207:1995 clauses with a set of recommended information items. Users should map this International Standard to the requirements and needs of their agreements, or project and organizational procedures.

Reviewing and understanding the requirements, needs and background of users and stakeholders are essential to applying this International Standard accurately and economically, since some information items are designed for various purposes and user groups:

- To provide information to specialized types of users who may not be a part of a particular project.
- To address the same type of user but in environments not normally coexisting in the same effort.
- To aid both users who are expected to be computer-literate and understand technical terminology, and users who may not have this background.

The type of decision to be made, or work to be performed, by users of the information should be considered before that information is prepared.

3 Conformance

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 with Amendments 1 and 2.

3.1 Definition of Conformance

Having tailored the selected system or software life cycle processes, to claim conformance to this International Standard, the organization or project shall prepare the information items identified in this International Standard applicable to the selected and tailored ISO/IEC 15288:2002 processes or the selected and tailored ISO/IEC 12207:1995 activities and tasks.

In this IS for simplicity of reference, each information item is described as if it were published as a separate document. However, information items shall be considered as conforming if they are unpublished but available in a repository for reference, divided into separate documents or volumes, or combined with other information items into one document.

Use of the nomenclature of the information item titles in Clause 10 is not required to claim conformance with this IS. The generic and specific record and information item contents in clauses 7, 9, and 10 of this International Standard may be tailored to satisfy requirements of an organization, its projects, or agreements based on the tailored conformance to ISO/IEC 15288:2002 or ISO/IEC 12207:1995 and amendments. In tailoring, information item titles and contents recommended by this International Standard may be modified (added to, deleted from, combined or reworded). The contents of the information items shall correspond to the selected and tailored processes, activities, and tasks.

Throughout this International Standard, "shall" is used to express a provision that is binding, "should" to express a recommendation among other possibilities, and "may" to indicate a course of action permissible within the limits of this International Standard. When using this International Standard as a guide, replace the term "shall" with "should".

The verb **"include"** used in this International Standard indicates that either (1) the information is present or (2) a reference to the information is listed.

3.2 Conformance Situations

Conformance may be interpreted differently for various situations. The relevant situation shall be identified in the claim of conformance:

- a) When conformance is claimed for an organization, the organization shall make public a document declaring its tailoring of the records and information items, and its interpretation of any clauses of the standard that reference "the contract."

NOTE One possible way for an organization to deal with clauses that cite "the contract" is to specify that they shall be interpreted in the project plans for any particular project.

- b) When conformance is claimed for a project, the project plans or the contract shall document the tailoring of the records and information items, and the interpretation of any clauses of the standard that reference "the contract."

NOTE A project's claim of conformance is typically specified with respect to the organization's claim of conformance.

- c) When conformance is claimed for a multi-supplier program, it may be the case that no individual project can claim conformance because no single contract calls for all the required records and information items. Nevertheless, the program, as a whole, may claim conformance if each of the required records and information items are produced by an identified party. The program plans shall document the tailoring of the records and information items, and their assignment to the various parties, as well as the interpretation of any clauses of the standard that reference "the contract."
- d) When conformance is claimed for an information item, the item shall contain the generic contents required in clause 9 of this standard and the specific content required in clause 10.

3.3 Type of Conformance

One of the following types of conformance shall be asserted. The selected type shall be identified in the claim of conformance:

- a) **Tailored:** The minimum set of required information items is determined by tailoring of processes and activities in accordance with annex A of ISO/IEC 12207:1995 or Annex A of ISO/IEC 15288:2002.
- b) **Absolute:** The minimum set of required information items is all of those specified as mandatory (that is, clauses containing "shall") in the text of the standard.

NOTE Absolute conformance may be claimed for selected processes or information items even if absolute conformance with the entire standard is not claimed.

4 Normative references

The following referenced documents are indispensable for the application 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 12207:1995 /AMD 1:2002/AMD 2:2004, *Information technology — Software life cycle processes*

ISO/IEC 15288:2002, *Systems engineering — System life cycle processes*

5 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO/IEC 12207:1995, ISO/IEC 6592:1999 and the following apply.

5.1

approval

written notification, by an authorized representative, that an information item appears to satisfy requirements, is complete.

NOTE Such approval does not shift responsibility from the supplier to meet requirements under a two-party situation.

5.2

COTS

Commercial-Off-The-Shelf; an item that a supplier offers to several acquirers for general use

5.3

criteria

specific data items identified as contents of information items for appraising a factor in an evaluation, audit, test or review

5.4

database

organization of data, usually controlled within an automated database management system(s)

NOTE Documentation of each database is required in ISO/IEC 12207, 5.3.7.1

5.5

document

generic term for separately identifiable, published (in electronic or printed media) information

5.6

documentation plan

plan identifying the documents to be produced during the system or software life cycle

5.7

information item

a separately identifiable body of information that is produced and stored for human use during a system or software life cycle

5.8

information item content

information included in an information item, associated with a system, product or service, to satisfy a requirement or need

EXAMPLE Information for plans, specifications, designs, test information and manuals.

5.9

information item type

a group of information items consistent with a pre-arranged set of generic criteria

EXAMPLE A “plan” is the information item type for all plans and “report” is the information item type for all reports.

5.10

software item

resulting software source and executable code from the integration of software units and software components

NOTE Includes identification and description of the software product, software life-cycle data, archive and release data and instructions for building the executable object code.

6 Life cycle data and information items

6.1 Life cycle data characteristics

This IS specifies how life cycle data is managed in information items. The required data from the life-cycle process shall be organized into records or a logical part of another information item and be consistent with an information item generic type. An information item shall include its generic information item contents (Clause 7).

Each set of records and information item produced as a document described in this International Standard shall support the life cycle data characteristics:

- a) Unambiguous: Information is unambiguous if it is described in terms that allow only a single interpretation, aided, if necessary, by a definition.
- b) Complete: Information is complete if it includes necessary, relevant requirements and/or descriptive material, responses are defined for the range of valid input data, and terms and units of measure are defined.
- c) Verifiable: Information is verifiable if a person or tool can check it for correctness.
- d) Consistent: Information is consistent if there are no conflicts within it.
- e) Modifiable: Information is modifiable if it is structured and has a style such that changes can be made completely, consistently, and correctly while retaining the structure.
- f) Traceable: Information is traceable if the origin of its components can be determined.
- g) Presentable: Information is presentable if it can be retrieved and viewed.

6.2 Records compared to other information items (documents)

A record is a special type of information item containing a unit of structured data. Consistent with the ISO 9000 series, the purpose of a record is to state results achieved or to provide evidence of activities performed by an organizational entity. Records gain their value from being combined with other records in a set, typically by inclusion in structured databases or repositories where the individual records are available for retrieval and analysis. Records hold the factual data (evidence) for the other generic information types. A single record, a selection of records, or a complete listing of the repository's contents is not suitable for issuance as a complete communication product as are the other information items (documents) such as a plan or procedure.

The other information items (documents) are produced and communicated for human use and contain formal elements (such as purpose, scope, and summary), intended to make them usable by their intended audience.

6.3 Management of life cycle data (records)

Life cycle data results from the execution of the activities and tasks of the standard. Many of the clauses in ISO/IEC 15288:2002 and ISO/IEC 12207:1995 require life cycle data to be produced or recorded. The clauses of ISO/IEC 15288:2002 and ISO/IEC 12207:1995 do not, however, dictate the content, location, format, or media to be used to record and maintain the data.

When choosing appropriate data to be recorded, users should also determine where in the organization or project's records the data should be recorded. Records may be maintained in databases, registers, repositories, archives, or other information management systems. Projects shall establish record retention policies in consideration of system life cycle and organizational needs for the data. Annex B of this International Standard lists other standards and guides, which may be consulted for helpful suggestions on choosing appropriate data records, data formatting, and data packaging. Clause 7 defines the content of generic records and Clause 9 recommends content for specific records.

6.4 Management of information items (documents)

The management of information items shall be performed by applying the Documentation Process of ISO/IEC 12207:1995 and/or the Information Management Process of ISO/IEC 15288:2002. The Documentation Process should support the needs of a project and the related product or service. It should include procedures for preparing, collecting, identifying, classifying, distributing, storing, updating, archiving and retrieving information items (documents).

Managers of documents perform the documentation process to 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.

NOTE Annex A provides a procedure for identifying information items and their contents during information management and documentation planning.

6.4.1 Developing the documentation plan

The tasks to be performed in the Documentation Process shall be identified in a Documentation Plan. When developing the Documentation Plan, consideration should be given to policies and procedures of the acquirer and supplier. ISO/IEC 15910 contains requirements for documentation plans for software user documentation. The Documentation Process for each project should be considered as part of a repeatable process for the acquirer and supplier.

NOTE A Documentation Plan may be created for an entire organization or to cover multiple projects that reuse document content.

6.4.2 Managing and controlling information items

Projects and organizations may publish their record descriptions and tailored information item descriptions in a data dictionary. This practice helps the document management, development, and maintenance activities.

An established hierarchy of information items should be prescribed and a mechanism developed for resolving conflicts between items. For example, there should be one master schedule for the entire suite of plans relating to a single project, and schedule information given in specific plans should relate to this master schedule.

Commercial or other existing information items may be substituted for all or part of an information item if they contain the desired information, meet applicable quality characteristics, and are properly referenced. When existing information items are readily available to users, consider providing a reference to these information items rather than reproducing the information.

7 Generic information types and information items

7.1 Overview

The use of generic types simplifies the application of consistent structure, content, and formats for similar information items (records and documents), to support usability. This International Standard defines the life cycle data of ISO/IEC 12207:1995 and ISO/IEC 15288:2002 by relating tasks and activities to the following generic information item types:

- a) record,
- b) description,
- c) plan,
- d) procedure,
- e) report,
- f) request,
- g) specification.

Generic information item (document) contents are mapped to the recommended output information items shown in column 3 of Tables 1 and 2.

The lists of contents of generic information item types do not specify a normative sequence, structure of parts, or a list of section titles.

7.2 Record – generic content guidelines

Purpose: Characterize the data an organizational entity retains.

NOTE Consistent with the ISO 9000 series, the purpose of a record is to state results achieved or to provide evidence of activities performed by an organizational entity.

A record should include the following:

- a) Date of record, date recorded, and status
- b) Scope
- c) Subject or category
- d) Issuing organization
- e) References

- f) Body
- g) Unique record identifier
- h) Recommended records are listed in Clause 9, Table 3.

7.3 Description – generic content guidelines

Purpose: Represent a planned or actual function, design, or item

A Description includes:

- a) Date of issue and status
- b) Scope
- c) Issuing organization
- d) References
- e) Context
- f) Notation for description
- g) Body
- h) Summary
- i) Glossary
- j) Change history

Recommended output information items:

- Database design description
- Database detailed design description
- High-level software design description
- Interface description
- Low-level software design description
- Proposal
- Release record
- Software unit description
- System architecture description
- System description
- System element description
- System life cycle description

7.4 Plan – generic content guidelines

Purpose: Define when, how, and by whom specific activities are to be performed.

A Plan includes:

- a) Date of issue and status
- b) Scope
- c) Issuing organization
- d) References (applicable policies, laws, standards, contracts, and other plans and references)
- e) Approval authority
- f) Approach for technical and management review
- g) Other plans (plans or task descriptions that expand on the details of a plan)
- h) Planned activities and tasks
- i) Identification of tools, methods, and techniques
- j) Schedules
- k) Budgets and cost estimates
- l) Resources and their allocation
- m) Responsibilities and authority
- n) Interfaces among parties involved
- o) Risks and risk assessment and mitigation measures
- p) Quality assurance and control measures
- q) Environment, infrastructure, security, and safety
- r) Training
- s) Glossary
- t) Change procedures and history
- u) Termination process

Recommended output Information Items

- Acceptance plan
- Acquisition plan
- Asset management plan
- Configuration management plan
- Development plan
- Documentation plan