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## Systems and software engineering — Software life cycle processes —

Part 2:

Relation and mapping between ISO/IEC/IEEE 12207-1:2017 and ISO/IEC/IEEE 12207:2008

ICS: 35.080

JO/IEC, 1:2008

7:2008

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### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

The committee responsible for this document is ISO/IEC JTC1, Information Technology, Subcommittee SC7, Software and Systems Engineering, in cooperation with the IEEE Computer Society Systems and Software Engineering Standards Committee, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition of ISO/IEC/IEEE 12207-2 is intended to complement ISO/IEC/IEEE 12207:2017 by providing a crosswalk of required outcomes, activities and tasks between ISO/IEC/IEEE 12207:2017 and ISO/IEC/IEEE 12207:2008.

ISO/IEC/IEEE 12207 consists of the following parts, under the general title Systems and Software Engineering — Software life cycle processes:

- Part 1: Concepts and requirements
- Part 2: Relation and mapping between ISO/IEC/IEEE 12207-1:2017 and ISO/IEC/IEEE 12207:2008

ISO/IEC/IEEE 12207 Part 1 is the current version of ISO/IEC/IEEE 12207:2017, although without expression of a Part 1. ISO/IEC/IEEE 12207 Part 2 is additionally provided as extension part of ISO/IEC/IEEE 12207. Future revisions of ISO/IEC/IEEE 12207:2017 will be renumbered and titled as a Part 1 document of the ISO/IEC/IEEE 12207 series.

### Introduction

The processes in ISO/IEC/IEEE 12207-1:2017, which is only a renumbered version ISO/IEC/IEEE 12207:2017, form a comprehensive set from which an organization can construct software system life cycle models appropriate to its products and services. An organization, depending on its purpose, can select and apply an appropriate subset to fulfil that purpose.

However, ISO/IEC/IEEE 12207:2017 does not include "software-specific processes" as a specialization of system processes, as identified in Clause 7 of ISO/IEC/IEEE 12207:2008. Those processes are subdivided into lower level detailed processes and partially described as tasks and Notes in processes defined by introducing system views in the new edition of ISO/IEC/IEEE 12207:2017. This document supports software engineering users of ISO/IEC/IEEE 12207:2008 in applying their current processes, activities and tasks based on the previous edition to perform effectively and efficiently processes, activities and tasks in the new edition of ISO/IEC/IEEE 12207:2017. This document also intends to help system engineers using ISO/IEC/IEEE 12207: 2017 (or ISO/IEC/IEEE 15288: 2015) collaborate with software engineers who have used ISO/IEC/IEEE 12207:2008.

This document can be used in one or more of the following modes in conjunction with ISO/IEC/IEEE 12207:

- By an organization to help use the current organizational software processes and assets derived from ISO/IEC/IEEE 12207:2008 in establishing an environment of desired processes of ISO/IEC/IEEE 12207:2017.
- By a project to help use the current project's software processes and assets derived from ISO/IEC/IEEE 12207:2008 and extend these to processes of ISO/IEC/IEEE 12207:2017 to provide software systems as products and services.
   By an acquirer and a supplier to help use the current agreement concerning processes and
- By an acquirer and a supplier to help use the current agreement concerning processes and activities derived from ISO/IEC/IEEE 12207:2008 in establishing an environment of desired processes of ISO/IEC/IEEE 12207:2017
- By process assessors to serve as an aid to mapping tasks and activities of the previous edition of ISO/IEC/IEEE 12207:2008 to the process reference model in Annex C of ISO/IEC/IEEE 12207:2017-1 for process assessments that may be used to support organizational process improvement.

## Systems and software engineering — Software life cycle processes — Part 2: Relation and mapping between ISO/IEC/IEEE 12207-1:2017 and ISO/IEC/IEEE 12207:2008

### 1 Scope

This document provides the mapping expressing corresponding relations between software life cycle processes in ISO/IEC/IEEE 12207:2017 and the processes in the previous edition ISO/IEC/IEEE 12207:2008.

These relations are demonstrated by means of mapping tables that show relationships between activities and tasks, and process outcomes.

This mapping assists users of the 2008 edition to transition to using the 2017 edition.

This document will help users understand the differences between the reference processes and requirements of the two editions of ISO/IEC/IEEE12207, and help the user to understand any potential gaps or process enhancements might be needed in seeking conformance to, and/or use of ISO/IEEE 12207:2017. Also, this document provides to such users the mapping which helps to identify corresponding and compatible process outcomes, activities and tasks of processes for software systems in the ISO/IEC/IEEE 12207:2017.

The mapping between ISO/IEC/IEEE12207:2017 and 2008 in this document can be used as a basis to continuously conduct, improve and extend current process assets including software specific process assets based on ISO/IEC/IEEE12207:2008 for effective implementation of the new edition of ISO/IEC/IEEE 12207:2017. These There are no normative references in this document.

Terms and definitions

For \*1.

For the purposes of this document, the terms and definitions given in ISO/IEC 12207:2018 and ISO/IEC/IEEE 24765: 2017 apply.

ISO and IEC and IEEE maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- IEEE Standards Dictionary Online: available at <a href="https://innovate.ieee.org/ieee-standards-dictionary-online">https://innovate.ieee.org/ieee-standards-dictionary-online</a>

NOTE Definitions for software engineering terms typically can be found in ISO/IEC/IEEE 24765, available at www.computer.org/sevocab

### **Purpose**

Users should apply this document to map between their current software life cycle processes consistent with ISO/IEC/IEEE 12207:2008 and the processes, activities, and tasks required by the current version, ISO/IEC/IEEE 12207:2017.

The user may define and document user implemented processes differently from either ISO/IEC/IEEE 12207:2008 or ISO/IEC/IEEE 12207:2017. Then, the mapping tables of this ISO/IEC/IEEE 12207-2 may be modified with additional user process information, when the user's processes are mapped to the reference processes of ISO/IEC/IEEE 12207:2017 in order to claim conformance with that standard.

This document will help users (who are presumably users of ISO/IEC/IEEE 12207:2008 as well) to understand the similarities and differences between the reference process definitions and requirements contained in ISO/IEC/IEEE 12207:2008 and ISO/IEC/IEEE 12207:2017 and then to help map their own implemented lifecycle processes to ISO/IEC/IEEE 12207:2017. Where ISO/IEC/IEEE 12207:2017 requirements (at the level of processes, outcomes, activities or tasks) differ from those in ISO/IEC/IEEE 12207:2008 the user will be able to identify elements (again at the level of processes, activities or tasks) which have gaps or will not meet requirements for conformance with ISO/IEC/IEEE 12207:2017.

Users can identify corresponding process outcomes, activities or tasks from the mapping tables in clause 6 of this document.

This ISO/IEC/IEEE 12207-2 document has none of conformance requirements. However, process outcome or activity/task mapping of this ISO/IEC/IEEE 12207-2 can be used to support conformance to ISO/IEC/IEEE 12207:2017 (i.e. 12207-1). So, such case will be stated in 1. Scope.

NOTE 1 The mappings in this document expand on ISO/IEC/IEEE 12207:2017, Table I.1, Comparison of processes in ISO/IEC/IEEE 12207:2017 and the previous edition, and Table I.2, Comparison of process outcomes in ISO/IEC/IEEE 12207:2017 and software-related outcomes in the previous edition.

NOTE 2 Analysis of the relationships between the tasks and activities of the previous edition and the current edition of ISO/IEC/IEEE 12207, as detailed in this document, can assist in process assessment and improvement. ISO/IEC 33004 may be used to develop a process reference model.

The following are typical use cases when users of this document can apply mappings:

- Users can understand which processes, outcomes, activities, or tasks of ISO/IEC/IEEE 12207:2017 cover or subsume the outcomes, activities, or tasks of processes (including software specific processes) of ISO/IEC/IEEE 12207:2008;
- Users can identify outcomes, activities, or tasks of processes (including software specific processes) of ISO/IEC/IEEE 12207:2008 that are to be continuously conducted, enhanced, extended or improved to meet the requirements of ISO/IEC/IEEE 12207:2017 and/or to demonstrate achievement of required outcomes, activities and tasks of the software life cycle processes.

### 5 Overview of the mappings

### 5.1 General

The process models used in the 2008 versions of ISO/IEC/IEEE 12207 and ISO/IEC/IEEE 15288 were harmonized to the process model used in both ISO/IEC/IEEE 12207:2017 and ISO/IEC/IEEE 15288:2015.

This document provides bi-directional mappings for outcomes, activities, and tasks between ISO/IEC/IEEE 12207:2008 and ISO/IEC/IEEE 12207:2017.

This document contains the following tables:

- Clause 6 Outcome mappings
- Mapping from ISO/IEC/IEEE 12207:2017 to ISO/IEC/IEEE 12207:2008 (Table1)
- Mapping from ISO/IEC/IEEE 12207:2008 to ISO/IEC/IEEE 12207:2017 (Table2)
- Clause 7 Activity and Task-level mappings

- Mapping from ISO/IEC/IEEE 12207:2017 to ISO/IEC/IEEE 12207:2008 (Table3)
- Mapping from ISO/IEC/IEEE 12207:2008 to ISO/IEC/IEEE 12207:2017 (Table4)

These tables can be used to determine how requirements in the previous edition were treated or requirements in the current edition have originated. Where a relationship is identified, it does not necessarily imply that the intent is identical.

This document provides a correspondence between the previous and current editions of ISO/IEC/IEEE 12207. It does not provide any explanatory commentary on why a change has been made, or the significance of the change.

NOTE Couplings of associative multiple outcomes or tasks are often mapped, rather than one-to-one mapping, from ISO/IEC/IEEE 12207:2008 to ISO/IEC/IEEE 12207:2017.

### 5.2 Compound and singular requirements

A compound requirement is a requirement (i.e. 'shall') containing more than one obligation that needs to be satisfied. There are many instances in ISO/IEC/IEEE 12207:2008 where the requirement is expressed as

"... shall do this and do that and do the other".

Although this may be a single sentence, it represents three separate obligations that will need to be satisfied.

Singular requirements are created from compound requirements by separating out these distinct requirements, when such a separated mapping helps to provide more obvious relations.

By way of example, the following sub-clause fragment is taken from ISO/IEC/IEEE 12207:2008 task '6.4.10 Software Maintenance Process, 3.1 Process implementation 1', 1st sentence, "The maintainer shall develop, document, and execute plans and procedures for conducting the activities and tasks of the Software Maintenance Process."

Three singular requirements can be identified in this compound requirement:

"6.4.10.3.1.1.1-1 The maintainer shall develop, [document, and execute] plans and procedures for conducting the activities and tasks of the Software Maintenance Process."

"6.4.10.3.1.1.1-2 The maintainer shall [develop], document, [and execute] plans and procedures for conducting the activities and tasks of the Software Maintenance Process."

"6.4.10.3.1.1.1-3 The maintainer shall [develop, document, and] execute plans and procedures for conducting the activities and tasks of the Software Maintenance Process."

Square brackets (i.e. []) are used to identify the particular requirement(s) to be ignored in reading the numbered compound requirements.

NOTE Additionally, 'should' and 'may' statements and descriptions in NOTEs are used to make mapping, when they are helpful for user to understand reasons for correspondences.

### 6 Outcome mappings

### 6.1 Outcome mapping from ISO/IEC/IEEE 12207:2017 to ISO/IEC/IEEE 12207:2008 edition

Table 1 correlates process outcomes required by ISO/IEC/IEEE 12207:2017 to process outcomes required in ISO/IEC/IEEE 12207:2008. The mapping indicates related outcomes that may be helpful in meeting the requirements of the ISO/IEC/IEEE 12207:2017. There is no assumption that all the required outcomes of the ISO/IEC/IEEE 12207:2008 are required to fulfil the required outcomes of ISO/IEC/IEEE 12207:2017.

When the sub clause column expresses 'l.m.n.2 x)', it indicates the process outcome x) that is described in sub clause for outcome 'l.m.n.2' of process 'l.m.n' in ISO/IEC/IEEE 12207:2017 and ISO/IEC/IEEE 12207:2008 respectively.

NOTE An only process outcome with aster marking, i.e. '(\*)', has a discrepancy mapping between one on Table I.2 in Annex I.2 of ISO/IEC/IEEE 12207:2017 to provide the more obvious relation, though this is extension of Table I.2.

Table 1 — Outcome mapping from ISO/IEC/IEEE 12207:2017 to ISO/IEC/IEEE 12207:2008

Process Outcomes (ISO/IEC/IEEE 12207:2017)			Process Outcomes (ISO/IEC/IEEE 12207:2008)		
6.1.1 Acquisition process		, Q	E. 9. 160, 50,		
Acquisition 2. a) A request for supply is	6.1.1	6.1.1	Acquisition 2. a) acquisition needs, goals, product and/or		
prepared.	.2a) 🔻	(2a)	service acceptance criteria and acquisition strategies are		
	P	15	defined; Marie Control of the Contro		
Acquisition 2. b) One or more suppliers are	6.1.1	6.1.1	Acquisition 2. c) one or more suppliers is selected;		
selected.	.2b)	.2c) 🦸	A COLL SOL		
<b>Acquisition</b> 2. c) An agreement is established	6.1.1	6.1.1	Acquisition 2. b) an agreement is developed that clearly		
between the acquirer and supplier.	.2c)	.2b)	expresses the expectation, responsibilities and liabilities of both		
		Fell. JA	the acquirer and the supplier;		
	6.1.1		<b>Supply</b> 2. c) an agreement is established between the acquirer		
		.2c)	and the supplier for developing, maintaining, operating,		
, cà	and,		packaging, delivering, and installing the product and/or service;		
Acquisition 2. d) A product or service complying	6.1.1	6.1.1	Acquisition 2. d) a product and/or service is acquired that		
with the agreement is accepted.	.2d)	.2d)	satisfies the acquirer's stated need;		
( )	6.1.1	6.1.1	<b>Acquisition</b> 2. e) the acquisition is monitored so that specified		
	.2d)	.2e)	constraints such as cost, schedule and quality are met;		
	6.1.1	6.1.1	Acquisition 2. f) supplier deliverables are accepted;		
	.2d)	.2f)			
<b>Acquisition</b> 2. e) Acquirer obligations defined in	6.1.1	6.1.1	<b>Acquisition</b> 2. g) any identified open items have a satisfactory		
the agreement are satisfied.	.2e)	.2g)	conclusion as agreed to by the acquirer and the supplier.		
6.1.2 Supply process					
Supply 2. a) An acquirer for a product or service	6.1.2	6.1.2	<b>Supply</b> 2. a) an acquirer for a product or service is identified;		
is identified.	.2a)	.2a)			
<b>Supply</b> 2. b) A response to the acquirer's request	6.1.2	6.1.2	<b>Supply</b> 2. b) a response to an acquirer's request is produced;		
is produced.	.2b)	.2b)			
<b>Supply</b> 2. c) An agreement is established	6.1.2	6.1.2	<b>Supply</b> 2. c) an agreement is established between the acquirer		
between the acquirer and supplier.	.2c)	.2c)	and the supplier for developing, maintaining, operating,		
			packaging, delivering, and installing the product and/or service;		
Supply 2. d) A product or service is provided.		6.1.2	Supply 2. d) a product and/or service that meets the agreed		
	.2d)	.2d)	requirements are developed by the supplier;		
<b>Supply</b> 2. e) Supplier obligations defined in the		6.1.2	<b>Supply</b> 2. e) the product and/or service is delivered to the		
agreement are satisfied.	.2e)	.2e)	acquirer in accordance with the agreed requirements;		

Supply 2. f) Responsibility for the acquired product or service, as directed by the agreement, is transferred.  2f) 2f) agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the product is installed in accordance with agreed requirements.  Supply 2. f) the folded Management 2. a) policies and processes are provided;  and product is installed in accordance with agreed requirements.  Supply 2. f) the management 2. d) Fife tycle Model Management 2. d) Infective for life cycle model management 2. d) Fife cycle Model Management 2. d) Infective for life cycle mode	Process Outcomes (ISO/IEC/IEEE 12207:2008)			
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6.2.3 Portfolio Management process				
0.2.5 1 of tiono Management process				
Portfolio Management 2.a) Business venture 6.2.3 6.2.3 Project Portfolio Management 2. a) business venture	re			
opportunities, investments or necessities are 22) 2a) opportunities, investments or necessities are qualifie	d,			
qualified and prioritized. prioritized and selected;				
<b>Portfolio Management</b> 2. b) Projects are 6.2.3   6.3.1   <b>Project Planning</b> 2. a) the scope of the work for the project Planning 2. a	project is			
identified2b) .2a) defined;				
Portfolio Management 2. c) Resources and 6.2.3   Project Portfolio Management 2. b) resources and b	oudgets for			
budgets for each project are allocated2c) .2b) each project are identified and allocated;				
Portfolio Management 2. d) Project6.2.3Project Portfolio Management 2. c) project manage	ment			
management responsibilities, accountability, and l.2d) l.2c) accountability and authorities are defined;				
authorities are defined.				
Portfolio Management 2. e) Projects meeting 6.2.3   6.2.3   Project Portfolio Management 2. d) projects meeting	~			
agreement and stakeholder requirements are l.2e) l.2d) agreement and stakeholder requirements are sustain	.ed;			
sustained.				
Portfolio Management 2. f) Projects not meeting 6.2.3   6.2.3   Project Portfolio Management 2. e) projects not me	_			
agreement or satisfying stakeholder .2f) .2e) agreement or stakeholder requirements are redirected	ed or			
requirements are redirected or terminated. terminated;				
Portfolio Management 2. g) Projects that have 6.2.3 None None of outcomes is mapped.				
completed agreements and satisfied stakeholder   .2g)				
requirements are closed.				
6.2.4 Human Resource Management process				
<b>Human Resource Management</b> 2. a) Skills 6.2.4 <b>Human Resource Management</b> 2. a) Skills required				
required by projects are identified2a) .2a) projects are identified;	by			

Process Outcomes (ISO/IEC/IEEE 12207:2017)			Process Outcomes (ISO/IEC/IEEE 12207:2008)			
Human Resource Management 2. b) Necessary	6.2.4	6.2.4	Human Resource Management 2. b) necessary human			
human resources are provided to projects.	.2b)	.2b)	resources are provided to projects;			
Human Resource Management 2. c) Skills of	6.2.4	6.2.4	Human Resource Management 2. c) skills of personnel are			
personnel are developed, maintained or	.2c)	.2c)	developed, maintained or enhanced;			
enhanced.						
		6.2.4	<b>Human Resource Management</b> 2. e) individual knowledge,			
	.2c)	.2e)	information and skills are collected, shared, reused and			
			improved throughout the organization.			
Human Resource Management 2. d) Conflicts in		6.2.4	<b>Human Resource Management</b> 2. d) conflicts in multi-project			
multi-project resource demands are resolved.	.2d)	.2d)	resource demands are resolved;			
6.2.5 Quality Management process						
Quality Management 2. a) Organizational		6.2.5	Quality Management 2. a) organization quality management			
quality management policies, objectives, and	.2a)	.2a)	policies and procedures are defined;			
procedures are defined and implemented.						
	6.2.5	6.2.5	<b>Quality Management</b> 2. b) organization quality objectives are			
	.2a)	.2b)	defined;			
		6.2.5	Quality Management 2.c) accountability and authority for			
	.2a)	.2c)	quality management are defined;			
Quality Management 2. b) Quality evaluation	6.2.5	6.2.5	Quality Management 2. a) organization quality management			
criteria and methods are established.	.2b)	.2a)	policies and procedures are defined;			
Quality Management 2. c) Resources and	6.2.5	6.2.4	Human Resource Management 2. b) necessary human			
information are provided to projects to support	.2c) )	.2b)	resources are provided to projects;			
the operation and monitoring of project quality	5	2.9	id also coile			
assurance activities.	All	1130				
Quality Management 2. d) Quality assurance	6.2.5	6.2.5	Quality Management 2. d) the status of customer satisfaction			
evaluation results are gathered and analyzed.	.2d)	.2d) **	is monitored;			
Quality Management 2. e) Quality management	6.2.5	6.2.5	Quality Management 2. e) appropriate action is taken when			
policies and procedures are improved based	.2e), d	.2e)	quality objectives are not achieved.			
upon project and organizational results.						
6.2.6 Knowledge Management process  Knowledge Management 2. a) A taxonomy for	9.0	7 2 2	Dougo Asset Management 2 c) as easet money and strategy			
the application of knowledge assets is identified.	6.2.6 .2a)	7.3.2 .2a)	<b>Reuse Asset Management</b> 2. a) an asset management strategy is documented;			
the application of knowledge assets is identified.	6.2.6	7.3.2	Reuse Asset Management 2. b) an asset classification scheme			
	.2a)	.2b)	is established;			
	6.2.6	7.3.1	<b>Domain Engineering</b> 2. a) the representation forms for the			
	.2a)	.2a)	domain models and the domain architectures are selected;			
	6.2.6	7.3.1	<b>Domain Engineering</b> 2. b) the boundaries of the domain and			
	.2a)	.2b)	its relationships to other domains are established;			
	6.2.6	7.3.1	<b>Domain Engineering</b> 2. c) a domain model that captures the			
	.2a)	.2c)	essential common and different features, capabilities, concepts,			
			and functions in the domain is developed;			
		7.3.1	Domain Engineering 2. d) a domain architecture describing			
	.2a)	.2d)	the family of systems within the domain, including their			
			commonalities and variabilities is developed.;			
		7.3.3	<b>Reuse Program Management</b> 2. a) the organization's reuse			
	.2a)	.2a)	strategy, including its purpose, scope, goals and objectives, is			
			defined;			
		7.3.3	<b>Reuse Program Management</b> 2. b) the domains for potential			
77 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.2a)	.2b)	reuse opportunities are identified;			
Knowledge Management 2. b) The	6.2.6	6.2.4	Human Resource Management 2. c) skills of personnel are			
organizational knowledge, skills, and knowledge	.2b)	.2c)	developed, maintained or enhanced;			
assets are developed or acquired.		<u> </u>				

Process Outcomes (ISO/IEC/IEEE 12207:2017)		Process Outcomes (ISO/IEC/IEEE 12207:2008)		
	6.2.6	7.3.1	<b>Domain Engineering</b> 2. e) assets belonging to the domain are	
	.2b)	.2e)	specified;	
	6.2.6	7.3.1	Domain Engineering 2. f) assets belonging to the domain are	
	.2b)	.2f)	acquired or developed and maintained throughout their life cycles;	
	6.2.6	7.3.2	Reuse Asset Management 2. c) Criteria for asset acceptance,	
	.2b)	.2c)	certification and retirement are defined;	
	6.2.6 .2b)	7.3.3 .2c)	<b>Reuse Program Management</b> 2. c) the organization's systematic reuse capability is assessed;	
	6.2.6 .2b)	7.3.3 .2d)	<b>Reuse Program Management</b> 2. d) the reuse potential of each domain is assessed;	
	6.2.6	7.3.3	Reuse Program Management 2. e) reuse proposals are	
	.2b)	.2e)	evaluated to ensure the reuse product is suitable for the	
			proposed application;	
Knowledge Management 2. c) The	6.2.6	6.2.4	Human Resource Management 2. e) individual knowledge,	
organizational knowledge, skills, and knowledge	.2c)	.2e)	information and skills are collected, shared, reused and	
assets are available.		- 0.4	improved throughout the organization.	
	6.2.6	7.3.1	Domain Engineering 2. g) the domain models and	
	.2c) 6.2.6	.2g) 7.3.2	architectures are maintained throughout their life cycles;	
		.2d)	Reuse Asset Management 2. d) an asset storage and retrieval mechanism is operated;	
	.2c) 6.2.6	7.3.2	Reuse Asset Management 2. f) changes to the assets are	
	.2c) ^	2f)	controlled;	
	6.2.6	7.3.2	Reuse Asset Management 2. g) Users of assets are notified of	
	.2c)	.2g)	problems detected, modifications made, new versions created	
	100	, 40°	and deletion of assets from the storage and retrieval	
100	Z.W.	م الله	mechanism.;	
· Ter	6.2.6 .2c)	7.3.3 .2f)	Reuse Program Management 2. f) the reuse strategy is implemented in the organization;	
Knowledge Management 2. d) Knowledge	6.2.6		Reuse Asset Management 2. e) the use of assets is recorded;	
management usage data is gathered and	.2d)	. <b>2</b> e)		
analyzed.	ane of			
مراجع المراجع	6.2.6	7.3.3	Reuse Program Management 2. g) feedback, communication,	
1417.93	.2d)	.2g)	and notification mechanisms that operate between affected	
		<b>7</b> 00	parties are established;	
	6.2.6	7.3.3	Reuse Program Management 2. h) the reuse program is	
6.3.1 Project Planning process	.2d)	.2h)	monitored and evaluated.	
Project Planning 2. a) Objectives and plans are	6.3.1	6.3.1	<b>Project Planning</b> 2. a) the scope of the work for the project is	
defined. (*)	.2a)	.2a)	defined;	
		6.3.1	<b>Project Planning</b> 2. b) the feasibility of achieving the goals of	
	.2a)	.2b)	the project with available resources and constraints are	
			evaluated;	
	6.3.1 .2a)	6.3.1	<b>Project Planning</b> 2. c) the tasks and resources necessary to	
		.2c)	complete the work are sized and estimated;	
		6.3.1	<b>Project Planning</b> 2. e) plans for the execution of the project are	
Project Planning 2 h) Poles recognishilities	.2a) 6.3.1	.2e) 6.2.3	developed; Project Portfolio Management 2. c) project management	
<b>Project Planning</b> 2. b) Roles, responsibilities, accountabilities, and authorities are defined. (*)	6.3.1 .2b)	6.2.3 .2c)	accountability and authorities are defined;	
are defined.		6.3.1	<b>Project Planning</b> 2. d) interfaces between elements in the	
	.2b)	.2d)	project, and with other project and organizational units, are	
			identified;	
	6.3.1	6.3.1	<b>Project Planning</b> 2. e) plans for the execution of the project are	
	.2b)	.2e)	developed;	