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Systems and software engineering — Life cycle management —

Part 2:

Guidelines for the application of ISO/ IEC/IEEE 15288 (System life cycle

iTeh STANDARD PREVIEW

(Singénierie des systèmes et du logiciel — Gestion du cycle de vie — Partie 2: Lignes directrices pour l'application de l'ISO/IEC/IEEE 15288 (Processus du cycle de vie du système)

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

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 document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Software and Systems Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition cancels and replaces ISO/IEC TR 24748-2:2011. The changes to this edition reflect changes in ISO/IEC/IEEE 15288:2015 from the 2008 edition, as well as the movement of concept material to ISO/IEC/IEEE 24748-1:2018.

A list of all parts in the ISO/IEC/IEEE 24748 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

Introduction

This document and its companion, ISO/IEC TR 24748-3 *Guide to the application of ISO/IEC 12207 (Software life cycle processes)* specifically support use of ISO/IEC/IEEE 15288 and ISO/IEC/IEEE 12207, respectively. These two guidelines continue and make use of the alignment effort evident in the two revised International Standards. Terminology, structure and content in the guidelines are aligned consistent with that in the two International Standards. Consequently, the users of ISO/IEC/IEEE 12207 and ISO/IEC/IEEE 15288 will benefit from having documents complementarily addressing all aspects of services or products over their life cycle.

Besides the above, there is also increasing recognition of the importance of ensuring that all life cycle stages, and all aspects within each stage, are supported with thorough guidance enabling alignment with process documents that focus on areas besides systems and software. This can include hardware, humans, data, processes (e.g. review process), procedures (e.g. operator instructions), facilities and naturally occurring entities (e.g. water, organisms, minerals). The concept and structure of the ISO/ IEC/IEEE 24748 series is intended to allow its extension to such additional domains where that will provide value to users.

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Systems and software engineering — Life cycle management —

Part 2: Guidelines for the application of ISO/IEC/IEEE 15288 (System life cycle processes)

1 Scope

This document is a guideline for the application of ISO/IEC/IEEE 15288:2015. It addresses system, life cycle, organizational, project, and process, concept application, principally through reference to ISO/IEC/IEEE 24748-1 and ISO/IEC/IEEE 15288:2015. It gives guidance on applying ISO/IEC/ IEEE 15288:2015 from the aspects of strategy, planning, application in organizations, and application on projects. It also provides comparison of the differences between ISO/IEC/IEEE 15288:2015 and the prior versions, ISO/IEC 15288:2008.

This document is intended to be consistent with both ISO/IEC/IEEE 24748-1 and ISO/IEC/ IEEE 15288:2015 in its treatment of life-cycle concepts and systems engineering processes.

I I en SIAP Systems engineering for defense programs is addressed in IEEE Std 15288.1, Application of Systems NOTE Engineering on Defense Programs. (**Standards.iteh.ai**)

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There are no normative references in this document. 24748-2-2018

Terms and definitions 3

For the purposes of this document, the terms and definitions given in ISO/IEC/IEEE 15288:2015 apply.

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

- IEC Electropedia: available at <u>http://www.electropedia.org/</u>
- ISO Online browsing platform: available at http://www.iso.org/obp
- IEEE Standards Dictionary Online: available at http://dictionary.ieee.org

4 Overview of ISO/IEC/IEEE 15288:2015

4.1 General

ISO/IEC/IEEE 15288:2015 Systems and software engineering — System life cycle processes, establishes a common framework for system life cycle processes, with well-defined terminology, that can be referenced by any party, particularly those having any involvement or interest in the system life cycle or performance of systems engineering activities. It applies to the acquisition of systems, which can be comprised of products, services, or both, as well as to the supply, development, operation, maintenance, and disposal of systems, whether performed internally or externally to an organization.

ISO/IEC/IEEE 15288:2015 may be used stand-alone or jointly with other International Standards, such as ISO/IEC/IEEE 12207:2017, and supplies a process reference model that supports process capability assessment in accordance with ISO/IEC 33002:2015 (Process assessment).

The purpose of ISO/IEC/IEEE 15288:2015 is to provide a defined set of processes to facilitate communication among acquirers, suppliers and other stakeholders in the life cycle of a system. ISO/ IEC/IEEE 15288:2015 is written for acquirers of systems and for suppliers, developers, operators, maintainers, managers, quality assurance managers, and users of systems.

4.2 Structure of ISO/IEC/IEEE 15288:2015

ISO/IEC/IEEE 15288:2015 contains requirements in two clauses:

- 1) Clause 6, which defines the requirements for the system life cycle processes;
- 2) Annex A that provides requirements for tailoring of ISO/IEC/IEEE 15288:2015.

Six informative annexes support the use of ISO/IEC/IEEE 15288:2015 or its harmonization with ISO/IEC 12207:2008:

- 1) Annex B provides information on possible information items that may be associated with each process in ISO/IEC/IEEE 15288:2015.
- 2) Annex C provides information about use of the ISO/IEC/IEEE 15288:2015 system life cycle processes as a process reference model to support process assessment.
- 3) Annex D provides an informative description of the process constructs used in ISO/IEC/ IEEE 15288:2015. (standards.iteh.ai)
- 4) Annex E provides information on the process view concept and examples of its use from two different process viewpoints. <u>ISO/IEC/IEEE 24748-2:2018</u>
- 5) Annex F provides information on the Architecture Definition and Design Definition processes in ISO/IEC/IEEE 15288:2015 as they relate to the Architectural Design process in the 2008 version of ISO/IEC/IEEE 15288.
- 6) Annex G provides information on application of system life cycle processes to a system of systems.

Readers of ISO/IEC/IEEE 15288:2015 are advised to consult Clause 5 of that International Standard to gain understanding of the key concepts used.

4.3 Context of ISO/IEC/IEEE 15288:2015

ISO/IEC/IEEE 15288:2015 has a focus on the processes that are used by or for a project that exists in a defined relationship with the organization, other projects and enabling systems. A project is assigned responsibility that encompasses one or more life cycle stages of the system-of-interest. ISO/IEC/ IEEE 15288:2015 is applicable to organizations and projects whether they act as the acquirer or the supplier of a system and whether the system is comprised of products, services, or a combination of both.

The context of ISO/IEC/IEEE 15288:2015 is illustrated in <u>Figure 1</u>. As the figure indicates, a single project may involve multiple organizations working together as partners. The project for the system of-interest may also interact with other projects, either for other systems that will interoperate with the system-of-interest, or for enabling systems. Such a project should use ISO/IEC/IEEE 15288:2015 to establish common terminology, as well as information flows and interfaces among the several organizations, to enhance communications.



ISO/IEC/IEEE 24748-2:2018

https://standards.iteh.ai/catalog/standards/sist/fl610fl0-a1d7-4aca-a839-When an organization applies ISO/JEC/JEEE 15288:2015 to a particular system that system becomes the system-of-interest. The system-of-interest has a life cycle that consists of multiple stages through which the system passes during its lifetime, denoted in the figure as s_1 , s_2 , ... s_n . These stages are not necessarily sequential and their execution can be completely or partially in parallel, as well as iterative or recursive. An example of typical stages is:

- s₁: concept;
- s₂: development;
- s₃: production;
- s4: utilization;
- s₅: support; and
- s₆ retirement.

```
NOTE 1 Stages are described in ISO/IEC/IEEE 15288:2015, 5.4.2 and in ISO/IEC/IEEE 24748-1:2018, 4.3.2 and 5.
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NOTE 2 The management of the transition from one stage to another is not necessarily a linear, sequential, progression and engineering activities are associated with providing appropriate work products and decision-making information in each stage.

A number of enabling systems are deployed throughout the system life cycle to provide the systemof-interest with support as needed. Each life cycle stage can require one or more enabling systems. It is important to note that an enabling system has its own life cycle and that when ISO/IEC/IEEE 15288:2015 is applied to it, it then becomes a system-of-interest.

NOTE 3 The role and use of enabling systems are described in <u>6.3.4</u> and <u>6.7.4.6</u> of this document.

ISO/IEC/IEEE 24748-2:2018(E)

NOTE 4 For related material on enabling systems, see also ISO/IEC/IEEE 15288:2015, 5.2.3 and ISO/IEC/IEEE 24748-1:2018, 4.2.4.

ISO/IEC/IEEE 15288:2015 is applicable at any level of the structure associated with a system-ofinterest. As a system is decomposed recursively into its system elements, the processes of ISO/IEC/ IEEE 15288:2015 may be used for each system and system element in the system structure, including enabling systems. Each system and system element has a life cycle of its own and its own set of enabling systems.

NOTE 5 For related material on system structure, see ISO/IEC/IEEE 15288:2015, 5.2.2 and ISO/IEC/IEEE 24748-1:2018, 4.2.3.

In order to perform needed operations and transformations upon systems during their life cycles, the organization creates and monitors projects. Projects have a defined scope, resources (including time) and focus. The scope can involve managing all of the stages of the life cycle, a subset of the stages, one or more defined processes or one or more process activities. The time scale can be of varying duration, for example a few weeks or tens of years. The focus of the project is related to the system-of-interest and its systems and system elements in some form of system structure or stage partitioning.

NOTE 6 System life cycle concepts are described in ISO/IEC/IEEE 24748-1:2018, 4.3.

Organizations focus on systems that are created or transformed by projects within the organization or in conjunction with other organizations. Projects have a span of interest that includes the system-ofinterest and its related enabling systems. Some enabling systems are under direct control of the project. The system-of-interest and those enabling systems make up the project span of control.

The work performed by projects is on or with the system-of-interest within one or more life cycle stages. ISO/IEC/IEEE 15288:2015 includes the requirement to define an appropriate life cycle for a system, the selection of processes to be applied throughout the life cycle and the application of these processes to fulfil agreements and achieve customer satisfaction.

ISO/IEC/IEEE 24748-2:2018

ISO/IEC/IEEE 15288:2015 can/be applied totall types of sproduct of receive a systems and system elements consisting of one or more of the following hardware, software, humans, processes, procedures, facilities, and naturally occurring entities. The use of ISO/IEC/IEEE 15288:2015 for systems within this broad scope is one of its main advantages.

The use of the standard may be adapted to accommodate the varying project requirements in treating system life cycles.

NOTE 7 This can be performed by adapting the life cycle as described in ISO/IEC/IEEE 24748-1:2018, Clause 5 and tailoring described in ISO/IEC/IEEE 15288:2015, Annex A.

4.4 Comparison of ISO/IEC/IEEE 15288:2015 to prior versions

This clause compares the 2008 and 2015 versions of International Standard ISO/IEC/IEEE 15288. Changes have been made to the processes at the structural level (i.e., processes have been added, renamed, or combined with others, with resultant renumbering). These structural changes in the ISO/IEC/IEEE 15288 process set are summarized in <u>Table 1</u> and the reasons for each structural change are given in <u>Table 2</u>.

Table 1 — Mapping of process sets betwee	n ISO/IEC 15288:2008	and ISO/IEC/IEEE 15288:2015
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J	SO/IEC 15288:2008		ISO/IEC/IEEE 15288:201	15
Clause	Process	Clause	Process	Structural Changes
6.2.3	Project Portfolio Management Process	6.2.3	Portfolio management process	Title changed
		6.2.6	Knowledge management process	Added process
6.3	Project Processes	6.3	Technical management process- es	Title changed

]	ISO/IEC 15288:2008	ISO/IEC/IEEE 15288:2015		
Clause	Process	Clause	Process	Structural Changes
		6.3.8	Quality assurance process	Added process
		6.4.1	Business or mission analysis process	Added process
6.4.1	Stakeholder Requirements Definition Process	6.4.2	Stakeholder needs and require- ments definition process	Title changed; numbering;
6.4.2	Requirements Analysis Process	6.4.3	System requirements defini- tion process	Title changed; numbering;
6.4.3	Architectural Design Process	6.4.4	Architecture definition process	Title changed; numbering
		6.4.5	Design definition process	Added process
		6.4.6	System analysis process	Added process
6.4.4	Implementation Process	6.4.7	Implementation process	Numbering
6.4.5	Integration Process	6.4.8	Integration process	Numbering
6.4.6	Verification Process	6.4.9	Verification process	Numbering
6.4.7	Transition Process	6.4.10	Transition process	Numbering
6.4.8	Validation Process	6.4.11	Validation process	Numbering
6.4.9	Operation Process	6.4.12	Operation process	Numbering
6.4.10	Maintenance Process	D6 .4.13	Maintenance process	Numbering
6.4.11	Disposal Process	6.4.14 14145.1	Disposal process	Numbering

Table 1 (continued)

Table 2 — Basis for change of process set in ISO/IEC/IEEE 15288:2015

Title change between ISO/IEC 15288:2008 and ISO/ IEC/IEEE 15288:2015 ^{905d415} /iso-iec-iec	sist/f1610f10-a1d7-4 Reason for change e-24748-2-2018
6.2.3 Project Portfolio Management Process (2008)	The purpose of the Portfolio Management process is to initiate and sustain necessary, sufficient and suitable projects in order to meet the strategic objectives of the
Changed to:	organization. Accordingly, it is done outside the scope of any one project and further, it is inappropriate to speak of the project portfolio of a single project.
6.2.3 Portfolio management process (2015)	
6.2.6 Knowledge management process (2015) [ADDED]	This was activity 6.2.4.3 d) under process 6.2.4 Human Resource Management Process in the 2008 version. The change to a process in ISO/IEC/IEEE 15288:2015 reflects the greater appreciation that an organizations knowledge is more than what its human resources possess and that the outcomes, activities and tasks need to be more inclusive to reflect this fact.
6.3 Project Processes (2008)	Reflects that the processes under this heading relate to the technical management of a project, but are not the full set of processes involved in managing a project.
Changed to	
6.3 Technical Management Processes (2015)	
6.3.8 Quality assurance process (2015) [ADDED]	In the 2008 version of 15288, quality assurance was task 6.3.2.3 a) 2) under process 6.3.2, Project Assess- ment and Control Process. It is now recognized as having a broader contribution, under process group 6.3, Technical processes, to the successful realization of the system over its life cycle.

Title change between ISO/IEC 15288:2008 and ISO/ IEC/IEEE 15288:2015	Reason for change
6.4.1 Business or mission analysis process (2015) [ADDED]	This is a critical precursor to determining needs and defining requirements. It was not explicitly addressed in ISO/IEC 15288:2008 and has now been added as a separate process in the 2015 version.
6.4.1 Stakeholder Requirements Definition Process (2008)	The change clarifies that stakeholder needs must first be determined, then used as a basis for deriving stake- holder requirements. That is:
Changed to:	a) needs and requirements are related but different
	b) that both must be addressed to provide a system that responds to stakeholders,
6.4.2 Stakeholder needs and requirements definition process (2015)	c) the stakeholders' views of what they desire that the system provide them in terms of products and services drives the requirements that express the intended interaction the system will have with its operational environment, and
	d) the stakeholders' requirements are derived by anal- ysis of the stakeholder needs
iTeh STAND	This is consistent with ISO/IEC/IEEE 29148:2011, Systems and software engineering — Life cycle processes A Requirements engineering, Clause 5.2.3, paragraph 1, Transformation of needs into requirements.
6.4.2 Requirements Analysis Process (2008) fands Changed to: ISO/IEC/ https://standards.iteh.ai/catalog/s 0be69905d415/ii 6.4.3 System requirements definition process (2015)	The process fittle in the 2008 version of 15288 did not reflect the full scope of what must be done to define system requirements: analysis is only a part of it. In addition, the scope of the process itself is broadened in the 2015 version of 15288 to include the preparation and maintenance of system requirements, not just the initial definition itself.
6.4.3 Architectural Design Process (2008) Changed to:	The process in the 2015 version of 15288 gives a more encompassing view of all the activities and tasks re- quired to architect a system, whereas the 2008 version focuses on the narrower aspect of architecture design.
6.4.4 Architecture definition process (2015)	
6.4.5 Design definition process (2015) [ADDED]	Design was inferred in ISO/IEC 15288:2008 process 6.4.3, Architectural Design Process. However, the 2015 version treats architecting (process 6.4.4) and design (6.4.5) as two distinct sets of effort, with outcomes, activities and tasks appropriate to each.
6.4.6 System analysis process (2015) [ADDED]	System analysis was inferred in ISO/IEC 15288:2008 process 6.4.3, Architectural Design Process. In the 2015 version, it is treated explicitly. Further, the process in the 2015 version of 15288 recognizes that system analysis can be performed in conjunction with more processes than just system design.

Table 2 (continued)

In addition to the above, the preponderance of changes in the 2015 edition of ISO/IEC/IEEE 15288 are refinements to the purpose, outcomes, activities and tasks of the processes in the International Standard. All of these changes reflect further experience with the International Standard since publication of the 2008 edition. Table 3 illustrates the extent of these changes for one process, using the Purpose, Outcomes and the first part of the Activities and Tasks in the Acquisition Process as an example, highlighting the specific changes with an underline. It is critical that the user of 15288 conduct a detailed comparison of each process in ISO/IEC/IEEE 15288:2015 compared to ISO/IEC 15288:2008.

Table 3 — Illustration of detail level process changes from ISO/IEC 15288:2008 to ISO/IEC/
IEEE 15288:2015

Acquisition process in ISO/IEC 15288:2008	Acquisition process in ISO/IEC/IEEE 15288:2015
6.1.1.1 Purpose	6.1.1.1 Purpose
The purpose of the Acquisition Process is to obtain a product or service in accordance with the acquirer's requirements.	The purpose of the Acquisition process is to obtain a product or service in accordance with the acquirer's requirements.
	NOTE As part of this process, the agreement is mod- ified when a change request is agreed to by both the acquirer and supplier.
6.1.1.2 Outcomes	6.1.1.2 Outcomes
As a result of the successful implementation of the Acquisition Process:	As a result of the successful implementation of the Acquisition process:
a) <u>A strategy for the acquisition is established.</u>	a) <u>A request for supply is prepared.</u>
b) One or more suppliers are selected.	b) One or more suppliers are selected.
c) <u>Communication with the supplier is maintained.</u>	c) An agreement is <u>established between the acquirer</u>
d) An agreement <u>to acquire a product or service ac-</u> <u>cording to defined acceptance criteria</u> is established.	and supplier. d) A product or service complying with the agreement
e) A product or service complying with the agreement is accepted.	is accepted. e) <u>Acquirer obligations defined in the agreement are</u>
f) Payment or other consideration is rendered. AR	satisfied. EVEV f) [DELETED]
6.1.1.3 Activities and tasks (Standards.	6.1.1.3 Activities and tasks
The acquirer shall implement the following activities and tasks in accordance with applicable organizational policies and procedures with respect to the Acquislards/ tion Process. 0be69905d415/iso-iec-iec	The acquirer shall implement the following activities and tasks in accordance with applicable <u>organization</u> policies and procedures with respect to the Acquisi- tion process. NOTE The activities <u>and resulting agree-</u> ment from this process often apply to suppliers in the
apply to <u>one or more</u> suppliers.	supply chain, including subcontracted suppliers.
a) Prepare for the acquisition . This activity consists of the following tasks:	a) Prepare for the acquisition. This activity consists of the following tasks:
1) <u>Establish</u> a strategy for how the acquisition will be conducted.	1) <u>Define</u> a strategy for how the acquisition will be conducted.
NOTE This strategy <u>includes reference to</u> the life cycle model, a schedule of milestones and selection criteria if the supplier is external to the acquiring organization.	NOTE This strategy <u>describes or references</u> the life cycle model, <u>risks and issues mitigation</u> , a schedule of milestones, and selection criteria if the supplier is external to the acquiring organization. <u>It also includes</u> key drivers and characteristics of the acquisition, such as responsibilities and liabilities; specific models, methods, or processes; level of criticality; formality;

Besides thoroughly reviewing all processes in ISO/IEC/IEEE 15288:2015 versus those in the 2008 edition, it may be useful for the user to recognize that a number of the processes changes reflect a significant change in the thoroughness with which the processes for requirements identification, architecting, design, and analysis are treated. <u>Table 4</u> shows the overall scope of this major change in the "front end" processes.

Table 4 — Comparison of requirements, architecting, design and analysis processes betweenISO/IEC 15288:2008 and ISO/IEC/IEEE 15288:2015

Requirements, architecting, design and analysis processes in ISO/IEC 15288:2008	Requirements, architecting, design and analysis processes in ISO/IEC/IEEE 15288:2015
	6.4.1 Business or mission analysis process
<u>6.4.1</u> Stakeholder Requirements Definition Process; <u>6.4.2</u> Requirements Analysis Process	<u>6.4.2</u> Stakeholder needs and requirements definition process (includes analysis of stakeholder requirements);
	<u>6.4.3</u> System requirements definition process (in- cludes analysis of system requirements)
6.4.3 Architectural Design Process	6.4.4 Architecture definition process;
	6.4.5 Design definition process
	6.4.6 System analysis process

5 Application concepts

5.1 Overview

This document provides guidelines for life cycle management in the field of systems. This clause highlights and explains essential concepts on which this document is based, and introduces key concepts useful in reading and applying ISO/IEC/IEEE 15288:2015.

NOTE ISO/IEC/IEEE 24748-1 provides more information on concepts related to life cycle management in **(standards.iteh.ai)**

5.2 System concepts

<u>ISO/IEC/IEEE 24748-2:2018</u>

Application of ISO/IEC/IEEE 15288 presupposes an understanding of system concepts.

NOTE System concepts for systems that are any mix of products and services are introduced in ISO/IEC/IEEE 15288:2015, 5.2. Additional discussion is in ISO/IEC/IEEE 24748-1:2018, 4.2.

5.3 Life cycle concepts

Application of ISO/IEC/IEEE 15288 presupposes an understanding of life cycle concepts.

NOTE 1 Life cycle concepts are introduced in ISO/IEC/IEEE 15288:2015, 5.4. Additional discussion is in ISO/IEC/IEEE 24748-1:2018 4.3.

NOTE 2 ISO/IEC/IEEE 24748-1 provides more information on concepts related to life cycle management in general.

5.4 Process concepts

Application of ISO/IEC/IEEE 15288 presupposes an understanding of process concepts.

NOTE Process concepts are introduced in ISO/IEC/IEEE 15288:2015, 5.5. Additional discussion is in ISO/IEC/IEEE 24748-1:2018, Annex A.

5.5 Organizational concepts

Application of ISO/IEC/IEEE 15288 presupposes an understanding of organizational concepts.

NOTE Organizational concepts are introduced in ISO/IEC/IEEE 15288:2015, 5.3. Additional discussion is in ISO/IEC/IEEE 24748-1:2018, Annex B.

5.6 Project concepts

Application of ISO/IEC/IEEE 15288 presupposes an understanding of organizational concepts.

NOTE Project concepts are introduced in ISO/IEC/IEEE 15288:2015, 5.3. Additional discussion is in ISO/IEC/IEEE 24748-1:2018, Annex C.

6 Applying ISO/IEC/IEEE 15288:2015

6.1 Overview

Understanding concepts does not give the ability to immediately apply them without further thought and work. The following clauses give guidance on what should be done to bridge the gap between concept and practical use in different project, organizational and life cycle environments, starting with planning the application of ISO/IEC/IEEE 15288:2015.

Modern businesses strive to develop a robust set of life cycle processes that are applied repeatedly to the projects of the business. To accommodate that need, ISO/IEC/IEEE 15288:2015 is intended to be useful for application at either the organization level, or at the project level. An organization should adopt the standard and supplement it with appropriate procedures, practices, tools and policies. A project of the organization should typically conform to the organization's processes rather than conform directly to this document.

In some cases, projects may be executed by an organization that does not have an appropriate set of processes adopted at the organizational level. Such a project may apply the provisions of ISO/IEC/ IEEE 15288:2015 directly to the project.

(standards.iteh.ai)

6.2 Application strategy

ISO/IEC/IEEE 24748-2:2018

6.2.1 Overview https://standards.iteh.ai/catalog/standards/sist/f1610f10-a1d7-4aca-a839-

0be69905d415/iso-iec-iece-24748-2-2018 ISO/IEC/IEEE 15288:2015 may be applied for a variety of reasons, such as to:

- a) define the processes, activities and tasks required for use on a specific project;
- b) improve processes used by an organization across multiple projects; and
- c) provide guidance on system life cycle processes usable within a larger process, such as an organization's acquisition process or maintenance process.

Whatever the reason for application of ISO/IEC/IEEE 15288:2015, a suggested application strategy consists of the following:

- a) plan the application;
- b) adapt ISO/IEC/IEEE 15288:2015, if applicable;
- c) conduct pilot project(s);
- d) formalize the approach; and
- e) institutionalize the approach.

This strategy is typical of the approach that should be followed when introducing changes into an organization or project. The application strategy described above may be repeated several times within a project or across an organization as additional processes are addressed and/or improved.

Whether the existing basis for system life cycle processes is ISO/IEC 15288:2008 or some other reference point, the fundamental starting point is to identify all the changes to go from that basis to