

P15289

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Type of Project: Revision to IEEE Standard 15289-2015

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Status: PAR for a Revision to an existing IEEE Standard

Root Project: 15289-2015

1.1 Project Number: P15289

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: ISO/IEC/IEEE Systems and software engineering -- Content of life-cycle information items (documentation)

Changes in title: ISO/IEC/IEEE ~~International Standard~~ Systems and software engineering -- Content of life-cycle information items (documentation)

3.1 Working Group: Life Cycle Documentation (Information Items) (C/S2ESC/15289_WG)

Contact Information for Working Group Chair

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Contact Information for Working Group Vice-Chair

None

3.2 Sponsoring Society and Committee: IEEE Computer Society/Software & Systems Engineering Standards Committee (C/S2ESC)

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None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2016

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 10

5.2 Scope: This International Standard specifies the purpose and content of all identified systems and software life-cycle and service management information items (documentation). The information item contents are defined according to generic document types and the specific purpose of the information item (document). This International Standard assumes an organization is implementing life-cycle processes, or practicing service management, using one or more of the following: ISO/IEC/IEEE 15288:2015, Systems and software engineering -- System life cycle processes, ISO/IEC 12207:2008 (IEEE Std 12207-2008), Systems and software engineering -- Software life cycle processes, ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013), Information technology -- Service management -- Part 1: Service management system requirements.

This International Standard provides a mapping of ISO/IEC/IEEE 15288:2015, ISO/IEC 12207:2008 (IEEE Std 12207-2008), and ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) and ISO/IEC 20000-2 (IEEE Std 20000-2-2013) clauses with a set of information items. It provides a consistent approach to meeting the information and

Changes in scope: This International Standard specifies the purpose and content of all identified systems and software life-cycle and service management information items (documentation). The information item contents are defined according to generic document types; ~~as presented in Clause 7;~~ and the specific purpose of the ~~document~~ ~~information~~ ~~(Clause item 10)~~ ~~(document)~~. This International Standard assumes an organization is implementing life-cycle processes, or practicing service management, using one or more of the following: ~~ISO/IEC 15288:2008~~ ~~(IEEE Std 15288-2008)~~; ~~2015~~, Systems and software engineering -- System life cycle processes, ISO/IEC 12207:2008 (IEEE Std 12207-2008), Systems and software engineering -- Software life cycle processes, ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013), Information technology -- Service management -- Part 1: Service management system requirements. This International Standard provides a mapping of ~~ISO/IEC 15288:2008~~ ~~(IEEE Std 15288-2008)~~; ~~2015~~, ISO/IEC 12207:2008 (IEEE Std 12207-2008), and ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) and ISO/IEC 20000-2 (IEEE Std 20000-2-2013) clauses with a set of

documentation requirements of systems and software engineering and IT service management.

ISO/IEC 12207:2008 (IEEE Std 12207-2008) and ISO/IEC/IEEE 15288:2015 define a set of processes for managing and performing the stages of a systems life cycle. They define an Information Management process, but they do "not detail documentation in terms of name, format, explicit content, and recording media". ISO/IEC 12207:2008 (IEEE Std 12207-2008) establishes a common framework for software life-cycle processes and in passing identifies or requires a number of documentation items. Its process reference model does not represent a particular process implementation approach, nor does it prescribe a system/software life-cycle model, methodology, or technique. ISO/IEC 12207:2008 (IEEE Std 12207-2008) does not always specify when software information items are to be prepared, nor does it identify information item contents. ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) establishes comprehensive requirements for documents and records, with some specific requirements. ISO/IEC 20000-2:2012 (IEEE Std 20000-2-2013), Information technology -- Service management -- Part 2: Guidance on the application of service management systems provides guidance on the use of Part 1. The generic document types (which may be referred to as information item types) are to be used to identify the information necessary to support the ISO/IEC/IEEE 15288:2015 agreement, organizational project-enabling, technical management, and technical processes; the ISO/IEC 12207:2008 (IEEE Std 12207-2008) primary, supporting, and organizational life -cycle processes; or the ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) service management system (SMS), service delivery, relationship, resolution, and control processes. For each life-cycle process or service, it would be possible to prepare a policy, plan, procedures, and reports, as well as numerous records, requests, descriptions and specifications. Such an elaboration of the documentation schema would be more rigorous than specified by ISO/IEC/IEEE 15288:2015 or ISO/IEC 12207:2008 (IEEE Std 12207-2008). This International Standard does not detail the life-cycle processes in terms of methods or procedures required to meet the requirements and outcomes of a process. Thus, information items may be combined or subdivided as needed for project or organizational purposes.

information items. It provides a consistent approach to meeting the information and documentation requirements of systems and software engineering and IT service management. ISO/IEC 12207:2008 (IEEE Std 12207-2008) and ISO/IEC/IEEE 15288:20082015 (IEEE Std 15288-2008) define a set of processes for managing and performing the stages of a systems life cycle. They define an Information Management process, but they do "not detail documentation in terms of name, format, explicit content, and recording media". ISO/IEC 15288:2008 (IEEE Std 15288-2008), and ISO/IEC 12207:2008 (IEEE Std 12207-2008) establishestablishes a common framework for software life-cycle processes and in passing identifyidentifies or requirerequires a number of documentation items. Its process reference model does not represent a particular process implementation approach, nor does it prescribe a system/software life-cycle model, methodology, or technique. ISO/IEC 12207:2008 (IEEE Std 12207-2008) does not always specify when software information items are to be prepared, nor does it identify information item contents. ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) establishes comprehensive requirements for documents and records, with some specific requirements. ISO/IEC 20000-2:2012 (IEEE Std 20000-2-2013), Information technology -- Service management -- Part 2: Guidance on the application of service management systems provides guidance on the use of Part 1. The generic document types (which may be referred to as information item types) are to be used to identify the information necessary to support the ISO/IEC/IEEE 15288:20082015 (IEEE Std 15288-2008) agreement, organizational project-enabling, enterprise, technical projectmanagement, and technical processes; the ISO/IEC 12207:2008 (IEEE Std 12207-2008) primary, supporting, and organizational life -cycle processes; or the ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) service management system (SMS), service delivery, relationship, resolution, and control processes. For each life-cycle process or service, it would be possible to prepare a policy, plan, procedures, and reports, as well as numerous records, requests, descriptions and specifications. Such an elaboration of the documentation schema would be more rigorous than specified by ISO/IEC/IEEE 15288:20082015 (IEEE Std 15288-2008) or ISO/IEC 12207:2008 (IEEE Std 12207-2008). As ISO/IEC 15288:2008 (IEEE Std 15288-2008) points out (1.4), "This International Standard does not detail the life-cycle processes in terms of methods or procedures required to meet the requirements and outcomes of a process." 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. This International Standard does not establish a service management system. The scope of this International Standard does not include the following: a) the format or content of recommended input data or input information items, except for the content of those input items that are also output information items; b) instructions on combining or subdividing information items and information item contents of a similar nature; c) 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, content management systems, or data repositories. NOTE 2 ISO/IEC 26514:2008, Systems and software engineering — Requirements for designers and developers of user documentation, provides guidance on formats for software user documentation. NOTE 3 ISO/IEC 15504-5:2012, Information technology — Process Assessment — Part 5: An exemplar software life cycle process

assessment model, Annex B (informative), and ISO/IEC 15504 6:2013 Information technology—Process assessment—Part 6: An exemplar system life cycle process assessment model, Annex B (informative) detail the content of work products as well as information items. Their guidance includes descriptions of a set of information items (documents) that an assessor may encounter. The information items in their guidance may be produced by combinations and subdivisions of the required information items in this International Standard.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: The purpose of this International Standard is to provide requirements for users of ISO/IEC 12207:2008 (IEEE Std 12207-2008), ISO/IEC/IEEE 15288:2015, and ISO/IEC 20000-1:2011 (IEEE Std 20000-1:2013) for identifying and planning the specific information items (information products) to be developed and revised during systems and software life cycles and service management processes.

Changes in purpose: The purpose of this International Standard is to provide requirements for users of ISO/IEC 12207:2008 (IEEE Std 12207-2008), ISO/IEC/IEEE 15288:20082015, (IEEE Std 15288-2008) and ISO/IEC 20000-1:2011 (IEEE Std 20000-1-:2013) for identifying and planning the specific information items (information products) to be developed and revised during systems and software life cycles and service management processes. This International Standard is intended for use as follows: a) To address the technical information needed by those involved in ISO/IEC 15288:2008 (IEEE Std 15288-2008) and ISO/IEC 12207:2008 (IEEE Std 12207-2008) processes. b) To specify information in an agreement process as described in ISO/IEC 15288:2008 (IEEE Std 15288-2008) or a two-party situation as described in ISO/IEC 12207:2008 (IEEE Std 12207-2008), ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013) and ISO/IEC 20000-2:2012 (IEEE Std 20000-2-2013). The two-party situation may range from an informal agreement within an organization to a legally binding contract between organizations. c) To develop information items that provide evidence for process assessment performed with respect to ISO/IEC 15504, and to guide process improvement activities. d) To guide a single party in self-imposed tasks. 2.2 Intended users of this International Standard This International Standard is applicable for use by: a) project managers responsible for the Information Management process of ISO/IEC 15288:2008 (IEEE Std 15288-2008) (6.3.6) during a system life cycle; b) project managers responsible for identifying information item requirements and document contents when using ISO/IEC 12207:2008 (IEEE Std 12207-2008), or any other software engineering life cycle process, to help determine what should be documented, when the documentation should be developed, and what the contents of the documents should be; c) acquirers responsible for determining what information items are needed to help ensure the quality of the project, or delivered system, product or service; d) individuals who write or support the design and development of service, systems and software information items; e) individuals responsible for identifying information items required to claim conformance with ISO/IEC 12207:2008 (IEEE Std 12207-2008), ISO/IEC 15288:2008 (IEEE Std 15288-2008), or ISO/IEC 20000-1:2011 (IEEE Std 20000-1-2013); f) individuals undertaking service, system or software process improvement in their organizations.

5.5 Need for the Project: This is the third edition of a widely used standard specifying the content of information items produced during the systems, software, and services life cycles. It enables consistent and efficient information management and delivery for producers and stakeholders.

5.6 Stakeholders for the Standard: The stakeholders include systems and software engineers, IT service providers, and information and documentation managers.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: Yes

Organization: ISO/IEC JTC1

Technical Committee Name: Systems and Software Engineering

Technical Committee Number: ISO/IEC JTC1/SC7

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8.1 Additional Explanatory Notes: 5.2 and 7.4: The scope and purpose of this standard are essentially unchanged. The verbiage has been condensed. The previous PAR statement dates from the original 2006 version, At that time IEEE required that the scope and purpose wording be exactly as given in the approved standard.

7.2 This revision project is a joint development of IEEE with ISO/IEC JTC 1/SC7 under the Partner Standards Development Organization agreement.

8.1 This third edition of ISO/IEC/IEEE 15289 cancels and replaces ISO/IEC 15289:2015, which has been technically revised. This third edition reflects ISO/IEC/IEEE 15288:2015, which replaced ISO/IEC 15288:2008 (IEEE Std. 15288:2008).

The system engineering life cycle processes have been revised and the cross-references to information items need to be updated.