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Systems and software engineering — Life cycle processes — Project management

Ingénierie du logiciel — Processus de cycle de vie — Gestion de projet

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Contents

Page

Foreword	v
Introduction.....	vi
1 Scope	1
1.1 Purpose	1
1.2 Field of application.....	1
1.3 Limitations	1
2 Conformance	2
2.1 Conformance to normative documentation content.....	2
2.2 Conformance to processes	2
2.3 Full conformance.....	2
3 Symbols and abbreviations.....	2
4 Application of this International Standard.....	3
5 Elements of the project management plan	4
5.1 Project overview (Clause 1 of the PMP).....	5
5.1.1 Project summary (Subclause 1.1 of the PMP).....	5
5.1.2 Evolution of the plan (Subclause 1.2 of the PMP).....	6
5.2 References (Clause 2 of the PMP).....	6
5.3 Definitions (Clause 3 of the PMP).....	6
5.4 Project context (Clause 4 of the PMP).....	6
5.4.1 Process model (Clause 4.1 of the PMP).....	6
5.4.2 Process improvement plan (Clause 4.2 of the PMP)	7
5.4.3 Infrastructure plan (Clause 4.3 of the PMP).....	7
5.4.4 Methods, tools and techniques (Clause 4.4 of the PMP).....	7
5.4.5 Product acceptance plan (Clause 4.5 of the PMP).....	7
5.4.6 Project organization (Clause 4.6 of the PMP).....	7
5.5 Project planning (Clause 5 of the PMP)	8
5.5.1 Project initiation (Subclause 5.1 of the PMP)	8
5.5.2 Project work plans (Subclause 5.2 of the PMP)	9
5.6 Project assessment and control (Clause 6 of the PMP)	10
5.6.1 Requirements management plan (Subclause 6.1 of the PMP).....	10
5.6.2 Scope change control plan (Subclause 6.2 of the PMP)	10
5.6.3 Schedule control plan (Subclause 6.3 of the PMP).....	10
5.6.4 Budget control plan (Subclause 6.4 of the PMP)	10
5.6.5 Quality assurance plan (Subclause 6.5 of the PMP).....	11
5.6.6 Subcontractor management plans (Subclause 6.6 of the PMP).....	11
5.6.7 Project closeout plan (Subclause 6.7 of the PMP).....	11
5.7 Product delivery (Clause 7 of the PMP)	11
5.8 Supporting process plans (Clause 8 of the PMP).....	11
5.8.1 Project supervision and work environment (Subclause 8.1 of the PMP)	11
5.8.2 Decision management (Subclause 8.2 of the PMP)	12
5.8.3 Risk management (Subclause 8.3 of the PMP)	12
5.8.4 Configuration management (Subclause 8.4 of the PMP)	12
5.8.5 Information management (Subclause 8.5 of the PMP)	12
5.8.6 Quality assurance (Subclause 8.6 of the PMP)	13
5.8.7 Measurement (Subclause 8.7 of the PMP)	13
5.8.8 Reviews and audits (Subclause 8.8 of the PMP).....	13
5.8.9 Verification and validation (Subclause 8.9 of the PMP)	14
5.9 Additional plans (Clause 9 of the PMP).....	14

5.10	End matter	14
6	Project processes	15
6.1	Project planning process	16
6.2	Project assessment and control process	20
6.3	Decision management process	23
6.4	Risk management process	25
6.5	Configuration management process	27
6.6	Information management process	29
6.7	Measurement process	31
	Bibliography	32

List of Figures

Page

Figure 1 – Format of a project management plan	4
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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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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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ISO/IEC/IEEE 16326 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, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition of ISO/IEC/IEEE 16326 cancels and replaces ISO/IEC TR 16326, which has been technically revised and merged with content from IEEE Std 1058-1998.

Introduction

This International Standard provides normative content specifications for project management plans covering software projects, and software-intensive system projects.

This International Standard also provides detailed discussion and advice on applying a set of project processes that are common to both the software and system life cycle as covered by ISO/IEC 12207:2008 (IEEE Std 12207-2008), *Systems and software engineering – Software life cycle processes* [15], and ISO/IEC 15288:2008 (IEEE Std 15288-2008), *Systems and software engineering – System life cycle processes* [16], respectively. The discussion and advice are intended to aid in the preparation of the normative content of project management plans.

This International Standard is the result of the harmonization of ISO/IEC TR 16326:1999 and IEEE Std 1058-1998.

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Systems and software engineering — Life cycle processes — Project management

1 Scope

1.1 Purpose

This International Standard is intended to aid project managers in managing to successful conclusion those projects concerned with software-intensive systems and software products.

This International Standard specifies the required content of the project management plan (PMP). This International Standard also quotes the extracted purpose and outcome statements from the project processes of ISO/IEC 12207:2008 (IEEE Std 12207-2008) and ISO/IEC 15288:2008 (IEEE Std 15288-2008), and adds detailed guidance for managing projects that use these processes for software products and software-intensive systems.

1.2 Field of application

This International Standard is written for those who use or plan to use ISO/IEC 15288:2008 (IEEE Std 15288-2008) and ISO/IEC 12207:2008 (IEEE Std 12207-2008) on projects dealing with software-intensive systems and software products, regardless of project scope, product, methodology, size or complexity. The field of application of this International Standard spans the whole software or system life cycle, and addresses everybody who plays a role in project management – project managers and others, specifically:

- those responsible for establishing and continuously improving ISO/IEC 12207:2008 (IEEE Std 12207-2008) software life cycle processes and ISO/IEC 15288:2008 (IEEE Std 15288-2008) system life cycle processes;
- those responsible for executing any ISO/IEC 12207:2008 (IEEE Std 12207-2008) software life cycle process or ISO/IEC 15288:2008 (IEEE Std 15288-2008) system life cycle process at a project level;
- organizations or individuals subcontracting a project management effort.

In many organizations, the various responsibilities of project management are assigned to more than one person. Where the term "project manager" is used in this International Standard, the guidance, advice or normative requirement applies to the applicable role within the organization.

This International Standard is intended to provide guidance for two-party situations and may be equally applied where the two parties are from the same organization. This International Standard can also be used by a single party as self-imposed tasks.

This International Standard can also serve as guidance in multi-party situations, where high risks are inherent in the supply and integration of complex software-based systems, and procurement can involve several vendors, organizations or contracting parties.

1.3 Limitations

The normative content specifications for project management plans and the guidance for management of the project processes are limited to projects dealing with software-intensive systems and software products.