

IEEE Standard for Software Project Management Plans

IEEE Standards Board

Approved December 10, 1987

Sponsor

**The Software Engineering Technical Committee
of the
Computer Society of the IEEE**

© Copyright 1988 by **The Institute of Electrical and Electronics Engineers, Inc 345 East 47th Street,
New York, NY 10017, USA**

*No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise,
without the prior written permission of the publisher.*

PDF: ISBN 0-7381-0409-4, SS12138

IEEE Standards documents are developed within the Technical Committees of the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Board. Members of the committees serve voluntarily and without compensation. They are not necessarily members of the Institute. The standards developed within IEEE represent a consensus of the broad expertise on the subject within the Institute as well as those activities outside of IEEE which have expressed an interest in participating in the development of the standard.

Use of an IEEE Standard is wholly voluntary. The existence of an IEEE Standard does not imply that there are no other ways to produce, test, measure, purchase, market, or provide other goods and services related to the scope of the IEEE Standard. Furthermore, the viewpoint expressed at the time a standard is approved and issued is subject to change brought about through developments in the state of the art and comments received from users of the standard. Every IEEE Standard is subjected to review at least every five years for revision or reaffirmation. When a document is more than five years old, and has not been reaffirmed, it is reasonable to conclude that its contents, although still of some value, do not wholly reflect the present state of the art. Users are cautioned to check to determine that they have the latest edition of any IEEE Standard.

Comments for revision of IEEE Standards are welcome from any interested party, regardless of membership affiliation with IEEE. Suggestions for changes in documents should be in the form of a proposed change of text, together with appropriate supporting comments.

Interpretations: Occasionally questions may arise regarding the meaning of portions of standards as they relate to specific applications. When the need for interpretations is brought to the attention of IEEE, the Institute will initiate action to prepare appropriate responses. Since IEEE Standards represent a consensus of all concerned interests, it is important to ensure that any interpretation has also received the concurrence of a balance of interests. For this reason IEEE and the members of its technical committees are not able to provide an instant response to interpretation requests except in those cases where the matter has previously received formal consideration.

Comments on standards and requests for interpretations should be addressed to:

Secretary, IEEE Standards Board 345 East 47th Street New York, NY 10017 USA

IEEE Standards documents are adopted by the Institute of Electrical and Electronics Engineers without regard to whether their adoption may involve patents on articles, materials, or processes. Such adoption does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the standards documents.

Foreword

(This Foreword is not a part of IEEE Std 1058.1-1987, IEEE Standard for Software Project Management Plans.)

Purpose

This standard specifies the format and contents of software project management plans. It does not specify the exact techniques to be used in developing project plans, nor does it provide examples of project management plans. Each organization that uses this standard should develop a set of practices and procedures to provide detailed guidance for preparing and updating software project management plans based on this standard. These detailed practices and procedures should take into account the environmental, organizational, and political factors that influence application of the standard.

Not all software projects are concerned with development of source code for a new software product. Some software projects consist of a feasibility study and definition of product requirements. Other projects terminate upon completion of product design, and some projects are concerned with major modifications to existing software products. This standard is applicable to all types of software projects; applicability is not limited to projects that develop operational versions of new products. Application of this standard is not limited by project size. Small projects may require less formality in planning than large projects, but all components of this standard should be addressed by every software project.

Software projects are sometimes component parts of larger projects. In these cases, the software project management plan may be a separate component of a larger plan or it may be merged into the system level project management plan.

Overview

This standard contains three sections. Section 1 defines the scope of the standard and provides references to other IEEE standards that should be followed when applying this standard. Section 2 provides definitions of terms that are used throughout the standard. Section 3 contains an overview and a detailed specification of the standard, including required components that must be included, and optional components that may be included in project plans based on this standard. The sequence of project plan elements presented in Section 3 does not imply that project plans should be developed in the order of presentation. In most instances, project plans based on this standard will be developed by repeated iteration and refinement of the various elements in the plan.

Audience

This standard is intended for use by software project managers and other personnel who prepare and update project plans and monitor adherence to those plans.

Evolution of Plans

Developing the initial version of the software project management plan should be one of the first activities to be completed on a software project. As the project evolves, the nature of the work to be done and the decomposition of work will be better understood. The project management plan must be updated periodically to reflect the evolving situation. Thus, each version of the plan should be placed under change control, and each version should contain a schedule for subsequent updates to the plan.

Terminology

This standard follows the IEEE Guide to Standards Development. In particular, the words shall, must, and the imperative form identify mandatory material within the standard. The words should, might, and may identify optional material.

History

The project authorization request for development of this standard was approved by the IEEE Standards Board on December 13, 1984. Modification of the authorization request was approved in September, 1986. Ten meetings were held within the United States and internationally between September, 1984, and September, 1986. These meetings produced the draft submitted for balloting in December, 1986.

Contributors

This standard was developed by the Software Project Management Plans Working Group of the Software Engineering Standards Subcommittee of the Computer Society of the IEEE. The following individuals contributed to the development of this standard:

Richard H. Thayer, *Chair*
Richard E. Fairley, *Chair*
Gary L. Whitten, *Secretary*

Steering Committee

Ronald L. Atchley
H. Jack Barnard
Francois Coallier

Hosein Fallah
Richard Johansson
Kari Kansala

Robert F. Metz
Patrick A. Rich
Hans Schaefer

Working Group

Bakul Banerju
George J. Bozoki
V. Churchill
Peter Coad
P. I. Davis
Raymond Day
T. Debling
J. Deleo
Ake Dovstram
R. Ferreol

Galwin Ferwin
Cheng Hu
John A. King
Thomas M. Kurihara
F. C. Lim
Richard W. MacDonald
Roger Martin
Randy Paddock
Francoise Perrodeau
Robert Poston

David Schultz
Robert Shillato
Daniel Solis
George Spidel
Richard Van Tilburg
Delores Wallace
David Weiss
Lauri Werth
Janusz Zalweski

Supporting Organizations

The following organizations provided support for development of this standard:

AT &T Bell Laboratories
AT &T Information Systems
Bell Canada
California State University, Sacramento
Center for Industrial Research, Norway
Compagnie D'Informatique Militaire, France
Computer Sciences Corporation
Goodyear Atomic Corporation
Hughes Aircraft Company
Institute of Atomic Energy, Poland
Intercon Systems Corporation
Lockheed Missiles & Space Co.
Mirror Systems, Inc.
National Bureau of Standards
NCR Corporation
Programming Environments, Inc.

Standard Telecommunications Labs
System Development Corporation
Technical Research Centre of Finland
Teleindustrier AB, Sweden
U.S. Department of Commerce
U.S. Department of Transportation
U.S. Naval Research Laboratories
University of Nevada, Las Vegas
University of Texas, Austin
Wang Institute of Graduate Studies

The Software Engineering Standards Subcommittee comprised the balloting committee that approved this document for submission to the IEEE Standards Board, and at the time of balloting was composed of the following persons:

F. Ackerman	Joel Forman	Michael T. Perkins
Richard L. Aurbach	Julian Forster	W. E. Perry
Motoei Azuma	Richard C. Fries	John Petraglia
H. J. Barnard	F. K. Gardner	Donald J. Pfeiffer
J. Behm	L. B. Gardner	I. C. Pyle
H. Ronald Berlack	David Gilperin	Thomas S. Radi
Michael A. Blackledge	Shirley Gloss-Soler	Salim Ramji
Giles Bracon	J. G. Glynn	Jean-Claude Rault
J. Joseph Brandt	Andrej Grebenc	Meir Razy
Kathleen L. Briggs	Victor Guarnera	Donald Reifer
A. Winsor Brown	Lawrence M. Gunther	Patrick A. Rich
F. Buckley	David A. Gustafson	R. San Roman
L. J. Call	J. A. Haksi	John C. Rowe
H. Carl	Jeffrey Hickey	Margaret Rumley
John W. Center	John W. Horch	Julio G. Sanz
John Chihorek	Cheng Hu	Steven Schach
T. S. Chow	Laurel V. Kaleda	Wolf A. Schnoege
J. K. Chung	Harry Kalmbach	Norman Schneidewind
Won L. Chung	Daniel E. Klingler	David Schultz
Antonio M. Cicu	Shaye Koenig	Gregory D. Schumacker
Judith Clapp	Joseph A. Krupinski	Leonard W. Seagren
Peter Coad, Jr.	Joan Kundig	Gerard P. Shabe
Francois Coallier	T. Kurihara	Robert Shillato
Christopher M. Cooke	Lak Ming Lam	David Siefert
Richard Cotter	John B. Lane	William J. Singer
T. Daughtrey	Robert A. C. Lane	Jacob Slonim
Peter Denny	G. Larsen	H. M. Sneed
F. M. Discenzo	F. C. Lim	V. Srinivas
David A. Dobraiz	Bertil Lindberg	G. Wayne Staley
David Doty	B. Livson	Franklin M. Sterling
Einar Dragstedt	Austin Maher	Mary Jane Stoughton
William Dupres	Paulo Cesar Marcondes	W. G. Sutcliffe
Albert D. DuRee	Nicholas Marselos	Michael H. Taint
Mary Eads	Roger Martin	Richard H. Thayer
L. E. Egan	John McArdle	Paul U. Thompson
W. D. Ehrenberger	J. A. McCall	Terrence L. Tillmans
Steven R. Eisen	R. McDowell	Valentin Tirman
Walter Ellis	Manijeh Moghis	G. R. Trebble
Caroline Evans	Charles S. Mooney	C. L. Troyanowski
Richard E. Fairley	Gary D. Moorhead	William S. Turner, III
David W. Favor	D. D. Morton	Robert Urling
Joan Feld	G. T. Morun	David Usechak
John Fendrich	Hiranobu Nagano	Thomas E. Vollman
Glenn S. Fields	Geraldine Neidhart	Dolores R. Wallace
Violet Foldes	Dennis Nickle	John P. Walter
T. Foote-Lennox	Wilma M. Osborne	Dale R. Webdale