P1016

Submitter Email: r.hilliard@computer.org
Type of Project: Modification to Approved PAR
PAR Request Date: 04-Sep-2008
PAR Approval Date: 07-Nov-2008
PAR Expiration Date: 31-Dec-2008
Status: Modification to a Previously Approved PAR for the Revision of a Standard 1016-1998
Root PAR: P1016  Approved on: 21-Mar-2002
Project Record:

1.1 Project Number: P1016
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Information Technology-Systems Design-Software Design Descriptions
Old Title: Standard for Information Technology-Systems Design-Software Design Descriptions

3.1 Working Group: RP for Software Design Descriptions Working Group (C/S2ESC/1016_WG)
Contact Information for Working Group Chair
Name: Richard Hilliard
Email: r.hilliard@computer.org
Phone: +1 978 857 5036

Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Computer Society/Software & Systems Engineering Standards Committee (C/S2ESC)
Contact Information for Sponsor Chair
Name: Paul Croll
Email: pcroll@csc.com
Phone: 540-644-6224

Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of Submission for Initial Sponsor Ballot: 10/2008
4.3 Projected Completion Date for Submittal to RevCom: 09/2009

5.1 Approximate number of people expected to work on this project: 6
5.2 Scope: This standard describes software designs and establishes the information content and organization of a software design description (SDD). An SDD is a representation of a software design to be used for recording design information and communicating that design information to key design stakeholders. This standard is intended for use in design situations in which an explicit software design description is to be prepared. These situations include traditional software construction activities, when design leads to code, and reverse engineering situations when a design description is recovered from an existing implementation.

This standard can be applied to commercial, scientific, or military software that runs on digital computers. Applicability is not restricted by the size, complexity, or criticality of the software. This standard can be applied to the description of high-level and detailed designs.

Old Scope: 1. Raise Std 1016 from a Recommended Practice to a full Standard; 2. Harmonize with chapter 3 of the Software Engineering Body of Knowledge (SWEBOK); 3. Eliminate any conflicts with IEEE/EIA Std 12207.0-1996; 4. Harmonize with IEEE Std 1320.1-1998 (IDEF0) and IEEE Std 1320.2-1998 (IDEF1X); 5. Address Component-Based Design
design, configuration management, or quality assurance. This standard does not require the use of any particular design languages, but establishes requirements on the selection of design languages for use in an SDD. This standard can be applied to the preparation of SDDs captured as paper documents, automated databases, software development tools or other media.

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

5.4 Purpose: This standard specifies requirements on the information content and organization of SDDs. This standard specifies requirements for the selection of design languages to be used for software design description, and requirements for documenting design viewpoints to be used in organizing a software design description. Old Purpose The standard is intended for those in technical and managerial positions who prepare and use Software Design Descriptions. It will guide a designer in the selection, organization, and presentation of design information. It will help standards developers ensure that a design description is complete, concise, and well organized. The revision is intended to upgrade the recommended practice to a full standard, harmonize the standard with current versions of IEEE standards as well as the Software Engineering Body of Knowledge. The intent is also to address open issues with the existing standard.

5.5 Need for the Project: Upgrade of IEEE 1016 from RP to full standard.

5.6 Stakeholders for the Standard: Software designers

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes
If yes, state date: 17-Feb-2008
6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No
6.1.c. 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 International Activities

a. Adoption
Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization? Do Not Know

Organization:
Technical Committee Name:
Technical Committee Number:
Contact Person Name:
Contact Person Phone:
Contact Person Email:

b. Joint Development
Is it the intent to develop this document jointly with another organization? Do Not Know

Organization:
Technical Committee Name:
Technical Committee Number:
Contact Person Name:
Contact Person Phone:
Contact Person Email:

c. Harmonization
Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? Do Not Know

Organization:
Technical Committee Name:
Technical Committee Number:
Contact Person Name:
Contact Person Phone:
Contact Person Email:
8.1 Additional Explanatory Notes (Item Number and Explanation): The approved PAR Scope and Purpose described the scope and purpose of the revision project -- not the scope and purpose of the standard. The revised Scope and Purpose are the same as those in the ballot draft P1016.