P1671.1

Submitter Email: chris.gorringe@eads-ts.com
Type of Project: Revision to IEEE Standard 1671.1-2009
PAR Request Date: 15-Apr-2010
PAR Approval Date: 17-Jun-2010
PAR Expiration Date: 31-Dec-2014
Status: PAR for a Revision to an existing IEEE Standard
Project Record: No Project Record
Root Project: 1671.1-2009 Edit Root Project Record

1.1 Project Number: P1671.1
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Automatic Test Markup Language (ATML) Test Description
Old Title: IEEE Trial-Use Standard for Automatic Test Markup Language (ATML) for Exchanging Automatic Test Equipment and Test Information via XML: Exchanging Test Descriptions

3.1 Working Group: Test and ATS Description Working Group (SASB/SCC20/TAD_WG)
Contact Information for Working Group Chair
Name: Ion Neag
Email Address: ion.neag@restonsoftware.com
Phone: (703) 234-2932
Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE-SASB Coordinating Committees/SCC20 - Test and Diagnosis for Electronic Systems (SASB/SCC20)
Contact Information for Sponsor Chair
Name: Mike Seavey
Email Address: michael.seavey@ngc.com
Phone: 224-558-7347
Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 05/2013
4.3 Projected Completion Date for Submittal to RevCom: 05/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 10
5.2 Scope: This standard defines an exchange format, utilizing eXtensible Markup Language (XML), for specifying test performance, test conditions, diagnostic requirements, and support equipment to locate, align, and verify the proper operation of a Unit Under Test (UUT). This is in support of the life cycle of Test Program Sets (TPSs) that will be used in an automatic test environment.
Old Scope: The scope of this trial-use standard is the definition of an exchange format, utilizing eXtensible Markup Language (XML), for exchanging the test description information defining test performance, test conditions, diagnostic requirements, and support equipment to locate, align, and verify the proper operation of a UUT. This is in support of the development of test program sets (TPSs) that will be used in an automatic test environment.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes
If yes please explain: This standard is dependent upon the parent standard IEEE 1671 - Standard for Automatic Test Markup Language (ATML) for Exchanging Automatic Test Equipment and Test Information via XML. At the time of submission the Draft standard is in its ballot resolution phase, having already achieved enough affirmative votes to be submitted to RevCom.

5.4 Purpose: No purpose statement is required since this standard is intended for IEC standardization
Old Purpose: The purpose of this trial-use standard is to promote and facilitate interoperability between components of Automatic Test Systems (ATSs) (e.g., rehosting test requirements between
ATS platforms) where UUT requirement definitions need to be shared. This trial-use standard will also facilitate the preparation or documentation of test program(s). The TestDescription schema becomes a class of information that can be used within the ATML family of standards.

5.5 Need for the Project: The standard will permit test descriptions to be utilized for a variety of purposes, including, Test Program generation, Test Requirement Document development and maintenance, and Test Description analysis. These test descriptions will reference IEEE 1641 Standard for Signal and Test Definition (STD) that describes signals and their behavior. Current TPSs developed to run on ATSs are implemented with tight coupling between components. The components are typically developed specific to a particular architecture. Once the test program is fielded, the requirements and strategies used initially to develop the TPS typically become obsolete as the test program evolves in its life cycle. As the ATS is replaced or achieves some level of obsolescence, it is typical to rehost the implementation of the TPS; a more expensive, time consuming task than that if implementing the UUT test requirement on the newer ATS or as part of instrument(s) replaced within the existing ATS.

5.6 Stakeholders for the Standard: Anticipated users of the ATML family of standards include the following:

- Product (e.g., UUT) developers.
- Product (e.g., UUT) maintainers.
- TPS developers.
- TPS maintainers.
- ATE system developers.
- ATE system maintainers.
- Instrumentation developers.
- Developers of ATML-based tools and systems.
- Developers of prime mission equipment that use the supported UUT as a component.

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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?: Do Not Know
If Yes please explain:
and answer the following
- Sponsor Organization:
  - Project/Standard Number:
  - Project/Standard Date:
  - Project/Standard Title:

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?: Yes
- Organization: ISO
  - Technical Committee Name: TC93
  - Technical Committee Number: WG7
  - Contact Name: Narayanan Ramachandran
  - Phone: +1 (301) 526 5280
  - Email: narayan23@gmail.com

b. Joint Development
Is it the intent to develop this document jointly with another organization?: No

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 Name:
  - Phone:
8.1 Additional Explanatory Notes (Item Number and Explanation): 1.3: This PAR has been submitted to update the previous Trial-Use Standard to Full Use and to align with the latest definitions and requirements of its parent standard IEEE Std 1671 - Standard for Automatic Test Markup Language (ATML) for Exchanging Automatic Test Equipment and Test Information via XML.

2.1, 5.2 & 5.4: The title, scope and purpose have all been changed to simplify and provide a consistent approach across the family of standards and to align their content with the latest IEEE Guide for PAR Review guidelines.

5.5: The goal is to have all the Full Use ATML 'dot' standards go to ballot at the same, or within a short window of each other so that all balloters can consider all changes at the same time. This will allow common changes to be considered across the family of 'Dot' standards. The number of changes are not expected to be large. The revision is to bring all the trial use standards inline with the IEEE Std 1671 base standard.

5.3: A PAR is being requested at this time so as to allow initial work to be done to update the trial-use standard to a full use standard in line with the parent standard.