

# ATML Status

July 2007  
Issue 11

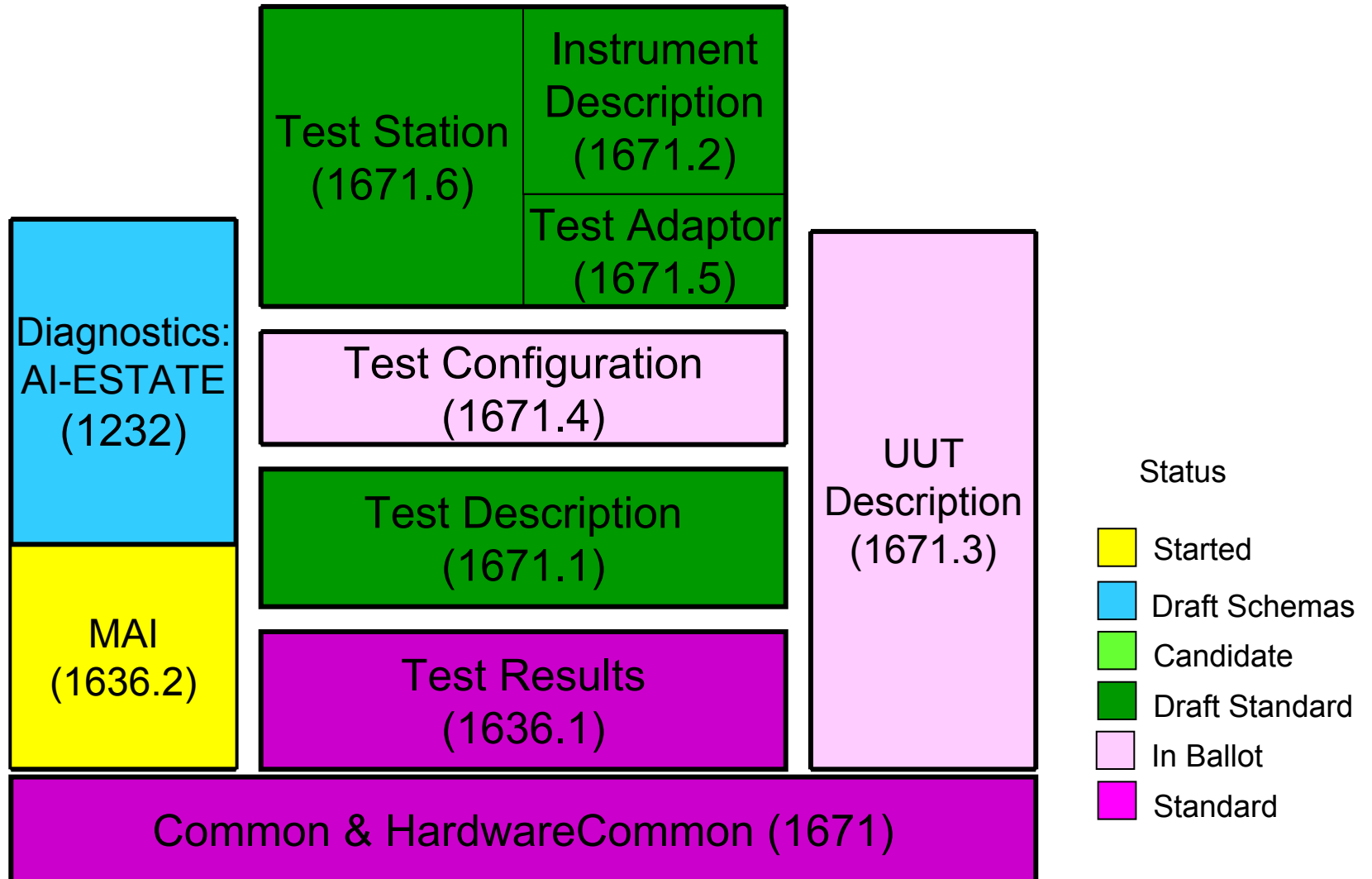
An overview of the ATML activity in the ATML focus group and as part of the IEEE SCC20 sub-committees

# ATML

- ATML's mission is to define a collection of XML-based schemas that allows ATE and test information to be exchanged in a common format adhering to the XML standard
- ATML defines a framework through which different architectures using XML can be implemented.
  - defines the components from which users can build their architectures, whilst being interoperable with other compliant architectures.
  - Show examples of the net centric services by which this information can be exchanged across different ATS platforms as part of a maintenance process.
  - defines the XML format that these elements.
- The ATML specifications will define:
  - How to define XML schemas that represent ATE and test information.
  - A set of XML schemas supporting the exchange of specific ATE and test information.
- The ATML specifications will support:
  - services that can be used for exchanging ATE and test information in a distributed net-centric environment.
  - services supporting the exchange of specific ATE and test information in specific common areas.

# ATML Framework

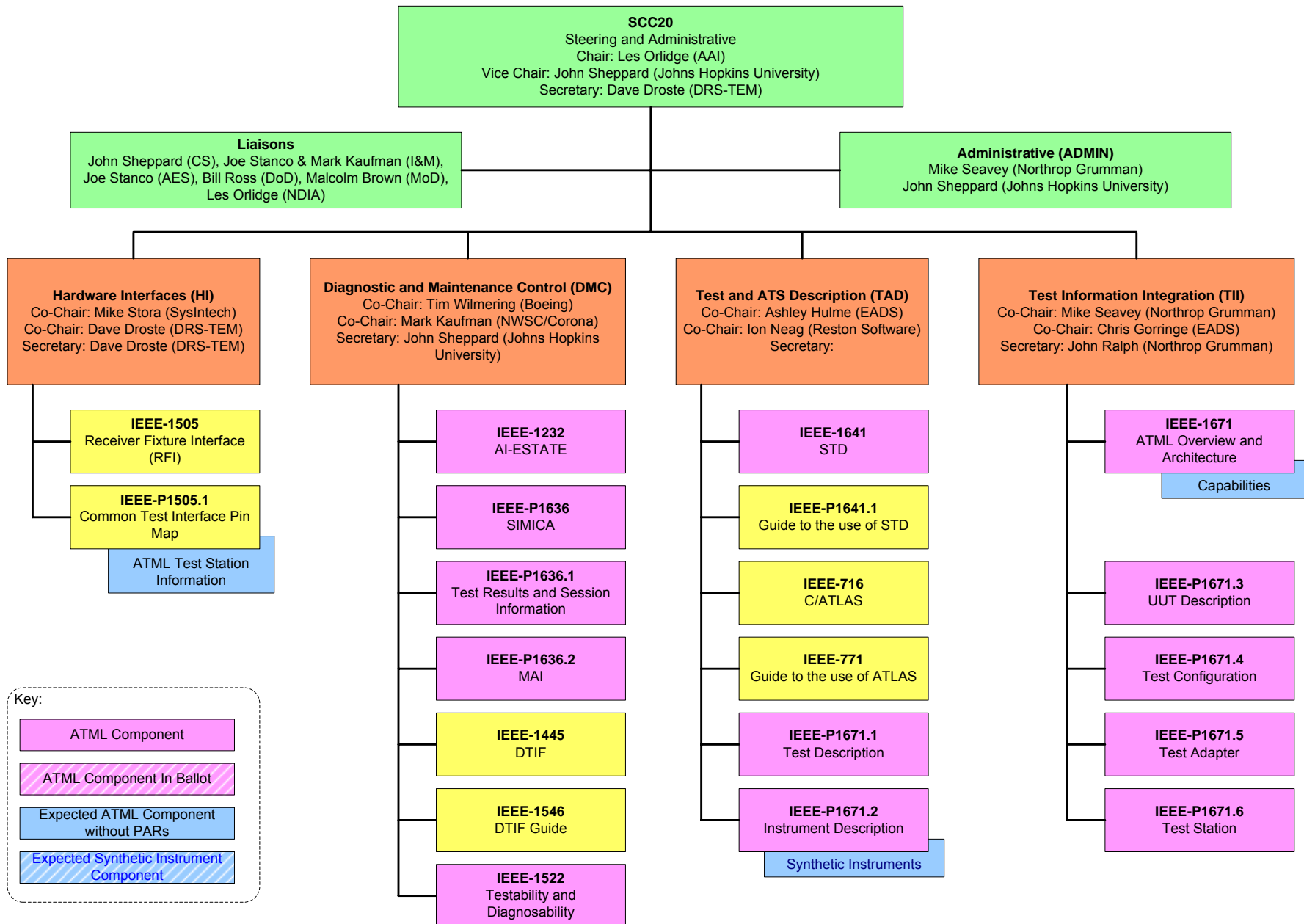
## IEEE Std. 1671-2006<sup>TM</sup>



# SCC20 & ATML Organisations

- The IEEE SCC20 is the standards organisation through which the ATML components (i.e.; schemas and documentation) will be published under various IEEE standards.
- The ATML organisation is an open, independent focus group contributed to by the ATE industry and government agencies to advance the common exchange of test information through the use of XML.
  - The ATML group provides draft schemas and associated documents, examples, use cases, requirements and conducts trial use of any ATML components.
  - Their findings are submitted to the various SCC20 sub-committees and working groups to advance the IEEE standards associated with the ATML components.

# SCC20 Organisation for 2007



# SCC-20 ATML PARs Status: All Approved

- Project Authorisation Request (PAR) need to be approved by the IEEE NESCOM prior to any SCC-20 working group being established.
  - AI-ESTATE PAR 1232 Existing & Update for ATML
  - SIMICA PAR 1636 Expires 12/07
  - Test Results PAR 1636.1 Approved
  - MAI PAR 1636.2 Approved
  - Test Description PAR 1671.1 Approved
  - Instrument Description PAR 1671.2 Approved
  - UUT Description – PAR 1671.3 Approved
  - Test Configuration - PAR 1671.4 Approved
  - Test Station & Test Adapter - PAR 1671.6, 1671.5 Approved

# SCC-20 ATML Standards Status:

- ATML Overview and Architecture:
  - IEEE Std 1671-2006™
    - Published December 2006
  - ATML Common and Hardware Common Schemas ([version 1.01](#)) are posted on the IEEE download site.  
(<http://standards.ieee.org/downloads/1671>)
  - Errata being created to document the differences between:
    - Common schema version 1.01 and 1.09
    - HardwareCommon schema version 1.01 and 1.10

# ATML's 2007 Objectives & Goals

- To have the P1671.3 (UUT Description) Trial-Use Standard:
  - formal ballot process (Feb 2007) ✓
  - trial-use standard by Q4 2007
- To have the P1671.4 (Test Configuration) Trial-Use Standard:
  - formal ballot process (Feb 2007) ✓
  - trial-use standard by Q4 2007
- To have the P1671.2 (Instrument Description) Trial-Use Standard:
  - Incorporated Synthetic Working Group (SIWG) material (June 2007) ✓
  - written, reviewed and to start the formal ballot process by July 2007
  - trial-use standard by Q3 2008
- To have the P1671.5 (Test Adapter) Trial-Use Standard:
  - written, reviewed and to start the formal ballot process by Aug 2007
  - trial-use standard by Q3 2008
- To have the P1671.6 (Test Station) Trial-Use Standard:
  - written, reviewed and to start the formal ballot process by Aug 2007
  - trial-use standard by Q3 2008



# ATML's 2007 Objectives & Goals (cont)

- To have the P1671.1 (Test Description) Trial-Use Standard:
  - written, reviewed and to start the formal ballot process by Sep 2007
  - trial-use standard by Q4 2008
- IEEE Std. 1636.1 2007 (Test Results) Trial-Use Standard published
  - formal ballot process complete by June 2007 ✓
- To have Candidate schemas for all ATML components in 2007
  - Q2
    - All IEEE Std 1671 Components (P1671.1 thru P1671.6)
  - Q3
    - Diagnostics (AI-ESTATE 1232) rev 2
    - Signal Descriptions (STD 1641) rev 2
  - Q4 2007
    - Maintenance Action Information (MAI P1636.2)

# Standards Drafts and Schema Revisions

Project or Standard	Project or Standard Number	Document & Draft Number	XML Schema Name	XML Schema Version Number
ATML Overview and Architecture	IEEE Std 1671™-2006	Annex B Draft 5.2	Common.xsd	1.09 (Note 1,3)
			HardwareCommon.xsd	1.08 (Note 1,3)
		Annex C Draft 1.1	Capabilities.xsd	0.02 (Note 2,3)
ATML Test Description	P1671.1	P1671.1 Draft 1	TestDescription.xsd	0.13
ATML Instrument Description	P1671.2	P1671.2 Draft 4	InstrumentDescription.xsd	0.20
ATML UUT Description	P1671.3	P1671.3 Draft 5	UUTDescription.xsd	0.11
ATML Test Configuration	P1671.4	P1671.4 Draft 5	TestConfiguration.xsd	0.52
ATML Test Adapter	P1671.5	P1671.5 Draft 3.1	TestEquipment.xsd	0.8
ATML Test Station	P1671.6	P1671.6 Draft 3.1		
SIMICA Test Results and Session Information	P1636.1	P1636.1 Draft 3	TestResults.xsd	2.01
SIMICA Maintenance Action Information (MAI)	P1636.2	Not Available	-	-
AI-ESTATE	IEEE Std 1232™-2002	Note 4		indicates project is a published standard
STD	IEEE Std 1641™-2004	Note 5		indicates project is in the ballot process

CCG1

Note 1: Schema version 1.01 posted on IEEE download site (as of May 2007)

Note 2: Capabilities will be included in next publication (Jan 2009)

Note 3: Annex B & C will be handled as Errata until next publication (Jan 2009)

Note 4: The AI-ESTATE Standard is in the process of an update, expected to go to ballot Q4 of 2007

Note 5: The STD Standard is in the process of an update

**Slide 10**

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**CCG1**

Mike Seavey to update this tomorrow 14th

Chris Gorringer, 6/14/2007

# ATML Schedule, TII Subcommittee

- TII Sub-committee
  - Operating Instructions (April 2005) ✓
- Overview and Architecture::= IEEE Std 1671-2006™  
(Chris Gorringer/Mike Seavey)
  - IEEE Par Approved (Nov 2004) ✓
  - Draft (Review April 2005) ✓
  - Requirements (Review April 2005) ✓
  - Draft Document (H) (Oct 2005) ✓
  - IEEE Editorial & Rev 2 (Jan 06) ✓
  - Ballot (May 2006) ✓
  - Ballot Resolution & Recirculation (July 2006) ✓
  - Submitted to RevCon (Aug 2006) ✓
  - IEEE Published as Trial-Use Standard (Dec 2006) ✓

# ATML Schedule, TII Subcommittee (cont)

- ATML 'Capabilities' XML Schema (Dan Pleasant)
  - Requirements (Sept 2005) ✓
  - Draft Schema Snippet – Component (May 2006) ✓
  - Finalize inputs to other groups (Jun 2006) ✓
  - Capabilities Schema (Aug 2006) ✓
  - Draft Capabilities Text (Dec 2006) ✓
    - Text to be basis of a new Annex to IEEE Std 1671 ✓
  - Annex C – ATML Capabilities written and reviewed (June 2007) ✓

# ATML Schedule, TII Subcommittee (cont)

- UUT Description ::= P1671.3  
(John Ralph)
  - Requirements (April 2005) ✓
  - Draft Schema (Review June 2005) ✓
  - Draft 2 Schema review (Jan 2006) ✓
  - Candidate Schema (Mar 2006) ✓
  - Draft 5 of the Standard (Jan 2007) ✓
  - Initiate Ballot Process (Feb 2007) ✓
- Test Configuration ::= P1671.4  
(Tim Davis)
  - Start (April 2005) ✓
  - Requirements (July 2005) ✓
  - Draft Schema (Review Oct 2006) ✓
  - Candidate Schema (July 2006) ✓
  - Draft 5 of the Standard (Jan 2007) ✓
  - Initiate Ballot Process (Feb 2007) ✓

# ATML Schedule, TII Subcommittee (cont)

- Test Station ::= P1671.6  
(Tamara Einspanjer/Ron Taylor)
  - Requirements (July 2005) ✓
  - Draft Schema (Jan 2006) ✓
  - Final Schema (Apr 2006) ✓
  - Candidate Schema (Oct 2006) ✓
  - Draft 3.2 of the Standard (Jul 2007)
  - Initiate Ballot Process (~Aug 2007)
- Test Adapter ::= P1671.5  
(Tamara Einspanjer/Ron Taylor)
  - Requirements (July 2005) ✓
  - Draft Schema (Jan 2006) ✓
  - Final Schema (Apr 2006) ✓
  - Candidate Schema (Oct 2006) ✓
  - Draft 3.2 of the Standard (Jul 2007)
  - Initiate Ballot Process (~Aug 2007)

Test Station and Test Adapter both share the 'Test Equipment' XML Schema

The Test Equipment Schema is documented in the Test Station Standard.

The Test Station Standard is therefore a normative reference to the Test Adapter Standard.

# ATML Schedule, TAD Subcommittee

- Test Description ::= P1671.1  
(Ion Neag)
  - Draft Schema review (Oct 2005) ✓
  - Draft Schema (Jan 2006) ✓
  - Draft 10 Schema (May 2006) ✓
  - Candidate Schema (Aug 2006) ✓
  - PAR (Oct 2005) ✓
  - Draft 1 of the Standard (Apr 2007) ✓
  - **Initiate Ballot Process (~Sep 2007)**
- Instrument Description ::= P1671.2  
(Teresa Lopes)
  - Draft Schema review (July 2005) ✓
  - Final Draft Schema (Apr 2006) ✓
  - Candidate Schema (Jun 2006) ✓
  - PAR (Oct 2005) ✓
  - Draft 4.4 of the Standard (May 2007) ✓
  - **Complete Incorporation of SIWG material (~Jul 2007)**
  - **Initiate Ballot Process (~Jul 2007)**



# ATML/SIMICA Schedule, DMC Subcommittee

- Test Results and Session Information ::= P1636.1  
(John Ralph)
  - ATML Candidate (Dec 2004) ✓
  - PAR Approved (Mar 2005) ✓
  - DMC Requirements Document (Review April 2005) ✓
  - P1636.1 Draft 1 Balloted (December 2006) ✓
  - Document Update & Recirculation Ballot #1 (May 2007) ✓
  - Document Update & Recirculation Ballot #2 (May 2007) ✓
  - IEEE publication of 1636.1 trial-use standard (~Aug 2007)
- Maintenance Action Information (MAI) ::= P1636.2  
(Mukund Modi, Joe Stanco)
  - P1636.2 MAI Initial Draft (Mar 2008)
    - Ballot (~Jan 2009)

# ATML Meeting Schedule

- Face-to-Face Meetings:
  - Jan. 16-18; Orlando, FL (Lockheed Martin) ✓
  - Apr. 16-20; SCC20 07-1 Madrid, Spain (INDRA) ✓
  - Jun. 12-14; Boston, MA (The MathWorks) ✓
    - Combined ATML/Synthetic Instrument Working Group (SIWG) meeting
  - Sept. 14-17; SCC20 07-2 Baltimore, MD
    - TII Management Only, in conjunction with AUTOTESTCON
  - Oct./Nov.; Santa Rosa, CA - pending ballot dates
- Additionally:
  - Bi-Weekly Teleconferences
  - 4 Meetings a year plus additional break-out working groups as necessary
  - Synchronise with SCC20 meetings