

Korea Information and Control Committee Meeting Summary and Minutes

13:00 – 15:00, Friday, April 19, 2013
#4205, SEMI Korea office, Seoul

Next Committee Meeting
Friday July 19, 2013
SEMI Korea Office, Seoul

Committee Announcements
None

Table 1 Meeting Attendees

Co-Chairs: Name (Company)

SEMI Staff: John Doe

| <i>Company</i> | <i>Last</i> | <i>First</i> | <i>Company</i> | <i>Last</i> | <i>First</i> |
|------------------------|-------------|--------------|--|-------------|--------------|
| Choong Ahng University | Jae Hoon | Lee | SK Hynix | Chul Hong | Ahn |
| Chung Ahng University | You-Jin | Park | SK Hynix | Yoo Ho | Choi |
| KISA | Ji-Hyun | Lee | TEL Korea | Byoung Min | Im |
| Kodi-S | Jin Soo | Jung | | | |
| Miracom | Kevin | Lee | Hitachi Kokusai Electric (Via-teleconference) | Matsuda | Mitsuhiro |
| PSK | Ray | Eom | TEL (Via-teleconference) | Sakamoto | Mitch |
| Samsung Electronics | Yun Kyung | Cho | TEL (Via-teleconference) | Mochizuki | Tadashi |

Table 2 Leadership Changes

None

Table 3 Ballot Results

Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

| <i>Document #</i> | <i>Document Title</i> | <i>Committee Action</i> |
|-------------------|--|--|
| *Cycle 1 | | |
| 4946A | Line Item Revision to SEMI E87-0709, Specification for Carrier Management, CMS and SEMI E87.1-0707 | Failed and returned to the task force for rework |
| *Cycle 2 | | |
| 5386A | Line Item Revision to SEMI E94-0312, Specification for Control Job Management , Enhancement of Material Redirection Mode | Passed and will be submitted to the ISC Audit & Review Subcommittee for procedural review |

Table 4 Authorized Ballots

| <i>#</i> | <i>When</i> | <i>SC/TF/WG</i> | <i>Details</i> |
|----------|---------------|-----------------|--|
| 4946B | Cycle 4, 2013 | GEM300 TF | Line Item Revision to SEMI E87-0709, Specification for Carrier Management, CMS and SEMI E87.1-0707 |

Table 5 Authorized Activities

None

Table 6 New Action Items

| Item # | Assigned to | Details |
|------------|--------------|---|
| 20130419-1 | Natalie Shim | Get more information about Doc 5538 from Japan I&CC and distribute to the committee members |
| 20130419-2 | Natalie Shim | Check the activities status about PCS TF under NA I&CC and report it to the committee |
| 20130419-3 | Natalie Shim | Check about back-end related standards activities in SEMI and report it to the committee |
| 20130419-4 | Natalie Shim | Check the SML Notation status & impact and report it to the committee |
| 20130419-5 | Natalie Shim | Check password resetting system status at semi website. |

Table 7 Previous Meeting Actions Items

| Item # | Assigned to | Details |
|------------|--------------|--|
| 20130131-1 | Natalie Shim | Two documents which all related to E94 revision and issuing at cycle 2, 2013 were detected. Technical duplication needs to be checked. <i>Completed</i> |
| 20130131-2 | Natalie Shim | Kevin Lee requested to schedule I&CC meetings away from other standards programs so that committee members can attend them from next year. <i>Completed</i> |
| 20130131-3 | Natalie Shim | Kevin Lee and Wontae Kim raised SEMI Standard Program's new log-in system issues such as password reset, ID reset and etc. Natalie Shim needs to check new system. <i>Several members still have problem in resetting their password at SEMI.ORG. Need to check the HQ system again.</i> |
| 20130131-4 | Natalie Shim | Matsuda Mitsuhiro requested EU Equipment Automation liaisons report to SEMI. Natalie Shim will contact EU staff for it. <i>Completed</i> |

1 Welcome, Reminders, and Introductions

Chulhong Ahn (SK hynix) called the meeting to order at 13:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01, SEMI Standards Required Meeting Elements

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion: Approve the previous meeting minutes with editorial changes

By / 2nd: Hyungsu Kim (SDS)/ Kevin Lee (Miracom)

Discussion: None

Vote: 12-0, Motion carried

Attachment: 02, Korea I&CC previous meeting minutes

3 Liaison Reports

3.1 Europe Equipment Automation Committee

Natalie Shim (SEMI Korea) reported for the Europe Equipment Automation Committee. Of note:

- Meeting Information

- Last Meeting: October, 2012 during SEMICON Europa 2012
- Next Meeting: October 7-10, 2013 during SEMICON Europa 2013
- Leadership and Structure Changes
 - Frank Petzold (Trustec) appointed as new co-chair. As a result, Europe Equipment Automation committee has 3 co-chairs.
- Activity Highlights
 - Disbanded task forces are;
 - International Env. Cont. Ctrl. task force
 - Intergr. Measurement task force
 - SANPro task force
 - Newly approved task forces are;
 - E48 Revision task force
 - International Reticle SMIF Pod and Load Port Interoperability task force – E111 and E112
- E45, E46, E108 and E146 set inactive.

Attachment: 03, EU Equipment Automation Committee Liaison Report

3.2 Japan Information & Control Committee

Matsuda Mitsuhiro reported for the Japan I&C Committee. Of note:

- Meeting Information
 - Last meeting: April 10, 2013 at SEMI Japan Office, Tokyo
 - Next meeting: June 19, 2013 at SEMI Japan Office, Tokyo
 - Year around meeting schedule
 - September, 2013 (TBD)
 - December 6, 2013 (Tentative)
 - April, 2014 (TBD)
- Leadership and Structure Changes
 - None
- Ballot Review (Cycle 2, 2013)
 - Doc. 5422 (New Standard: Guide for Equipment Information System Security) **failed** and sent to the task force for rework.
 - Doc. 5423A (Line-item Revision to SEMI E40.1-0312 SECS-II Support for Processing Management Standard and SEMI E5-0712 SEMI Equipment Communications Standard 2 Message Content (SECS-II); Add mapping to PPID for RecID) **passed** and sent to A&R for procedural review.
- Ballot Plan
 - None
- New Activities
 - None.

**Note: SNARF 5367 (Line Item Revision to E87, Specification for Carrier Management (CMS). Load Port Transfer Error Indication) is withdrawn.*

- Task Force Updates
- AMHS TF
 - None.
- Equipment Information System Security (EISS) TF
 - Doc.5422: “New Standard: Guide for Equipment Information System Security” to be reworked.
- Sensor Bus TF
 - Preparing revision of E54.12 (CC-Link) to add the latest SDM mapping.
 - Plans to go through SEMI E54.19-0308 “Specification for Sensor/Actuator Network for MECHATROLINK” for 5-year-review.
- GEM 300 TF
 - Doc.5367 (Revision to E87, Load Port Transfer Error Indication)
 - TF decided to disband this activity because it cannot solve the problem only in the condition of Load Port Transfer State of E87
 - Doc.5423A (Revision to SEMI E40.1 and SEMI E5, Add mapping to PPID for RecID)
 - Balloted in Cycle 2-2013 and 2 negatives received for line item #1
 - TF concluded 2 negatives as related and not technically persuasive, and decided to propose to I&C committee pass as balloted
 - Doc.5538 (Recipe Cache)
 - Discussed with NA GEM300 TF on April 1, 2013
 - Collaboration with NA GEM300 TF
 - Doc.5454 Alarm Category
- Predictive Carrier Logistics (PCL) TF
 - No TF meeting since Nov. 15 because resource conflict with Doc.5538 PRC (Production Recipe Cache)
 - Activity is being resumed by reviewing State Model and preparation of document framework
- I&CC Japan Chapter
 - Plans to go through SEMI E98-1106 “Provisional Standard for the Object-Based Equipment Model (OBEM)” for 5-year-review.

Action Item: 20130419-1, Get more information about Doc 5538 from Japan I&CC and distribute to the committee members

Attachment: 04, Japan Information & Control Committee Liaison Report

3.3 North America Information & Control Committee

Natalie Shim reported for the North America Information & Control Committee. Of note:

- Meeting Information:
 - Last meeting: April 3, 2013 at San Jose, CA

- Next meetings: July 8-10, 2013 at San Francisco, CA
 - Monday, July 8
 - I&C Leadership (09:00 – 10:00)
 - GEM300 task force (10:00 – 17:00)
 - PCS (13:00 – 15:00)
 - I&C GCS (17:00 – 18:00)
 - Tuesday, July 9
 - DDA task force (08:00 – 12:00)
 - Sensor Bus task force (13:00 – 15:00)
 - Discussion on Japan EISS task force Activity (13:00 – 15:00)
 - Energy Saving Equipment Communication task force (15:00 – 18:00)
 - Sort Map task force (15:00 - 17:00)
 - Wednesday, July 10
 - I&C Committee (8:00 AM – 4:30 PM)
- Leadership and Structure Changes
 - Brian Rubow (Cimetrix) was appointed as co-chair and will be formally appointed by the NARSC at SEMICON West 2013.
- Ballot Review
 - Cycle 1, 2013
 - Doc.5511 (Reapproval of SEM E54,20, Standard for Sensor/Actuator Network Communications for EtherCAT) **passed** and sent to A&R for procedural review.
 - Cycle 2, 2013
 - Doc.5274A (Revision to Add a New Subordinate Standard Specification for Sensor/Actuator Network Specific Device Model of a Generic Equipment Add-On Sensor (ADDON) to SEMI E54-0710, Sensor/Actuator Network Standard) **failed** and sent to the task force for rework.
 - Doc.5411A (New Standard: Specification for Equipment Energy Saving Mode Communications (EESM) **failed** and sent to the task force for rework.
 - Doc.5452A (Line Item Revisions to SEMI E134-0710, Specification for Data Collection Management and SEMI E134.1-0710, Specification for SOAP Binding of Data Collection Management (DCM)) **passed** and sent to A&R for procedural review.
 - Line Item 1: Clarify conditionValue for Start Triggers and Stop Triggers
 - Line Item 2: Clarify InvalidExceptionRequest for an isDuplicate special case
 - Doc.5453 (Revision to Add a New Subordinate Standard: Specification for SECS-II Protocol for Equipment Energy Saving Mode to SEMI Draft Document 5411A, New Standard: Specification for Equipment Energy Saving Mode Communications (EESM)) **failed** and sent to the task force for rework.
 - Doc.5454A (Line Item Revisions to SEMI E30-0611, Generic Equipment Model (GEM) Standard and SEMI E5-0712, SEMI Equipment Communications Standard 2 Message Content (SECS-II)) **failed** and sent to the task force for rework.
 - *Line Item 1: Modifications to the definition of Alarms*

- Doc.5509 (Line Item Revision to SEMI E94-0312, Specification for Control Job Management) **failed** and sent to the task force for rework.
 - *Line Item 1: Clarify the entry for OutputRule in Table 2*
- Doc. 5510 (Line Item Revision to SEMI E157-0611, Specification for Module Process Tracking. Modifications to sections in the standard to clarify its content) **failed** and sent to the task force for rework.
 - *Line Item 1: Pre- and Post-processing Requirement*
- Ballot Plan
 - Cycle 3 or 4
 - Doc.5454B (Line Item Revisions to SEMI E30, Generic Equipment Model (GEM) Standard and SEMI E5, SEMI Equipment Communications Standard 2 Message Content (SECS-II), Modifications to the definition of Alarms)
 - Doc.5274B (New SEMI E54 Subordinate Standard: Specification for Sensor/Actuator Network Specific Device Model for Generic Equipment add-on Sensor (ADDON))
 - Doc.5411B (New Standard: Specification for Equipment Energy Saving Mode Communications (EESM))
 - Doc.5453A (New Subordinate Standard: Specification for SECS-II Protocol for Equipment Energy Saving Mode)
 - Note: This proposal will result in a subordinate standard under the “Specification for Equipment Energy Saving Mode Capability” (i.e., Revision to 5411B)
 - Cycle 4
 - Doc. 5509A (Revision to SEMI E94, Specification for Control Job Management)
 - Doc. 5510A (Revision to SEMI E157, Specification for Module Process Tracking)
 - Doc. TBD (Revisions to:
 - SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM))
 - SEMI E30.1, Inspection and Review Specific Equipment Model (ISEM)
 - SEMI E82, Specification for Interbay/Intrabay AMHS SEM (IBSEM)
 - SEMI E88, Specification for AMHS Storage SEM (Stocker SEM)
 - SEMI E91, Specification for Prober Specific Equipment Model (PSEM)
 - SEMI E122, Standard for Tester Equipment Specific Equipment Model (TSEM)
 - SEMI E123.1, Specification for SECS-II Protocol for Handler Specific Equipment Model (HSEM)
 - **Remove references of SML and SML Notation**
- Task Force Updates
 - Diagnostic Data Acquisition (DDA) TF
 - Revised SNARF
 - Doc. 5507 Revisions to SEMI E120, E120.1, E125, E125.1, E128, E132, E132.1, E134.1, E138, E139.1 to resolve issues identified in the TF (see back-up slide for additional details)

- Revisions made to include clarifications to exception criteria in E134. Also, changes to recognize Complementary Files and Various Materials will be made.
- These changes, including the recent SNARF revisions, will not affect the respective schema files
- GEM300 TF
 - New SNARFs
 - Doc.XXXX, Revisions to:
 - SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM),
 - SEMI E30.1, Inspection and Review Specific Equipment Model (ISEM),
 - SEMI E82, Specification for Interbay/Intrabay AMHS SEM (IBSEM),
 - SEMI E88, Specification for AMHS Storage SEM (Stocker SEM),
 - SEMI E91, Specification for Prober Specific Equipment Model (PSEM),
 - SEMI E122, Standard for Tester Equipment Specific Equipment Model (TSEM), & SEMI E123.1, Specification for SECS-II Protocol for Handler Specific Equipment Model (HSEM)
 - Remove references of SML and SML Notation
 - Additional Background: When the committee conducted the Intellectual Property Check, during ballot adjudication, it was reported that SML Notation is copyrighted by The PEER Group. While additional discussion between SEMI and PEER Group will be held (e.g., explanation/clarification of the SEMI Standards Regulations), the committee approved a SNARF to remove references of SML and SML Notation in these Standards (see above list). Additional Standards may be added to this list as the TF progresses with this activity.
 - Doc.5549, Revision to SEMI E30, Generic Model for Communications and Control of Manufacturing Equipment (GEM) with title change to: Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM)
 - Reorganization of introductory sections per the SEMI Standards Procedure Guide and Style Manual, and
 - Title change to add “Specification” document subtype.
 - Ballot Plan: Cycle 5 or 6, 2013

Action Item: 20130419-2, Check PCS task force status and report to the Korea I&C committee

Attachment: 05, North America Information & Control Committee Liaison Report

3.4 SEMI Staff Report

Natalie Shim gave the SEMI Staff Report. Of note:

- Global Calendar of Events
 - SEMICON West (July 9 – 11, 2013 at San Francisco, California)
 - SEMICON Taiwan (September 4-6, 2013 at Taipei)
 - SEMICON Europe (October 8-10, 2013 at Dresden, Germany)
- 2013 Critical Dates update

- Cycle 3 (Ballot submission by April 17, voting period: May 1 – 31)
- Cycle 4 (Ballot submission by May 20, voting period: June 1 – July 1)
- Major Items Included in Revision to the Regulations
 - This revision to the Regulations added a new category called Complementary File.
 - TC Chapters must take action on Standards that reference files in formats other than pdf (e.g., XML schema, WDSL, xls)
 - All non-pdf files published prior to March 2013 Regulations are Various Materials.
 - TC Chapters must decide if non-pdf files are required for implementation of the Standard, and if so, TC Chapter must issue a ballot to make the non-pdf files “Complementary Files”.
 - Future Tasks
 - Virtual Meetings
 - Official Liaisons with other SDOs
 - Redefine Interest Categories of TC Members
 - Inclusion of regulatory requirement in SEMI Standards / Safety Guidelines
- SEMI Standards Publications (March 2013 cycle)
 - New Standards: 0
 - Revised Standards: 3
 - Reapproved Standards: 2
 - Withdrawn Standards: 0
 - Total SEMI Standards in portfolio: 871 (Includes 93 Inactive Standards)
- Standards Usage Interview
 - Looking for details on how standards are actually used:
 - Development/Engineering
 - Procurement
 - Manufacturing
 - Interview should take less than 30 minutes – contact James or any Standards staff
- The Official SEMI Standards Group
 - <http://www.linkedin.com/groups/Official-SEMI-Standards-Group-1774298/about>

Attachment: 06, Staff Report

4 Ballot Review

Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.
Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

NOTE 1: Committee adjudication on Cycle 1 and 2 are detailed in the Audits & Reviews (A&R) Subcommittee Forms for procedural review. This A&R form is available as attachments to these minutes. The attachment number for each document is provided below the summary table.

4.1 Cycle 1 Ballot

| <i>Document #</i> | <i>Document Title</i> | <i>Committee Action</i> |
|-------------------|--|--|
| 4946A | Revisions to SEMI E87-0709, Specification for Carrier Management (CMS) and E87.1-0707, Provisional Specification for SECS-II Protocol for Carrier Management (CMS) | Failed and sent to TF for rework. |

4.2 Cycle 2 Ballot

| <i>Document #</i> | <i>Document Title</i> | <i>Committee Action</i> |
|-------------------|---|--|
| 5386A | Line Item Revision to SEMI E94-0312, Specification for Control Job Management, Enhancement of Material Redirection Mode | Passed and sent to A&R committee for procedural review. |

Attachment: 07, 4946A A&R report
 08, 5386A A&R report

NOTICE: This document met the 90% approval condition set forth in Section 9.6.3 of the *Regulations Governing SEMI Standards Committees* at the close of balloting.

5 Subcommittee & Task Force Reports

5.1 GEM300 task force

The task force leaders summarized the GEM300 task force meeting result by verbally. Of note:

- Meeting information
 - Last meeting: April 5 at TEL Korea
 - Next meeting: TBD
- Ballot review
 - The task force reviewed Doc.4946A and Doc. 5386A voting results and decided to fail Doc. 4946A and rework. On the other hand, the team passed Doc. 5386A. Task force also submitted Doc.5320B ballot authorization at cycle 3, 2013.
 - The task force plan to rework Doc 4946B at cycle 4, 2013 as below.

Motion: Approve 4946B at cycle 4, 2013

By / 2nd: Byoung Min Im (TEL Korea)/ Yoo Ho Choi (SK hynix)

Discussion: None

Vote: 8-0, Motion Carried

5.2 DDA task force

No update

6 Old Business

None

7 New Business

None

8 Action Item Review

8.1 *Open Action Items*

None

8.2 *New Action Items*

Natalie Shim reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

9 Next Meeting and Adjournment

The next meeting of the Korea I&C committee is scheduled for July 19, 2013 at SEMI Korea office, Seoul



Respectfully submitted by:
 Natalie Shim
 Standards Specialist
 SEMI Korea
 Phone: 81.2.531.7808
 Email: eshim@semi.org

Minutes approved by:

| | |
|-------------------------------------|-----------------|
| Chul Hong Ahn (SK Hynix), Co-chair | <Date approved> |
| Kevin Lee (Miracom), Co-chair | <Date approved> |
| Hyungsu Kim (Samsung SDS), Co-chair | <Date approved> |

Table 8 Index of Available Attachments #1

| # | <i>Title</i> | # | <i>Title</i> |
|----|--|----|------------------------|
| 01 | SEMI Standards Required Meeting Elements | 05 | NA I&CC liaison report |
| 02 | Korea I&CC previous meeting minutes | 06 | Staff Report |
| 03 | Europe Equipment Automation liaison report | 07 | 4946A A&R Report |
| 04 | Japan I&CC liaison report | 08 | 5386A A&R Report |

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.