



## EHS Japan TC Chapter Meeting Summary and Minutes

Japan Winter 2017 Standards Meetings in conjunction with SEMICON Japan 2017

Friday, December 15, 2017 13:00-16:00

Conference Tower, Tokyo Big Sight, Tokyo, Japan

TC Chapter Announcements

Next TC Chapter Meeting

Tuesday, April 24, 2018 13:00-17:00

SEMI Japan office, Tokyo, Japan

### Table 1 Meeting Attendees

**Co-Chairs:** Hidetoshi Sakura/ Nuflare Technology, Supika Mashiro/Tokyo Electron, Moray Crawford/Hatsuta Seisakusho

**SEMI Staff:** Chie Yanagisawa (SEMI Japan)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ASM Japan	Takasaki	Yoshihisa	SCREEN Support Solutions	Imamiya	Ryosuke
DAIFUKU	Hosaka	Yoshihiro	Tec Communications	Kanamoto	Makoto
Hatsuta Seisakusho	Crawford	Moray	Tec Communications	Kuroishi	Chikako
Murata Machinery	Tominaga	Tadamasa	Tokyo Electron	Horiguchi	Takahiro
NuFlare	Sakura	Hidetoshi	TÜV Rheinland	Matushita	Kazuya
NSS	Norman	Doug			
Panasonic	Sugihara	Kenji	SEMI China	Huan	Sophia
Safe Techno	Wakamatsu	Sadatsugu	SEMI Japan	Yanagisawa	Chie

### Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
None		

### Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
None	

### Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6288	Line Item Revision to SEMI S21-1106E, SAFETY GUIDELINE FOR WORKER PROTECTION	/
Line Item 1	Addition of Table of Contents, and Removal of the list of section numbers and titles from section 2 and add a NOTE to explain replacement and relocation of the list.	Passed as balloted

Note 1: **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

Note 2: **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

**Table 5 Activities Approved by the GCS prior to the Originating TC Chapter meeting**

#	Type	SC/TF/WG	Details
None			

**Table 6 Authorized Activities**

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

#	SC/TF/WG	Details
None		

Note 1: SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARE>

**Table 7 Authorized Ballots**

#	When	TF	Details
#6289	Early cycle of 2018	S18 Revision TF	Revision to SEMI S18-0312: ENVIRONMENTAL, HEALTH AND SAFETY GUIDELINE FOR FLAMMABLE SILICON COMPOUNDS

**Table 8 SNARF(s) Granted a One-Year Extension**

#	TF	Title	Expiration Date
None			

**Table 9 SNARF(s) Abolished**

#	TF	Title
None		

**Table 10 Standard(s) to receive Inactive Status**

Standard Designation	Title
None	

**Table 11 New Action Items**

Item #	Assigned to	Details
None		

**Table 12 Previous Meeting Action Items**

Item #	Assigned to	Details
EHS171004-01	SEMI Japan staff	To convey the message of the EHS Japan TC Chapter that SEMI should clearly define the word "STEP" is "published SEMI Standards education program" and SEMI HQ makes the staffs understand that definition in all regions including ones with no Standards division. (*This action is succeeded from EHS170425-02.) -> CLOSE at SEMI Japan staff
EHS171004-02	The attendees at this TC Chapter meeting (October 4, 2017)	To get their companies consider to nominate a new leader for the Seismic Protection Task Force in order that the task force could continue the activity in Japan region. -> OPEN

**Table 12 Previous Meeting Action Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
EHS171004-03	The attendees at this TC Chapter meeting (October 4, 2017)	To get their companies consider to participate in S18 Revision Task Force. -> OPEN
EHS171004-04	SDRCM TF	To propose a new SNARF for Line Item Revision to SEMI S17 at the first EHS Japan TC Chapter meeting in 2018. ->OPEN
EHS170425-03	STEP S2 Working Group/staff	To plan and hold the STEP S2 program in October 2017 -> CLOSE

## 1 Welcome, Reminders, and Introductions

Moray Crawford (Hatsuta Seisakusho) 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\_Required\_Elements\_Reg\_20150327\_E+J

## 2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

<b>Motion:</b>	To approve the previous meeting minutes with corrections.
<b>By / 2<sup>nd</sup>:</b>	Hidetoshi Sakura (NuFlare Technology) / Tadamasa Tominaga (Murata Machinery)
<b>Discussion:</b>	None
<b>Vote:</b>	11 in favor and 0 opposed. Motion passed.

## 3 Liaison Reports

### 3.1 JRSC Report

Hidetoshi Sakura (NuFlare Technology) reported for the JRSC that there was no specific item discussed at the JRSC meeting held on December 12, 2017.

### 3.2 GCS Report

Hidetoshi Sakura (NuFlare Technology) reported for the EHS GCS that there was no item between the previous Japan TC Chapter meeting and this meeting.

### 3.3 EHS North America TC Chapter

Tadamasa Tominaga (Murata Machinery) reported for the EHS North America TC Chapter. Of note:

- Manufacturing Equipment Safety Subcommittee (MESSC)
  - Single fault failures in S2
- S2 Chemical Exposure TF
  - Doc. 6171, Line Item Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment.
  - Doc. 5624, Line Item Revision to SEMI S2, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment.

- S3 (Heating Systems) Revision TF
  - Drafting doc. 6209, Revision of S3 with title change, Safety Guideline for Process Liquid Heating Systems
- S6 (Exhaust Ventilation) Revision TF
  - Have been on-going discussions related to various improvements
  - Gas Detection
- S8 Ergonomics TF
  - Drafting doc. 5996 Improvements to SEMI-S8 Appendix 1 SESC:
  - New SNARF 6309, Line Item Revision to S8-0915, Safety Guideline for Ergonomics Engineering of Semiconductor Manufacturing Equipment
- S10 (Risk Assessment) Revision TF
  - Drafting Ballot 6049A: Line-Item Revision to SEMI S10-0815E Safety Guideline for Risk Assessment and Risk Evaluation Process
- S22 (Electrical Design) Revision TF
  - Straw pole on what efforts to start with
- S28 Revision TF
  - No plan to expand scope
  - Doc. 6310, Reapproval of SEMI S28-1011 Safety Guideline for Robots and Load Ports Intended for Use in Semiconductor Manufacturing Equipment
- Anchorage TF
  - A line item ballot to S2 related to section 18.8.5.3 and its exception with a goal of clarifying the criterion is planned.
- Control of Hazardous Energy (CoHE) TF
  - Doc. 5957 draft rewrite of SEMI S2 Section 17
- Energetic Materials EHS TF
  - Ballot 5761B, New Standard: Environmental, Safety and Health Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes
- Fire Protection TF
  - 5969, Line Item Revision to SEMI S14-1016: Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment
  - 5969: Line Item Revisions to SEMI S2-0715
- NA Seismic Liaison TF
  - 2 change proposals for changes to DR information in S2 (scheduled to 'move' in July 2018) were sent following 'West to main JP task force, 2 more were under development
  - Continued working on last item ('negligible force' issue), made some progress, will call telecon's to complete. Targeting completion prior to Spring meetings.

**Attachment:** 02\_NA EHS TC Chapter Liaison report Nov 2017 v1

### 3.4 EHS Taiwan TC Chapter



Chie Yanagisawa (SEMI Japan) reported for the EHS Taiwan TC Chapter. Of note:

- Environmental Sustainability TF
  - Disbanded.
- Seismic TF
  - The leadership changes were made
  - In order to prevent the damage caused by earthquake, equipment in the clean room should take methods of fastening things and manufacturing process combined into consideration
  - Will plan to work with JP Seismic Protection TF to discuss about equipment of seismic protection issue.
- Equipment Safety TF
  - Propose the new business for moveable robot
  - Propose the new business for energy saving for clean room

**Attachment:** 03\_Taiwan EHS Liaison Report \_ 20171102\_r1

### 3.5 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report. Of note:

- SEMI Global 2017/2018 Calendar of Events
- SEMICON Japan Overview
- Global Standards Meeting Schedule
- SEMICON Japan Standards Meetings
- 2017/2018 Critical Dates for SEMI Standards Ballots
- A&R Ballot Review
- SEMI Standards Publications
- JRSC Topics

**Attachment:** 04\_SEMI Staff Report 20171212c

## 4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

4.1 Document #6288, Line Item Revision to SEMI S21-1106E, SAFETY GUIDELINE FOR WORKER PROTECTION

4.1.1 Line Item 1: Addition of Table of Contents, and Removal of the list of section numbers and titles from section 2 and add a NOTE to explain replacement and relocation of the list.

**Attachment:** 05\_6288\_LineItemLetterBallotReviewSheet

## 5 Subcommittee and Task Force Reports

5.1 GHG Emission Characterization Task Force



Chie Yanagisawa (SEMI Japan) conveyed a message from George Hoshi (Tokyo Electron) for the GHG Emission Characterization Task Force there is no update.

#### 5.2 S18 Revision Task Force

No report was made due to the TF leader's absence.

Chie Yanagisawa (SEMI Japan) mentioned that the ballot submission of major revision to S18 will be proposed at the "New Business" section of this meeting later.

#### 5.3 S23 Revision Global Task Force

Chie Yanagisawa (SEMI Japan) conveyed a message from George Hoshi (Tokyo Electron) for the S23 Revision Global Task Force there is no update.

#### 5.4 SDRCM (S Documents REG-PG-SM Conformance Maintenance) Task Force

No report was made due to the TF leader's absence.

Chie Yanagisawa (SEMI Japan) mentioned that #6288: Line Item Revision to S21 was reviewed and passed at the "Ballot Review" section of this meeting above.

She continued that a new SNARF for Line Item Revision to SEMI S17 should be proposed at the next TC Chapter meeting as in the action item EHS171004-04.

#### 5.5 Seismic Protection Task Force

No report was made due to the TF leader's absence. As for the action item EHS171004-02, the discussion will be made at "Action Item Review" section later.

#### 5.6 STEP Planning Working Group

Kenji Sugihara (Panasonic) reported for the STEP Planning Working Group that the STEP was held with 80 participants on October 20, 2017 at SEMI Japan office.

## 6 Old Business

### 6.1 Project Period Review

The TC Chapter reviewed the following items at the meeting.

- #6199: Reapproval of SEMI S17-0113, Safety Guideline for Unmanned Transport Vehicle (UTV) Systems
  - When #6199 activity started on April 25, 2017, initially considered as Reapproval of SEMI S17-0113.
  - However, in order to remove the list of section numbers and titles outside of main body per PM § 3.2.3, a new SNARF for line item revision will be proposed at the next TC Chapter meeting.
  - So, the ballot submission corresponding to #6199 SNARF will not happen.

### 6.2 Five Year Review

The TC Chapter reviewed the list of the Standards by Japan region published in 2012 and 2013 as follows.

- SEMI S17-0113: Safety Guideline for Unmanned Transport Vehicle (UTV) Systems

- Mentioned above.
- SEMI S18-0312: Environmental, Health and Safety Guideline for Flammable Silicon Compounds
  - #6289: major revision
    - Ballot submission to be proposed at the “New Business” section of this meeting later.

## 7 New Business

### 7.1 Proposal of New Activity (Revision to SEMI S18)

Supika Mashiro (Tokyo Electron) addressed the committee on this topic.

<b>Motion:</b>	To approve the #6289 ballot submission for early cycle of 2018
<b>By / 2<sup>nd</sup>:</b>	Moray Crawford (Hatsuta Seisakusho) / Kenji Sugihara (Panasonic)
<b>Discussion:</b>	None
<b>Vote:</b>	10 in favor and 0 opposed. <b>Motion Passed.</b>

### 7.2 Proposal of Editorial Change to S21 (Independently from a Letter Ballot)

NOTE 2: This proposal on this editorial change is made independently from a Letter Ballot, and requires TC Chapter review. The details are in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

### 7.3 SEMI S21-1106E, SAFETY GUIDELINE FOR WORKER PROTECTION

**Attachment:** 06\_BallotReport\_S21\_for\_Editorial Change

## 8 Action Item Review

### 8.1 Open Action Items

None

### 8.2 Previous Action Items

8.2.1 EHS171004-01: SEMI Japan staff to convey the message of the EHS Japan TC Chapter that SEMI should clearly define the word “STEP” is “published SEMI Standards education program” and SEMI HQ makes the staffs understand that definition in all regions including ones with no Standards division. (\*This action is succeeded from EHS170425-02.)

-> CLOSE at SEMI Japan staff

8.2.2 EHS171004-02: The attendees at this TC Chapter meeting (October 4, 2017) to get their companies consider to nominate a new leader for the Seismic Protection Task Force in order that the task force could continue the activity in Japan region.

-> OPEN

The discussion was made as follows.

Tadamasa Tominaga (Murata Machinery) made a comment that Mr Adachi is not a recommendable as a leader because he is not used to SEMI Standards activity nevertheless he has enough knowledge of this field.

The other companies other than Murata Machinery are under consideration. Yoshihiro Hosaka (DAIFUKU) made a comment that the leader(s) should be familiar with architect, especially US architect, and machine design, so the task force needs other participants than AHMS suppliers.



8.2.3 EHS171004-03: The attendees at this TC Chapter meeting (October 4, 2017) to get their companies consider to participate in S18 Revision Task Force.

-> OPEN

Hidetoshi Sakura (NuFlare) said that Gases vendor may join in this activity. Other participants are welcome.

8.2.4 EHS171004-04: SCRCM TF to propose a new SNARF for Line Item Revision to SEMI S17 at the first EHS Japan TC Chapter meeting in 2018.

-> OPEN

8.2.5 EHS170425-03: STEP S2 Working Group/staff to plan and hold the STEP S2 program in October, 2017

-> CLOSE

### 8.3 New Action Items

There is no action item for this meeting.

## 9 Next Meeting and Adjournment

The next meeting is scheduled as follows. See <http://www.semi.org/en/events> for the current list of meeting schedules.

- Date and Time: Tuesday, April 24, 2018, 13:00-17:00
- Venue: SEMI Japan office

Having no further business, a motion was made to adjourn. Adjournment was at 16:00.





Respectfully submitted by:

Chie Yanagisawa

Manager

SEMI Japan

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Minutes tentatively approved by:

Supika Mashiro (Tokyo Electron), Co-chair	--
Hidetoshi Sakura (NuFlare Technology), Co-chair	March 22, 2018
Moray Crawford (Hatsuta Seisakusho), Co-chair	--

**Table 13 Index of Available Attachments<sup>#1</sup>**

<i>Title</i>	<i>Title</i>
01_Required_Elements_Reg_20150327_E+J	04_SEMI Staff Report 20171212c
02_NA EHS TC Chapter Liaison report Nov 2017 v1	05_6288_LineItemLetterBallotReviewSheet
03_Taiwan EHS Liaison Report _ 20171102_r1	06_S21_BallotReport_for_Editorial Change

#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](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.