



EHS Japan TC Chapter Meeting Summary and Minutes

SEMI Standards Japan Winter Meetings 2025

Wednesday, December 3, 2025 10:00 AM – 1:30 PM JST

Room C+D, RISE GATE NIHONBASHI, Tokyo, Japan/ Official Virtual TC Chapter Meeting (Hybrid)

TC Chapter Announcements

Next TC Chapter Meeting

Wednesday, June 3, 2026 10:00 AM – 12:00 PM JST

SEMI Japan Office, Tokyo, Japan/ Official Virtual TC Chapter Meeting (Hybrid)

Table 1 Meeting Attendees

Italics indicate virtual participants.

Co-Chairs: Supika Mashiro/ Tokyo Electron, Moray Crawford/Hatsuta Seisakusho, Akiko Tsukada/ Nuflare Technology,
SEMI Staff: Akiko Yoshida (SEMI Japan)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
ACM	Cui	Shuangsheng	Safety Guru	Sklar	Eric
AMEC	Wang	John	SCREEN Semiconductor Solutions	Nishimura	Takayuki
ASML	Lee	Tong-Keun	SCREEN Semiconductor Solutions	Shibukawa	Jun
CERTIE	Ko	Kennis	Samsung Electronics	Yu	Jeongah
Fujikin	Sakura	Hidetoshi	Samsung Electronics	Jeong	Minsik
Hatsuta Seisakusho	Crawford	Moray	Self	Yeh	Yu-Chun
Hitachi High-Tech	Omomo	Yoshihito	SK hynix	Kwon	Hyukhwa
ICR	Kang	Kyung-Man	SK hynix	Park	Minjung
KOKUSAI ELECTRIC	Matsuda	Mitsuhiro	SZU Korea	Park	Keunyong
Kushan Kinglai Hygienic Materials	Kingson	Austin	Teradyne	Kim	JJ
MURATA MACHINERY	Adachi	Naruto	Tokyo Electron	Aoyama	Kokai
MURATA MACHINERY	Yamasaki	Kei	Tokyo Electron	Hama	Naoya
Nikon Precision	Girlea	Lucian	Tokyo Electron	Hayashi	Haruna
NuFlare Technology	Nakazawa	Takuya	Tokyo Electron	Mashiro	Supika
NuFlare Technology	Tsukada	Akiko	TÜV Media GmbH	Matsushita	Kazuya
PCA	Park	Hyunjun	SEMI China	Ma	Sara
Pilz Korea	Han	Jimmy	SEMI Korea	Shim	Natalie
SAFE TECHNO	Rao	G. Nageshwar	SEMI Japan	Hirabara	Takeaki
Safe World Engineering	Lim	Bruce	SEMI Japan	Yoshida	Akiko

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
Mobile Maintenance Robot Safety TF	N/A	Supika Mashiro (Tokyo Electron) Kokai Aoyama (Tokyo Electron)

Table 3 TC Chapter Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
N/A	Mobile Maintenance Robot Safety TF

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
7349A	Revision of SEMI S13-0113 (Reapproved 0819), ENVIRONMENTAL, HEALTH AND SAFETY GUIDELINE FOR DOCUMENTS PROVIDED TO THE EQUIPMENT USER FOR USE WITH MANUFACTURING EQUIPMENT with the Title change to ENVIRONMENTAL, HEALTH, AND SAFETY GUIDELINE FOR DOCUMENTS PROVIDED TO THE EQUIPMENT USER FOR USE WITH SEMICONDUCTOR MANUFACTURING EQUIPMENT	Passed with editorial changes

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

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

Table 5 Ratification Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>ISC A&R Action</i>	<i>A&R Forms</i>
None			

#1: **Passed** Ratification ballots will be submitted to SEMI publication for final processing.

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

Table 6 Activities Approved by the GCS between meetings of the TC Chapter

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			

Table 7 Authorized Activities

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

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
None			

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

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

Table 8 Authorized Ballots

<i>#</i>	<i>When</i>	<i>TF</i>	<i>Details</i>
None			

Table 9 SNARF(s) Granted a One-Year Extension

<i>#</i>	<i>TF</i>	<i>Title</i>	<i>Expiration Date</i>
None			

Table 10 SNARF(s) Abolished

#	TF	Title
None		

Table 11 Standard(s) to receive Inactive Status

Standard Designation	Title
None	

Table 12 New Action Items

Item #	Assigned to	Details
EHS20251203-01	SEMI Staff	To forward TC review results to Doc.#7349A to the ISC A&R SC for procedural review.
EHS20251203-02	SEMI Staff	To call for participation for the newly formed Mobile Maintenance Robot Safety TF and create a TF dedicated page on Connect@SEMI.

Table 13 Previous Meeting Action Items

Item #	Assigned to	Details
EHS20250625-01	SEMI Staff	To request SEMI Publication to label SEMI S17-0317 being Inactive as early as feasible. →Closed
EHS20250625-02	S13 Revision TF Leader	To submit Doc.#7349A for Cycle 7, 8, or 9, 2025. →Closed
EHS20250625-03	SEMI Staff	To ask SEMI HQ to improve SVM to ensure fair access for Program Members from Mainland China. →Closed

1 Welcome, Reminders, and Introductions

Supika Mashiro (Tokyo Electron) called the meeting to order at 10:00 AM JST. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01_Meeting Reminders

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: Approve the minutes as written.

By / 2nd: Moray Crawford (Hatsuta Seisakusho)/ Lucian Girlea (Nikon Precision)

Discussion: None.

Vote: 18-Y 0-N. Motion passed.

Attachment: 02_EHS JA TC Minutes_20250625_R1

3 Ballot Review

NOTE 1: TC Chapter adjudication of ballots 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 file name for each balloted document is provided.



3.1 *Doc.#7349A, Revision of SEMI S13-0113 (Reapproved 0819), ENVIRONMENTAL, HEALTH AND SAFETY GUIDELINE FOR DOCUMENTS PROVIDED TO THE EQUIPMENT USER FOR USE WITH MANUFACTURING EQUIPMENT with the Title change to ENVIRONMENTAL, HEALTH, AND SAFETY GUIDELINE FOR DOCUMENTS PROVIDED TO THE EQUIPMENT USER FOR USE WITH SEMICONDUCTOR MANUFACTURING EQUIPMENT*

- This Document **passed** TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.

Attachment: 03_7349A_Ballot Review

4 Liaison Reports

4.1 *Japan Regional Standards Committee (JRSC) Report*

Moray Crawford (Hatsuta Seisakusho) reported for the JRSC that the last meeting took place on August 28, in conjunction with the Planning Meeting. There were no topics specifically relevant to the EHS Japan TC Chapter.

4.2 *Global Coordinating Subcommittee (GCS) Report*

Moray Crawford (Hatsuta Seisakusho) reported for the GCS that SNARF for Line Item Revision to SEMI S30 was approved and its Letter Ballot submission for Cycle 1, 2026 was authorized by the GCS.

4.3 *EHS North America TC Chapter*

Eric Sklar (Safety Guru) reported for the EHS NA TC Chapter. Of note:

- The last meeting was held on October 9, 2025 in Phoenix, Arizona in conjunction with SEMICON West, and the next meeting will be held on February 12, 2026 in conjunction with NA Winter meetings.
- Line Items 1, 4, 5, 6, 9, 10 of Doc.#7371, Line-Item Revisions to SEMI S1-0824, Safety Guideline for Equipment Safety Labels passed the TC review with or without editorial changes.
- SNARF 7411, Line Item Revision of SEMI S30-0824, Safety Guideline for Use of Energetic Materials in Semiconductor R&D and Manufacturing Processes (Subj: criteria regarding source enclosure doors) was approved by the GCS.
- Doc.#7134C (Revision to SEMI S8-0218), Doc.#7371A (Line Item Revision to SEMI S1-0824), and Doc.#7372 (Line Item Revision to SEMI S23-1021^{E2}) were authorized to be submitted for either of Cycle 9, 2025, Cycle 1 or 2 of 2026.
- One year extension of the project period for SNARF 6907 (Revision to SEMI S7-0515 Safety Guideline for Evaluating Personnel and Evaluating Company Qualifications) was approved.
- The S2 Major Revision TF will send an information ballot out for work validation and to gather concerns.
- The S23 Revision Global Task Force is preparing for Doc.#7135, which updates SEMI S23-1021e, the Guide for Conservation of Energy, Utilities, and Materials Used by Semiconductor Manufacturing Equipment. Meanwhile, the ERP Task Force has revised RI 3, scheduled to be balloted in Cycle 1 or 2 of 2026.
- Korea EHS TC requested MESSC to change SEMI S2 RI 20. All the requested changes were reviewed and agreed upon by Korea EHS TC and NA EHS TC with one exception, the removal of R20-4.4.3 as published in S2 currently.

Attachment: 04_NA EHS TC Chapter Liaison report Dec2025v1

4.4 *EHS Taiwan TC Chapter*

Natalie Shim (SEMI Korea) reported for the EHS Taiwan TC Chapter. Of note:



- The last meeting was held on November 28, 2025 and the next meeting is TBD.
- TC Chapter approved to rename Equipment Safety TF to Facility and Equipment Safety TF and added “facility” in the charter of its TFOF.
- SNARF for New Safety Guideline: Safety Guideline for High-tech Factories was approved.
- SNARF for New Safety Guideline: Safety Guideline for Battery Energy Storage Systems (BESS) was approved.

Attachment: 05_EHS Taiwan Liaison Report_20251128_V1

4.5 EHS Korea TC Chapter

Natalie Shim (SEMI Korea) reported for the EHS Korea TC Chapter. Of note:

- The kickoff meeting was held on July 11, 2025 at SEMI Korea office and online (hybrid) and the next meeting will be held on March 6, 2026 at SEMI Korea office and online (hybrid).
- TFOF to form S2 Major Revision Liaison TF was approved and the TF members are participating in the weekly TF meeting of the primary TF.
- Field-Based Safety SC and Regulatory Alignment SC were newly formed, and their kick-off meetings were held in September.

Attachment: 06_Liaison report_KR_EHS_Oct2025

4.6 EHS China Chapter Formation Group (CFG)

Sara Ma (SEMI China) reported for the EHS China TC CFG. Of note:

- EHS discussion was organized during SEMICON China 2025 in March, and member companies shared their EHS experiences and current standards concerns.
- After a few months of discussions, the EHS China CFG kicked off on October 22, 2025. SEMI Standards Regulations were introduced to the members and a total of 122 people participated in the meeting.
- China CFG members are learning and providing perspectives on SEMI EHS Guidelines and actively participating in EHS related meetings and activities in other regions.

Attachment: 07_China Updates for EHS-Nov. Sara

5 SEMI Staff Report

Akiko Yoshida (SEMI Japan) gave the SEMI Staff Report. Of note:

- At SEMICON West 2025, for the first time in Phoenix, Arizona in October, the second round of SEMI Global Standards Summit (GSS) was held in the afternoon on Tuesday, October 7. The GSS is a strategic forum dedicated to identifying standards-critical areas and advancing an industry-wide standardization roadmap for the next 3- and 7-year horizons. The theme was “Future Standards for Connected & Sustainable Semiconductor Manufacturing.”
- As for upcoming NA Standards meetings 2026, NA Winter Meetings will be held in February in a full virtual format, NA Spring Meetings will be held in Albany, New York in May in conjunction with ASMC, and SEMICON West Meetings in October in San Francisco.
- SEMICON Japan 2025 will have irregular venue arrangements because of renovations at Tokyo Big Sight. Standards meetings will be held at TFT Building, not the Conference Tower.
- Procedure Manual was revised and the July 7, 2025 version has been published online. This revision includes: 1) major revision to multiple related Standards on a single ballot action, 2) clarification to major revision ballot format, 3) primary standard revision checklist, and 4) clarification of the SNARF form.



Attachment: 08_Staff Report_December 2025_R0

6 Subcommittee and Task Force Reports

6.1 Global Seismic Protection Task Force

Supika Mashiro (Tokyo Electron) reported for the Global Seismic Protection TF that there have been no activities after the revision to RI of SEMI S2 was successfully completed.

6.2 Global S23 Revision Task Force

Akiko Yoshida (SEMI Japan) reported that George Hoshi (Tokyo Electron), one of the TF co-leaders who had expressed his intention to step down from his leadership position, was unable to attend the meeting as originally planned. Supika Mashiro mentioned that the upcoming leadership transition from George Hoshi to herself would be discussed soon.

6.3 S18 Revision Task Force

Supika Mashiro (Tokyo Electron) reported for the S18 Revision TF that there had been no activities since the last TC Chapter meeting, but she plans to resume the work soon.

6.4 S2 Major Revision Liaison Task Force

Supika Mashiro (Tokyo Electron), as leader of the S2 Major Revision Liaison TF, reported that she has been actively attending the S2 Major Revision TF meetings. The liaison TF would convene when the primary TF shifts its discussion to a different topical area. She welcomes any suggestions for upcoming liaison TF meetings.

6.5 S13 Revision Task Force

This is replaced with Ballot Review of Doc.#7349A as described in 3.1 above.

7 Old Business

7.1 Project Period Review

No SNARFs will be expiring soon.

7.2 5-year Review

No document is subject for 5-year review within this year.

8 New Business

8.1 TFOF for Forming the Mobile Maintenance Robot Safety Task Force

Supika Mashiro (Tokyo Electron) presented the TFOF for forming the Mobile Maintenance Robot Safety Task Force to address issues to realize safe operation of mobile maintenance robots in the semiconductor Fab environment. This TF will develop new safety guidelines that are deemed necessary to fill the gaps between existing industry standards including SEMI Safety Guidelines with regard to safe operation of mobile maintenance robots. The TF co-leader would be Supika Mashiro and Kokai Aoyama, both from Tokyo Electron.



Motion: Approve the TFOF to form the Mobile Maintenance Robot Safety TF.
By / 2nd: Supika Mashiro (Tokyo Electron)/ Takayuki Nishimura (SCREEN Semiconductor Solutions)
Discussion: None.
Vote: 18-Y 0-N. Motion passed.
Attachment: 09_TFOF_Mobile Maintenance Robot Safety TF_Clean_r1

9 Action Item Review

9.1 Open Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
EHS20250625-01	SEMI Staff	To request SEMI Publication to label SEMI S17-0317 being Inactive as early as feasible. →Closed.
EHS20250625-02	S13 Revision TF Leader	To submit Doc.#7349A for Cycle 7, 8, or 9, 2025. →Closed. The ballot was submitted for Cycle 8, 2025.
EHS20250625-03	SEMI Staff	To ask SEMI HQ to improve SVM to ensure fair access for Program Members from Mainland China. →Closed. Implementation would be expected to happen early next year.

9.2 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
EHS20251203-01	SEMI Staff	To forward TC review results to Doc.#7349A to the ISC A&R SC for procedural review.
EHS20251203-02	SEMI Staff	To call for participation for the newly formed Mobile Maintenance Robot Safety TF and create a TF dedicated page on Connect@SEMI.

10 Next Meeting and Adjournment

The next meeting is scheduled for Wednesday, June 3, 2026 10:00 AM – 12:00 PM JST at SEMI Japan Office, Tokyo, Japan and via Official Virtual TC Chapter Meeting (Hybrid). See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: [1:30 PM JST].



Respectfully submitted by:

Akiko Yoshida

Standards & EHS

SEMI Japan

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Minutes tentatively approved by:

Supika Mashiro (Tokyo Electron), Co-chair	January 5, 2026
Moray Crawford (Hatsuta Seisakusho), Co-chair	January 5, 2026
Akiko Tsukada (NuFlare Technology), Co-chair	January 5, 2026

Table 14 Index of Available Attachments^{#1}

<i>Title</i>	<i>Title</i>
01_Meeting Reminders	06_Liaison report_KR_EHS_Oct2025
02_EHS JA TC Minutes_20250625_R1	07_China Updates for EHS-Nov. Sara
03_7349A_Ballot Review	08_Staff Report_December 2025_R0
04_NA EHS TC Chapter Liaison report Dec2025v1	09_TFOF_Mobile Maintenance Robot Safety TF_Clean_r1
05_EHS Taiwan Liaison Report_20251128_V1	

#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 Akiko Yoshida at the contact information above.