

## Metrics, Information Control, and Physical Interfaces & Carriers Joint Europe TC Chapters Meeting Minutes

SEMICON Europa 2015  
Wednesday, October 7, 2015, 2:00 PM - 4:15 PM  
Messe Dresden, Germany

### Next Committee Meeting

SEMICON Europa, Grenoble, France. Exact date will be determined. Check [www.semi.org/standards](http://www.semi.org/standards) for more info.

### SEMI Staff

Kevin Nguyen – SEMI HQ

### Co-chairs

Alfred Honold, InReCon (PIC, I&C, Metrics)

Frank Petzold, Trustsec (PIC, I&C)

**Table 1 – Meeting Attendees**

<i>Last Name</i>	<i>First Name</i>	<i>Company</i>
Honold	Alfred	InReCon
Petzold	Frank	Trustsec
Roussy	Agnes	EMSE-CMP*
Schellenberger	Martin	Fraunhofer IISB
Weber	Alan	Cimetrix

\*Attended via teleconference

**Table 2 – Organization/Task Force Changes**

None

**Table 3 – Ballots Summary**

None

**Table 4 – Authorized Ballots**

None

**Table 5 – Authorized Activities**

None

**Table 6 – Previous Meeting Actions Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>	<i>Status</i>
1014-1	SEMI Staff	Send message to Shannon about E48 inactivity	Completed
1014-2	SEMI Staff	Message to David Boldin about GCS participation	Completed
1014-3	SEMI Staff	Preparation of Liaison Report	Completed

**Table 7 – New Actions Items**

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
1015-1	Martin Schellenberger (Fraunhofer) and Alan Weber (Cimetrix)	To find out if the semiconductor industry would be interested in involving Predictive Model Markup Language (PMML) and come up with an idea for moving forward for an international task force. This topic is open for volunteers.
1015-2	All	To perform 5 year review for E104 and E141 <ul style="list-style-type: none"> <li>SEMI E104-0303 (Reapproved 0211) - Specification for Integration and Guideline for Calibration of Low-pressure Particle</li> </ul>

Item #	Assigned to	Details
		<p>Monitor</p> <ul style="list-style-type: none"> <li>SEMI E141-0705 (Reapproved 0211) - Guide for Specification of Ellipsometer Equipment for Use in Integrated Metrology</li> </ul>

### 1.0 Call to Order

Alfred Honor called the meeting to order and welcomed everyone who attended. A round of self-introduction was made. All SEMI standards meetings are subjected to SEMI Anti-Trust Reminder and Guidelines concerning Patentable Technology. SEMI Regulations now require all attendees to be members of SEMI standards. Membership enrollment is at [www.semi.org/standardsmembership](http://www.semi.org/standardsmembership). The agenda was reviewed and approved.

### 2.0 Review and Approval of Meeting Minutes from Spring Standards Meeting, Berlin, Germany, April 15, 2015

Minutes were reviewed. No change was made.

**Motion:** To accept the minutes as written.

**By / 2<sup>nd</sup>:** Alfred Honor/Frank Petzold

**Discussion:** None

**Vote:** Unanimous. Motion passed

[Attachment – 1, 141008\\_EAC\\_Minutes\\_Approved](#)

### 3.0 Staff Report

Report was given by Kevin. Highlights:

- Upcoming event
  - 2015
    - December 16-18, 2015
    - Tokyo, Japan
  - 2016
    - NA Spring, April 4-7, 2016, at SEMI HQ in San Jose, California
    - SEMICON West, July 11-14, 2016, San Francisco, California
- There are now 9 ballots cycle for 2015. Critical date for 2016 will be updated on the web at
  - <http://www.semi.org/Standards/Ballots>
- SEMI Standards Publications
  - Total SEMI Standards in portfolio: 947
- New Requirements/Process Reminders for TC Chapter Meetings from December 2014 Regulations
  - Standards Document Development Project Period
    - Project period shall not exceed 3 years (Regs 8.3.2)
    - If document development activity is found to be continuing, but cannot completed with the project period, TC Chapter may grant one-year extension at a time, as many times as necessary.
  - SNARF Review Period
    - A submitted SNARF for a new, or for a major revision to an existing, Standard or Safety Guideline is made available to all members of a TC Chapter's parent global technical committee for two weeks for their review and comment. (Regs 8.2.1)
      - If the SNARF is submitted at a TC Chapter meeting, the committee can review and approve, but the SNARF will need to be distributed for two weeks and then approved via GCS.
  - Procedures for Correcting Nonconforming Titles of Published Standards Document (PM Appendix 4)**
    - Some Standards qualify for a special procedure where a line item change can be used to correct the titles. Otherwise, the corrective action will likely require a major revision.
    - The following standard is in need of title correction for title conformance

SEMI E104-0303 (Reapproved 0211) - Specification for Integration and Guideline for Calibration of Low-pressure Particle Monitor

- **5 Year Review**
- The following standards are due for 5 year review
  - SEMI E104-0303 (Reapproved 0211) - Specification for Integration and Guideline for Calibration of Low-pressure Particle Monitor
  - SEMI E141-0705 (Reapproved 0211) - Guide for Specification of Ellipsometer Equipment for Use in Integrated Metrology

[Attachment – 2, SEMI Staff Report \(10 1 2015\)](#)

#### **4.0 Task Force Reports**

##### **4.1 Process Control TF**

Martin reported E133-1114 SPECIFICATION FOR AUTOMATED PROCESS CONTROL SYSTEMS INTERFACE was revised a few years ago on predictive maintenance. There has been no activities or support afterward. The TF may sunset if there is no further interest. The presentation by Jan Eite may generate a new activity.

##### **4.2 International Reticle SMIF Pod and Loadport Interoperability TF**

Alfred reported the TF is mainly working on Revision to Standard SEMI E111: 150 mm Reticle SMIF Pod. The revision is targeting on Related Information 2 on ACCESS PORTS FOR RETICLE SMIF POD (RSP150) PURGING. Feedback is sought at the Google site,

[https://docs.google.com/document/d/1D-o\\_8M9RThTUPs5K74sPdyRxW0VXolokaN2xTUfsGI/edit](https://docs.google.com/document/d/1D-o_8M9RThTUPs5K74sPdyRxW0VXolokaN2xTUfsGI/edit)

[Attachment – 3, Reticle Pod LP Interoperability TF Report 2015-09-30](#)

##### **4.3 Presentation “PMML for unsupervised learning models” as new possible topic for PCS Task Force, Jan Eite (TNO)**

Jan Eite was not available to present. However, Agnes, Jan’s project partner, conducted the presentation on his behalf. The interesting presentation is based on Predictive Model Markup Language (PMML). The concept for architectures, process control, and implementation were highlighted.

Alan commented the concept is interesting. Unfortunately the PCS was established too late to be adopted by the semiconductor manufacturers. PMML is not currently used in the semiconductor industry, but it is used elsewhere. It could be adopted to integrate third party models into the PCS systems. Is there an interest for semiconductor to be involved? If so, a team should be formed to move forward.

The EDA standards such as E120, E125, and E133 should be looked at since there may be an overlap. The technical aspects need to be discussed and collaborated. Participation of Alan Weber and James Moyne could help to identify the interactions with these standards. An ideal scenario would have people representing from PMML and semiconductor industries. IC manufacturers and APC may need to be involved.

**Action Item #1** – Alan and Martin to find out if the semiconductor would be interested in involving PMML and come up with an idea for moving forward for an international task force. This topic is open for volunteers.

[Attachment – 4, 2015 - Bullema - SEMICON Dresden PMML based Data Model for Fab Wide APC implementation](#)

#### **5.0 Liaison Reports**

Kevin reported all regional liaison reports.

##### **5.1 NA I&C Committee**

See attached.

[Attachment – 5, 151005\\_JA-ICC\\_Liaison\\_v2](#)

## **5.2 Japan I&C Committee**

See attached.

[Attachment – 6, NA I&C report September 2015](#)

## **5.3 Taiwan I&C Committee**

The TC met during SEMICON Taiwan in September 2015. Three new task forces approved.

- GEM 300
- Backend Factory Integration
- Equipment Information Integration

## **5.4 Korea I&C Committee**

The TC met in September 18, 2015. Two documents were authorized for cycle 1 2016 ballots.

- Doc. 5832, New Standard, Specification for Generic Counter Model
- Doc. 5833, New Standard, Specification for Maintenance Program Model

## **5.5 NA Metrics Committee**

There have been Webinars covering critical SEMI Metrics Standards, including E10: Specification for Definition and Measurement of Equipment Reliability, Availability, and Maintainability and E79: Specification for Definition and Measurement of Equipment Productivity, are under development. Upon completion, details will be posted to [www.semi.org/standards](http://www.semi.org/standards)

Alan commented SEMI E168-0915 - Specification for Product Time Measurement, was recently published. The effort was heavily led by SEMATECH.

## **5.6 Japan Metrics Committee**

No meeting. No activity.

## **5.7 NA PIC Committee**

See attached.

[Attachment – 7, NA PIC Report West 2015 DLB](#)

## **5.8 Japan PIC Committee**

See attached.

[Attachment – 8, 151007\\_JA-PIC\\_for-SE2015\\_v2.1](#)

## **6.0 Ballot Review**

None

## **7.0 Old Business**

None. All previous meeting action items were completed.

## **8.0 New Business**

Kevin mentioned SEMI E104 will need to be issued for title conformance. The TC can either issue a line ballot to correct its title while it is due for 5 year review.

Also, E104 and E141 are due for 5 year review. If revisions are needed, TFOF and SNARF are needed. If reapprovals, TFOF is not needed. **Action Item #2** - The TC will need to take action review these standards.

- SEMI E104-0303 (Reapproved 0211) - Specification for Integration and Guideline for Calibration of Low-pressure Particle Monitor
- SEMI E141-0705 (Reapproved 0211) - Guide for Specification of Ellipsometer Equipment for Use in Integrated Metrology

## 9.0 Next Meetings

The next EU TC Chapter will be held at SEMICON Europa 2016.

## 10.0 Action Item Review

Summary of action was reviewed by Kevin Nguyen. If any, these can be found in the New Action Items table 7 at the beginning of these minutes.

## 11.0 Adjourn

Adjournment of the meeting was held at 4:00 PM

These minutes are respectfully submitted by:

Kevin Nguyen,  
SEMI Standards Operations Manager  
Phone: 408-943-7997  
Email: [knguyen@semi.org](mailto:knguyen@semi.org)

Approved by:

Alfred Honold, InReCon (PIC, I&C, Metrics)  
Frank Petzold, Trustsec (PIC, I&C)

Oct 22, 2015

Oct 22, 2015

**Table 8 – Index of Attachment Summary**

#	Title		Title
1	<a href="#">141008_EAC_Minutes_Approved</a>	5	<a href="#">151005_JA-ICC_Liaison_v2</a>
2	<a href="#">SEMI Staff Report (10 1 2015)</a>	6	<a href="#">NA I&amp;C report September 2015</a>
3	<a href="#">Reticle Pod LP Interoperability TF Report 2015-09-30</a>	7	<a href="#">NA PIC Report West 2015 DLB</a>
4	<a href="#">2015 - Bullema - SEMICON Dresden PMML based Data Model for Fab Wide APC implementation</a>	8	<a href="#">151007_JA-PIC_for-SE2015_v2.1</a>

#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 Kevin Nguyen at the contact information above