

July 29, 1998
SUMMARY OF THE IEEE
EMCS STANDARDS COMMITTEE MEETING.
April 26, 1998
Westin – Seattle, WA

The following is a brief summary of the attached minutes, which highlight the key points and issues raised at the meetings.

- The meeting had a total attendance of 13, 8 SCOM members and 5 Guests. There were 7 SCOM proxies.
- Standards 139, 140, 187, 377, 473, 1140 and 1309 are current with no W/G activity.
- Standards 213 and 376 have passed 4 years since reconfirmation.. The SCOM Secretary completed 376 ballot without comment and 213 with one negative comment/ballot. Both standards now are being processed for final re-affirmation after resolution of the negative comment is completed. Both Standards need the action completed by the December 1998 IEEE Standards Board meeting. Dave Traver is looking to form a new W/G to begin the activity of updating 213 before its expiration by new FCC rules in June of 1999.
- Standard 299 is current, reconfirmed in 1991. Dale Svetanoff has resolved all of the negative ballot comments. He has now submitted the Proposed Standard Form to the IEEE.
- Standard 475 has not made further progress. Negative comments received on the 4th Draft and were not resolved in an acceptable “documented” manner. John Osburn is the new interim W/G Chair and has the action item to clear negative comments and re-circulate the standard if necessary before the May 1, 1998 target date and the Oct 30, 1998 RevCom date. The standard was re-affirmed in 1994.
- PAR 482-1992 was cancelled. Mr. Hoeft submitted a new PAR, which was approved by the IEEE as PAR 1530.
- PAR 1128 has completed the re-circulation and ballot activity successfully and was approved by RevCom on January 13, 1998..
- PAR 1302 had a passing ballot in early August, 98 and negative ballot comments were resolved. There was a motion to allow the IEEE the ability to resolve reference to a copyrighted figure (DEF STAN59-103) before the May 1, 1998 deadline. The W/G chair, Hugh Denny, has now submitted to the IEEE Standards Board for final action.
- PAR 1530 is the new work led by Bud Hoeft for establishing cable connector shielding measurement guidelines.
- The SCOM is working on improving documentation in preparation for potential IEEE audit.
- Clarification of SCOM Coordination activities with other national and inter-national standards bodies are ongoing.

Respectfully Submitted,

March 11, 1998

MINUTES OF THE IEEE
EMCS STANDARDS COMMITTEE MEETING.
Sunday - April 26, 1998
Westin, Seattle, WA

MEMBERS PRESENT

Donald N. Heirman	Chair	David Traver	Secretary
Donald Sweeney	Email/Coordination	Andrew Drozd	
Joe Butler	Policy/Procedures	Dan Hoolihan	Awards Co-Chair
Thurman Ritenour	Awards Co-Chair	John Osburn	W/G Coordinator

MEMBERS ABSENT

Stephen Berger	Vice Chair (Proxy)	Risaburo Sato	(Proxy)
John Kraemer	(Proxy)	Ed Bronaugh	(Proxy)
Ralph Showers	(Proxy)	Hugh Denny	(P1302)(Proxy)
Bill McGinnis	(Proxy)		

OTHERS PRESENT

Henry Benitez	Tektronix	Kimball Williams	Education
H. R.Hoffman	Lucent Technologies	Warren Kesselman	
Takeo Yoshino	Fukui University		

ADDITIONAL MINUTES DISTRIBUTION

Sue Vogel	IEEE Liaison	Janet O'Neil	EMCS Sec.
Bill Gjertson	EMCS Pres.	Leo Makowski	RAC
Todd Hubing	TAC	Kimball Williams	Education

ELECTROMAGNETIC COMPATIBILITY SOCIETY STANDARDS COMMITTEE CORRESPONDENCE

Seattle, WA - SCOM Meeting April 26, 1998- *Final Agenda*

0.0	Call to Order -	Heirman
1.0	Introduction	Heirman
2.0	Approval of Minutes – Atlanta, GA, Nov. 7, 1997	Heirman
3.0	Policy & Procedures / Operations Manual	Butler
4.0	General SCOM Operation Issues	
4.1	SCOM 1998 Re-Confirmation	Traver
4.2	Coordination & Liaisons	Heirman
4.3	Distinctness of SCOM	Heirman
5.0	1998 Budget	
6.0	Review of Standards Activities	Traver
6.1	STD 139 -Rec. Meas. of RF from ISM Equip	(Current)
6.2	STD 140 -Interference from Radio Htg Equip	(Current)
6.3	STD 187 -FM and TV Broadcast Receivers	(Current)
6.4	STD 213 -Cond. Emissions TV & FM Receivers	(Current)
6.5	P299 -Effectiveness of Shielded Enclosures	(Current)
6.6	STD 376 -Meas. of Impulse Strength/Bandwidth	(Current)
6.7	STD 377 -Land Mobile Communication Xmtrs	(Current)
6.8	STD 473 -Site Survey	(Current)
6.9	P475 -Meas. for Field Disturbance Sensor	(Gisin/Osburn)
6.10	P485/New # -Connector Shielding (PAR1530)	(L. Hoeft)
6.11	P1128 -RF Absorber	(Perini)
6.12	STD 1140 -ELF/VLF VDT	(Current)
6.13	P1302 -Gasket Effectiveness	(Denny)
6.14	STD1309 -Cal. of EM Probes & Sensors (Errata)	(Kraemer)
7.0	New Standard Requests	
7.1	Digital TV / FCC Measurement	
7.2	Coordination	
8.0	New SCOM Committee Membership	
8.1	August Elections- Officers SCOM	
8.2	Audit of SCOM P&P - November	(Drozd)
8.3	Standards Association Membership – Required for ballot	
9.0	Next Meeting	
9.1	Denver Symposium August 24, 1998 (8 am-12 noon) & 26, 1998 (7:30am to 8:30am).	
10.0	Adjournment	

MINUTES – April 26, 1998

1.0 Call to Order & Introductions -

The Vice Chair opened the SCOM working meeting at 5pm on Sunday, April 26, 1998. 8 SCOM members were in attendance, 7 proxies were presented to the chair and several special guests were introduced. The proposed Agenda was modified by adding items 7.1, 7.2, 8.1, 8.2, 8.3 and 9.1. In addition, the section 4.0 was changed from “Brainstorming” to “Re-confirmation”. A motion to approve the modified agenda was made, seconded and unanimously approved with no abstentions. For information on attendees and SCOM BoD Report by D. Heirman, [see Attachments A & B.](#)

2.0 Approval of SCOM Minutes – Atlanta, GA, November 7, 1997.

The committee reviewed the minutes and no significant modifications were requested, (typographical and spelling corrections only). After review a motion was made, seconded and passed, with one abstention by the Secretary, to approve the minutes as amended. [See Attachment C.](#)

3.0 Policy and Procedures & Operations Manual

Joe Butler indicated that the latest version of the SCOM is dated August 18, 1997. Joe indicted that some items may still be contained in the P&P that were more “operational” and he was hesitant to remove those specific items until the Operations Manual was formally completed. The chair indicated that all SCOM members should have a copy of this in preparation for the upcoming audit. An action item was suggested for Joe and the secretary to e-mail a copy to all members. Dan Hoolihan suggested that we publish it on the IEEE web page. Note: this item was actually discussed after agenda items 6.0 to 6.14- Standards Status. [See Attachment D.](#)

The Chair indicated that Hugh Denny had agreed to take on the task of updating the Operations Manual now that his work on P1302 was completed. The latest issue of the Operations manual was dated February 17, 1997.

Action Item Butler/Traver – e-mail updated copy of P&P to SCOM members
Action Item Traver – Re-send by e-mail latest copy of Operations Manual to Hugh Denny.

4.0 General SCOM Operation Issues [See Attachment E.](#)

4.1 SCOM 1998 Re-Confirmation

The Secretary indicated that he had received 1998 SCOM re-confirmation letters from all the current members. Andrew Drozd indicated that we needed some type of formal letter indicating the “assignment” of the SCOM membership. It was decided that a summary letter was adequate to meet the P&P. [See Attachment F.](#)

A discussion about Mike Hatfield membership took place. The summary of the discussion is that the invitation was not responded to after the secretary sent a copy of the P&P and invitation to the next meeting and the item is closed.

A discussion about the proposed PAR regarding Power Line Filters proposed by Tom Key took place during the dinner recess. The secretary indicated that the item “not active and considered closed” since no one from the Working Group had taken any action since the original proposal. Kimball Williams took the action item to contact a majority of the proposed W/G and see if there was any interest in the original PAR.

Action Item Traver – issue summary letter of 1998 reconfirmations, “Official Notifications”.
Action Item Williams – follow up with original Filter PAR W/G

4.2 Coordination & Liaison

The Chair indicated the latest information on SCOM liaisons for coordination for several international and national standards as follows:

CISPR A	Heriman / Mertel (need to assign only one for reporting purposes)
CISPR B	Hoolihan
CISPR E	Heirman (Tom Moore – EIA)
CISPR G	Heirman
C.63	Heirman / Bronaugh/ Nestor Castio – Power Society
SAE	
EMI/EMR/AE-4	Gary Fenecal
ESD ASSOC.	B. Ritenour

Coordination & Liaison - continued.

EIA R1 Commercial / Safety (TC-8)
R2 Commercial / EMC (TC-8)
(G46 was dropped – motion passed unanimously)

RTCA Eric Boorstrom

ASTM DO9.12.14 EMC Drew Paragrim (On P1302 W/G)
Transfer Impedance of Gaskets (In draft for over 3 years)
Environmental Conditioning of Gaskets (In draft for over 3 years)
Slot Aperture Test (In draft for over 3 years)
EO6.53 – Military Shelter (Mil-Std 285 was retired so technician level test procedure was developed)

Note: as a matter of ASTM Policy, drafts of ASTM are not routed for coordination according to Joe Butler.

ETSI/ERM Ron Storrs – Sweden

CENLEC Martin Brolick

IEC 61000> TC7- W/G3, TC-22 Power Quality – Automotive, TC 74, TC 65

IEC 62 / SC 62A

ISO 59000<

AAMI

FDA WEAC

COMAR

ENG

DoD

ACES

IEEE USA

SSIT

Joe Butler indicated that sometimes these persons identified were not always true “ liaisons ” but rather persons who the SCOM has identified as contact points to keep us informed of “what they are up too”. The chair indicated we “needed a process” to determine our activity level expected with these different groups – eg ... how the SCOM is expected to interact with each group.

Action item: Butler – put together proposed liaisons listing.

4.3 Distinctness of SCOM

A discussion of the previous meeting findings on the “distinctness of SCOM” was completed. Reference was made to the list of those specific items the attendees felt were distinct features of SCOM created at the last meeting in Atlanta. “How” we implement the activities we felt SCOM could contribute too was still an open question. Basic measurement technology and the ability to educate others seemed to be a focal point. How we “do it” is the open issue covered in the brainstorming portion of the meeting. The chair indicated as an example, “ should SCOM educate others in the use of STD 299 or other IEEE EMC standards?”

The Chair indicated that the original “charter” or function of the committee was to “maintain IEEE EMC Standards”. However, recent history has shown that we have obviously expanded the function to include developing new standards. Now it appears we are “having growing pains” in trying to coordinate with other standards organizations. The function or charter of the SCOM needs to be further defined to improve the combined direction of the SCOM, SAC and RAC.

5.0 1999 Budget

The Chair gave the following 1999 proposed SCOM Budget details:

Meeting Expenses	\$1000
Administrative/ Mailing	\$500
Chair Travel	\$1000
SCOM Administrative	\$500
W/G Chair Travel	\$2500
Standards Purchase	\$500
Training Tape for W/G	\$6000
TOTAL	\$12000

Warren Kesselman indicated that the basic budget proposal needed to be identified by May 1998.

6.0 Review of Standards Activities

6.1 STD 139

IEEE Recommended practice for the Measurement of Radio Frequency Emissions from Industrial, Scientific, and Medical (ISM) Equipment Installed on the User's Premises.

- Reaffirmed on March 18, 1993. Next review due in 1998

Action Item – Secretary start re -affirmation Ballot.

6.2 STD 140 -

IEEE Recommended practice for the Minimization of Interference from Radio Heating Equipment

- Reaffirmed in 1995.

6.3 STD 187 -

IEEE Standard on Radio Receivers: Open Field Method of Measurement of Spurious Radiation from FM and Television Broadcast Receivers.

- Reaffirmed in 1995. Some comments received by Chair on the effectiveness of this Standard and should SCOM revise or eliminate the standard in the near future.

6.4 STD 213 -

IEEE Standard Procedure for Measuring Conducted Emissions in the Range of 300kHz to 25MHz from Television and FM Broadcast Receivers to Power Lines

The secretary reported that he had received a passing ballot with negative comment from E. Bronaugh. The secretary indicated that he intended to try and resolve the negative ballot so we could keep the current standard while we started a new work to include Digital TV. The FCC will not recognize the 5 micro-henry LISN after June of 1999. **See Attachment G.**

Action Item Traver - resolve negative ballot and submit “Yellow”Form for submittal of Proposed Standard.

6.5 STD 299 - IEEE Standard method of measuring the effectiveness of the electromagnetic shielding enclosures.

The Chair indicated that the standard was now available from the IEEE and is current after completion of the final work of resolving and circulation of the responses to the negative ballots and comments. **See Attachment H.**

6.6 STD 376 -

IEEE Standard for the Measurement of Impulse Bandwidth

The secretary reported that he had received a passing re-affirmation ballot. [See Attachment I.](#)

Action Item Traver - submit "Yellow"Form for submittal of Proposed Standard.

6.7 STD 377 -

IEEE Recommended Practice for the Measurement of Spurious Emissions from Land-Mobile Communications Transmitters

The secretary reported that he had received a formal letter from Peggy Blash at the IEEE confirming the re-affirmation of 377 and 473 on June 26, 1997.

6.8 STD 473 -

IEEE Recommended Practice for an Electromagnetic Site Survey.

The secretary reported that he had received a formal letter from Peggy Blash at the IEEE confirming the re-affirmation of 377 and 473 on June 26, 1997. It is current with no W/G activity at this time.

6.9 STD 475-1983

IEEE Measurement Procedure for Field Disturbance Sensor (rf Intrusion Alarm).

John Osburn reported that he addressed "every comment I could find except one which asked for a change in terminology. John felt he was ready to submit the "Yellow"Form for submittal of Proposed Standard. The Chair indicated he had received a letter of extension on this project by RevCom until October 30, 1998. The secretary indicated that the target should be the "1st of May" to be 40 days prior to the next IEEE Standards Board meeting on June 25, 1998. [See Attachment J.](#)

Action Item: John Osburn – submit "Yellow"Form for submittal of Proposed Standard.

6.10 PAR 482-1992 / NOW PAR 1530

Cable Connector Shielding Characterization.

The secretary reported that he had received 8 approvals from SCOM members on the proposed PAR. The Chair indicated that the new PAR number of 1530 had been approved as of March 27, 1998 and that the PAR had a new title: "The Recommended Practice for Design and Construction of Calibration Artifacts for Cable Connector and Shielding Test Fixtures for Frequencies from 1 Hz to 10 GHz.".The Chair indicated that he had worked directly with the W/G Chair, Bud Hoefl, to finalize the final PAR scope and title.

[See Attachment K.](#)

6.11 Standard P1128-1992

Recommended Practice for RF Absorber Performance Evaluation in the Range 30 MHz to 5 GHz.

The Chair reported that RevCom has reported "that conditions for approval have been satisfied". The action was taken on January 13, 1998 and is now available. [See Attachment L.](#)

6.12 PAR P1140-1991 -

Standard Procedures for the Measurement of Electric and Magnetic Fields from Video Display Terminals (VDT's) from 5 Hz to 400 kHz. Published in June 1994. Review is due in 1998.

6.13 PAR P1302 -

Guide for the Electromagnetic Characterization of Conductive Gaskets in the Frequency Range DC to 18 GHz.

The Chair reported that Hugh Denny, the Working Group Chair, had spent an extraordinary amount of time completing the successful ballot and follow-up activities. He also suggested that Hugh should be considered for an award for his standards work. A reference to a "DEF-STAN59-103" may have a copyright attached to it. In order to assure the standard proceeds on schedule, a motion was made to tentatively allow the Chairman of the IEEE Standards Committee the "authorization to remove the figure and make a reference to it" if the copyright approval could not be resolved before the May 1, 1998 deadline. Page 41, figure 11 in the P1302 Draft 4.1 is the drawing of the measurement aperture in question. The motion passed unanimously with no abstentions. [See Attachment M.](#)

6.14 P1309

IEEE Standard for the Calibration of Electromagnetic Field Sensors.

The Chair indicated that equation 13G that has an incorrect sign. The IEEE was notified of the required correction on June 29, 1997 and it appeared to be lost. It was re-submitted to IEEE on April 14, 1998. The IEEE admits having received it, but could not explain why action wasn't taken.

7.0 New Standards Requests

7.1 Digital TV / FCC Measurements

The Secretary indicated that his company was involved in developing Digital TV. He indicated that the current standards (213 & 187) for TV needed to be updated for the new technology. The IEC/CISPR/EN standards will not work because the digital TV requirements are for USA only. Only the USA will have 18 different MPEG formats, with special EPG, Closed Caption packets etc. with a terrestrial broadcast (which will be different from cable signal which looks like it will be component video). The secretary indicated that we need a national working group with FCC participation and that he would be pursuing the activity.

7.2 Coordination

Don Sweeney indicated that he was following up with coordination requests. [See Attachment N.](#)

8.0 New SCOM Committee Membership

8.1 August Elections – SCOM

The Chair indicated that Stephen Berger would not be able to continue as an officer (currently Vice Chair) of the SCOM. In addition the Chair requested at least two volunteers for each position of the SCOM for election at the next meeting. The Chair indicated that we should solicit nominations, including self-nominations for selection at the next meeting. The Vice Chair and Secretary are "elected positions" according to the current P&P. Joe Butler and Donald Heirman would have to update the Policy and Procedures and a motion made and approved to make the change to add the Chair as an elected position.

Action Item: Traver – ask for nominations

Action Item: Butler/ Heirman – suggest change to P&P on how Chair is elected or appointed.

8.2 Audit of SCOM P&P

Andrew Drozd presented a matrix that he developed a "must have" and "should have" indicating the necessity of supporting documentation needed to prove conformance to P&P. As an example, a letter of sponsorship is nice to have or "should have" but it is not a "must have" requirement. There should be something on file to show how members were appointed to various positions within the SCOM. [See Attachment O.](#)

8.3 Standards Association Membership – Required for Ballot

The chair indicated that he wanted to remind the members that they must become members of the IEEE Standards Association order to vote on future ballots.

9.0 Next meeting

The next meetings are tentatively set for:

Rome, Italy: Friday September 18, 1998, 8am to 10 am in conjunction with the international Italian EMC Symposium.

IEEE NJ: Friday November 13, 1998, 5pm to 9pm in conjunction with the Fall BoD meetings.

10.0 Adjournment

The second meeting was adjourned at approximately 5 PM., November 7, 1997.

Respectfully Submitted,

David L. Traver - Secretary
EMC Society Standards Committee

Attachments A to O