IEEE EMC Society  
Standards Development and Education Committee  
(SDECom)  
http://www.emcs.org/standards/sdecomindex.html

Attendees:  
Alistair Duffy (Chair)  
Ed Hare (VP Standards)  
Bob Scully  
Davy Pissoort  
Henry Benitez  
Don Sweeney  
Jon Nguyen  
Don Heirman  
Craig Fanning (Vice Chair)  
John Norgard  
Ghery Pettit  
Doug Kramer  
Colin Brench  
Fred Heather  
Mike Oliver  
Charles Manto  
Ross Carlton (Secretary)  
Joanna McLellan  
David Traver  
Soo Kim (Standards Association)  
Hiroshi Inoue  
Cameron Jones  
Tom Braxton  
Jens Santulli

August 7, 2017  08:30-12:00  Washington, D.C., USA

1. **Call to Order and Introductions**  
The Chair opened the meeting by welcoming the attendees and establishing the ground rules for the meeting. The Chair introduced Mr. Soo Kim of the IEEE Standards Association. The Chair also summarized a very active program for standards development activities during the week, including 12 standards working group meetings in addition to the typical SDECom and SACCom meetings.

Attendees then introduced themselves, their affiliation, and their interest in standards development.

2. **Approval of Agenda**  
The draft agenda was reviewed and approved without change.

**GENERAL ITEMS TO NOTE**

3. **Show IEEE Patent slides**  
Attendees were notified of rules regarding the discussion of patented work.

**ADMINISTRATIVE ITEMS FOR ACTION**

4. **Minutes of Previous Meeting**  
The draft minutes from the March 26, 2017 meeting in Stuttgart, Germany were reviewed. The Chair reviewed the open SDECom volunteer positions from Section 8 of the minutes. The minutes were approved without change.

5. **Status of Old Action Items**  
- 2017-1 – Provide current status of IEEE 473 - Ed Hare – Complete. Chair of IEEE 473 is in attendance provided a status update in Section 10.
- 2017-2 – Provide suggestions to maximize EMC-S benefit - John Norgard – Closed. Since the Action relates to an ongoing interaction that is actively managed, this Action Item is closed. John is receiving input from SDECom members as needed. No specific suggestions were discussed.
6. **P187 Review**

The draft for ballot of P187 “Standard for Measurement of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz” has previously been circulated. David Traver, Chair of the P187 Working Group, provided the Committee with a status update. The draft is prepared to go out for ballot. There have been issues in getting industry participation from a couple segments. David has received about 30 responses from invitation letters sent to call for the balloting committee. The invitation will close on August 16th. The standard will be sent out for ballot in August.

There are few technical changes. The main work was in harmonizing references and requirements and updating the look of the standard to bring it up to date. In addition, information that is obsolete (i.e. CRT-specific technologies such as beam scanning) has been deleted.

The Committee reviewed the latest draft with redline changes. Specific changes and the rationale for such were discussed as the standard was reviewed.

The Committee unanimously (One abstention - David Traver) voted in favor of balloting the existing draft. Note that only editorial changes are allowed after the vote.

7. **Arrangements for the Conference Week**

A schedule of standards-related events has been published, printed and distributed to all Symposium attendees.

Committee members have been identified to attend each standards meeting.

The Committee requests that members assist in staffing the standards booth in the exhibit hall - particularly during the breaks. (Booth 841)

8. **Standards Association**

Soo Kim made some comments on behalf of the Standards Association:

The REVCom is being more detailed in their reviews and in enforcing policies. SDECom is doing a good job dealing with Standards processes.

The maintenance cycle for standards is 10 years.

IEEE 187 is the only standard currently in process.

Standards expiring next year that do not yet have PARs:

- 377
- 1140 - allowed to die
- 1302
9. Open Discussion

Don Sweeny stated that using a template for developing a standard is highly recommended. Soo Kim said that the template is considered difficult to use by some. Links to the template and other guidance information is available on the SDECom website.

Ghery Petit added that documenting the process is needed and should be provided to the "angel". Something beyond what is available from the Standards Association - more best practices and lessons learned in developing EMC standards.

The question was raised on how to sign up for balloting. This will be discussed in the Standards Development training session.

**Action 2017-10:** Ed Hare - Send balloting instructions by email.

Fred Heather proposed a new standard for direct lightning effects defining both methods and levels. He will coordinate with the SAE lightning committee. He plans to submit a draft PAR this week. He will solicit members at the TC-5 meeting. Bob Scully gave a history lesson on lightning requirements. There has always been a lack of a direct effect method even while the requirement for surviving a direct strike has been a requirement for many years. The Committee unanimously approved Fred to create a PAR for this standard.

P1897, an RP for "Resolution of Powerline Gap-Noise Reports", is in process for power companies with details of how to respond to reports of powerline noise.

**Action 2017-11:** Ed Hare - Work with Sue to send liaison request to Power & Energy to invite them to participate in P1897.

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**August 10, 2017 13:00-17:00 Washington, D.C., USA**

10. Call to Order and Introductions

The Chair opened the meeting by welcoming the attendees and establishing the ground rules for the meeting.

Attendees then introduced themselves, their affiliation, and their interest in standards development.

11. Approval of Agenda

The draft agenda was reviewed and approved without change.

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**GENERAL ITEMS TO NOTE**

12. Show IEEE Patent slides

Attendees were notified of rules regarding the discussion of patented work.

13. Update on standards

The current list of standards in development is located on the SDECom web site at: [http://www.emcs.org/standards/sdecom/Standards_Matrix.html](http://www.emcs.org/standards/sdecom/Standards_Matrix.html)

The current standards in development and standards requiring attention were reviewed.

**Std. 187-2003**
- From Ghery Petit
  - The revision parallels CISPR 32 for the broadcast piece
Draft is in good shape. Updating references and making other minor editorial and technical changes.

Balloting group being formed.

Project 370
- From Alistair.
  - Primarily an organizational meeting.
  - Established 3 task groups with a Chair and editor. Drafts are mostly complete.
  - Editors meeting this afternoon. Main work will happen tomorrow.
  - Considering taking to DesignCon for a "bring your own DUT" party.

Std. 377-1980
- No WG.

Action 2017-12: Ed Hare - Determine if minor revision can be made to keep the standard alive.

Project 473
- From Ed Hare
  - Currently withdrawn
  - Chair did not make WG meeting but did arrange for backup.
  - Primarily an organizational meeting. Discussions of next steps.
  - Scheduled a conference call in a couple months to keep momentum.
- Don Heirman
  - Will cover measurement of the environment both inside and outside a building.
  - Work is being coordinated with C63.

Std. 475-2000
- SDECom wants to extend frequency range up to 300 GHz.

Std. 1128-1998
- From Soo Kim
  - Established task groups to work on the chapters.
  - Setup up online work area and teleconference details
  - Seeking participation (co-sponsorship) from AP-S

Std. 1140-1994
- From Don Heirman
  - TC-7 was asked if they wanted to sponsor this a couple of years ago. They declined.
  - In this year's meeting, TC-7 decided to look into what might be salvaged and repurposed for near field, etc.

Std. 1302-2008/Project 1302
- From Davy Pissoort.
  - Revision of the existing standard
  - Close to complete
  - Davy to work with Soo on balloting over next few months.
  - On target for April 2018 balloting.
  - High attendance during the meeting (no count)
  - All needed changes identified
    - Defined the test methods to be included in the standard
  - Made plans for round-robin testing
  - Will form SC to define the testing
Std. 1597.1-2008/Project 1597.1
- From Alistair Duffy.
  - This is for the revision of an existing standard.
  - A lot of progress/change in techniques and usage.
  - Discussed what needs to change immediately vs longer time-frame issues.
  - Revision will focus only on needed immediate changes.

Project 1848
- From Keith Armstrong
  - Meeting held on 8/9.
  - Fewer attendees than previous.
  - Close to first public ballot after some formatting and SDECom review.
  - Licensing from IET is still an issue that needs to be worked out.

Project 1897
- Draft 85% complete.
- Tri-weekly meetings by Webex
- Good representation by electric utilities.

Project 2425
- Mike Oliver is our liaison. EMC-S is co-sponsor.

Action 2017-13: Mike Oliver – Report on the status of this WG at the next SDECom meeting.

Project 2710
- From Alistair Duffy.
  - On target

Project 2715
- From Davy Pissoort.
  - Set up monthly WG meeting
  - Identified people and methods
  - Round-robin testing in progress
  - First site completed on way to second site
  - Next to assign work areas

Project 2716
- From Davy Pissoort.
  - Next meeting in a few weeks in Angers
  - Methods and round-robin requirements are still TBD

Project 2717
- From Davy Pissoort.
  - Meeting held on August 8th.
  - Immediate tasks are research into applicable areas.

Project 2718
- From Ed Hare
  - Meeting held on August 8th.
  - Chair did not attend to update SDECom.
  - Ed says it is on target but no details were provided.

14. Reports from SDECom representation on other bodies
John Norgard, SDECom representative to ANSI C63, reported on the recent meeting on May 8-11, 2017. In addition, the meeting was also attended by SDECom members Don Heirman and Ed
Hare. John received reports from the various C63 subcommittees. Highlights of the status of ANSI C63 include:

- New or revised standards recently published
  - C63.2-2016
  - C63.5-2017
  - C63.27-2017
- In progress
  - C63.26
  - C63.25
  - C63.24
  - C63.4 (topics for next major revision)
  - C63.4a (amendment to current version)
- New standards
  - C63.29
  - C63.30
  - C63.31

The next meeting of ANSI C63 is in November 2017 at ETS-Lindgren in Austin, TX.

15. Possible New Standards

The Chair solicited the attendees for ideas regarding possible new standards.

- Statistical process control for EMC labs
- EMP Protection for Critical Infrastructure
  - Needs
    - Harmonized requirements and methods.
    - Easy for CEOs to understand.
    - Needs to apply to large (continent spanning) distributed systems.
    - How do we engender understanding by industry?
  - There was a good discussion from the Committee following the problem description. Members agree a simple document is not useful for engineering purposes. Meaningful guidance is complex by its nature. The overall feeling is that the topic is worthy of work but the final form of the guidance will likely not meet the initial desire.

CLOSING ITEMS

16. Other Business

A question regarding the possibility of on-line meetings was raised. There are many reasonable tools to facilitate online meetings. These tools are noted for a few issues including audio and video quality. However, they can be useful when a Committee member cannot attend a meeting in-person. Additional possibilities include email lists (using the IEEE ListServe service) and online group workspace applications (IEEE Collabratec).

Don Sweeny raised the issue that working groups disband too soon and that history can be lost. Unfortunately, this is the process and a PAR would be needed to formally maintain the WG or MT. SDECom could consider moving the working group to a SDECom subcommittee (or other ad hoc group with a specific scope) to keep it together to provide consistency through future revisions or amendments. The following discussion from multiple members was in agreement.

17. Review of New Action Items

New Action Items assigned during this meeting are as follows:

Action 2017-11: Ed Hare - Work with Sue to send liaison request to Power & Energy to invite them to participate in P1897.

Action 2017-12: Ed Hare - Determine if minor revision can be made to keep the standard alive.
Action 2017-13: Mike Oliver – Report on the status of this WG at the next SDECom meeting.

18. **Adjournment of meeting**  
Chair

The next meeting of SDECom is planned for 12 November 2017 in Phoenix, AZ, USA.

The Chair closed the meeting by thanking the attendees and congratulating the membership on a successful Symposium week.