

SCC14
Quantities, Units and Letter Symbols Committee
Unapproved Minutes
14 November 2016 at 2:00 PM EST
Join.me Web Meeting

1. Call to order

The chair called the meeting to order at 14:10.

2. Roll Call of Voting Members

Voting members present: Gordon Aubrecht (Secretary), Peter Balma (Vice Chair), Angelo Campanella, Douglas Edwards, James Frysinger (Past Chair), Randall Groves, Gary Hoffman (Chair), Ronald Petersen, Howard Ressel

Voting members not present: Bruce Barrow, Clair Clayborn, Michael Heinsdorf, Bill Potts, Ambler Thompson, Paul Trusten

Persons in attendance: Andrew Fieldsend, Ronald Hotchkiss, Ahmed Zobaa, Christopher Struck, Bartley Cardon, Elizabeth Gentry, Malia Zaman (IEEE-SA Staff), Michele Turner (IEEE-SA Editorial Staff)

Attendee requesting membership: Christopher Struck (Granted by the SCC14 Chair)

3. Introductions (Please give your affiliation): The Chair invited anyone attending who is not a voting Member in attendance may request Membership by contacting the SCC14 Chair.

4. Determination of Quorum: 9 Members out of 15 in Attendance. Quorum was achieved.

5. Approval of Agenda

Peter Balma moved to approve, Gordon Aubrecht seconds

Motion approved unanimously.

6. Approval of May 2016 SCC14 Meeting Minutes

Gordon Aubrecht moved to approve, Peter Balma seconds

Motion approved unanimously.

7. Call for Patents

8. Chair's Remarks

The Chair announced that Mr. Bruce Barrow and Mr. James Frysinger will be individually awarded the IEEE-SA Standards Medallion at the IEEE-SA Awards Banquet on December 4, 2016 at the Palace at Somerset Hills for their tireless efforts in Standards Development for IEEE-SASB Standards Coordinating Committee 14 (SCC14). The Chair congratulated Messrs. Barrow and Frysinger for their outstanding efforts. The Chair also thanked and congratulated Mr. James Frysinger for the great job

getting the jointly sponsored ASTM/IEEE Std SI10 through the ballot process and Board Approval of ASTM and IEEE. The Chair announced that SCC14 will no longer be responsible for locating problems with SI usage in IEEE Standards both pre and post ballot, but will be the subject matter experts to advise Sponsors and the IEEE SASB through the IEEE-SASB Editorial Staff and recommend exceptions to IEEE Policy 9.17 to RevCom. The IEEE-SA Standards Board Implementation Plan for IEEE Policy 9.17 can be found at: <http://standards.ieee.org/about/sasb/metric.pdf>

9. Subcommittee Reports

9.1. SCC14.1:

9.1.1. WG SI 10 American National Standard for Metric Practice, Frysinger

It has been approved by the Boards of ASTM and IEEE. Chair Frysinger will see the galleys in about 2 weeks or longer. He will check the galleys, which needs to be vetted carefully, then IEEE-ASTM can publish. It may take several months. A suggestion was offered by Mr. Cardon to assist in editorial review. Chair Frysinger will enlist other members of WG SI10 if needed.

9.2. SCC14.2:

9.2.1. WG 270-2006 IEEE Standard Definitions for Selected Quantities, Units, and Related Terms, with Special Attention to the International System of Units (SI), Hoffman

Standard active until 31 December 2022

Nothing to report so far; The SCC14 Chair is titular head, expects to be replaced.

9.3. SCC14.3:

9.3.1. WG P260.1 IEEE Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units), Frysinger

PAR for revision approved until 2020

The Chair reported that the Working Group is using iMeetCentral for communication with his working group,

9.3.2. WG P1541-2002 IEEE Standard for Pefixes for Binary Multiples, Frysinger

PAR for revision approved until 2020, Standard active until 31 December 2018.

The Chair is using iMeetCentral.

9.4. SCC14.4:

9.4.1. WG P280-1985 IEEE Standard Letter Symbols for Quantities Used in Electrical Science and Electrical Engineering, Petersen

PAR for revision approved until 2020, Standard active until 31 December

2018. The Chair indicated that he has a working group. The Word files received from IEEE-SA Staff standards were corrupted, that required retyping almost everything. In a few weeks, he expects to send the first draft to the working group.

9.5. SCC14.5:

9.5.1. WG P260.4 American National Standard Letter Symbols and Abbreviations for Quantities Used in Acoustics, Hoffman

PAR for revision approved until 2020, Standard active until 31 December 2018

The Chair reached out to the Acoustical Society of America's (ASA) Director of Standards, Christopher Struck, who circulated an email alerting ASA Members of the IEEE-SA revision of P260.4 and those ASA Members interested should contact the P260.4 WG Chair. The P260.4 Chair thanked Mr. Struck and now there are 8 members of the working group. The Chair will feed the materials to voting members for comment and schedule the first working group meeting in January 2017.

Angelo Campanella spoke to Victor Sparrow, he has a notes that may be valuable. There was a lot of physics outside of acoustics; it turns out there are many sensors that need to be included. Mr. Campanella questioned how much of that should be in this acoustic document.

Mr. Cardon indicated that you need as much physics to make the document clear. It depends on what is in the PAR, The Chair noted that there is normative text that may be outside the scope of the PAR but this information may be included in other ways such as through informative notes or annexes.

9.6. SCC14.6:

9.6.1. WG 260.3-1993 American National Standard Mathematical Signs and Symbols for Use in Physical Sciences and Technology, Aubrecht

Standard active until 31 December 2022. There may need to be another person in charge due to Aubrecht's cancer diagnosis.

9.7. WG P945 Recommended Practice for Preferred Metric Units for Use in Electrical and Electronics Science and Technology, Barrow

PAR expires 31 December 2017, Standard active until 31 December 2018

The Chair was not in attendance to report. Mr. Aubrecht made progress, but the work has stalled at the moment. We may need a PAR extension.

10. New Business

10.1. **SCC14 proposed conventions for SCC14 reviewers of pre and post ballot drafts of IEEE Standards** (Time specific item to be discussed after Agenda item 8), Balma

Vice Chair Balma proposed conventions for SCC14 reviewers of pre and post ballot drafts of IEEE Standards, Mr. Balma provided a short presentation prepared with assistance of Michele Turner from IEEE-SA Editorial Staff for a two to three page document for Working Groups to help them with metrication. Mr. Balma suggested that such a document could be posted on myProject. Mr. Balma's presentation is attached to these minutes.

Peter Balma made a motion to for a Task Force for the creation of these SCC14 Conventions and James Frysinger seconded. The motion was approved unanimously.

Peter Balma requested volunteers to contact him to work on the document with a report due at our May 2017 SCC14 Meeting.

10.2. **SCC14 Website improvements, Frysinger**

Mr. Frysinger said he worked with Luigi Napoli of IEEE-SA IT Staff. We have a public page with a link to a private page. A member listing of SCC14 members could also be there. The committee can decide what to put on the public page.

Mr. Frysinger suggested that all former records be on the private page.

We have an email reflector: standards-units@ieee.org. Members can send emails to everyone else and email addresses are not exposed.

To ensure SCC14 is consistent with the SCC14 P&P Mr. Frysinger moved that we keep the required roster on the private web page. Mr. Aubrecht seconded.

Motion was unanimously approved.

Frysinger asks whether the names of members be put on the public page. Angelo asks if the working group names can be shared. The email reflector can handle it automatically.

Howard Ressel moved, Angelo Campanella seconds to put the name of voting members & affiliations on the public page. The motion was unanimously approved.

10.3. **SCC14 proposed Guide for alternate metric fasteners, valves and fittings, Hoffman**

The SCC14 Chair indicated that many IEEE Standards including those from the Communications and Power and Energy Societies use fasteners, valves and fittings that are not metric and this affects the global acceptance of IEEE

Standards. The SCC14 Chair recommended to SCC14 that an IEEE Guide to propose alternate metric fittings, fasteners and valves would be beneficial to IEEE-SA's desire to be a Global standards development organization. The Chair asked for a motion from the Members of SCC14 to form a PAR study group to work on developing a PAR for a new IEEE Guide. James Frysinger moved to approve a study group and Peter Balma seconded. The motion was unanimously approved. The SCC14 Chair will lead this effort.

10.4. SCC14 proposed Standard for metrication of digital imaging, Hoffman

The SCC14 Chair explained that there is a growing movement in digital imaging to move away from dots per inch as well as other Imperial Units to metric. Everyone agreed that this may be a worthwhile effort but Doug Edwards voiced a concern that there was no one to lead the effort. The SCC14 Chair requested a motion for conditional approval to form a PAR Study Group upon finding someone to Chair the PAR study group. James Frysinger moved to conditionally approve a PAR a study group contingent upon finding someone to Chair the effort, Howard Ressel seconded. The motion was unanimously approved. The SCC14 Chair will be looking for someone from digital imaging community to Chair this activity.

10.5. Investigate elimination of SCC14 subcommittees, Hoffman

The Chair indicated that with so few IEEE Standards, that there was no plausible reason for Subcommittees. Most SCC14 Subcommittees have only one Working Group. Jim Frysinger argued that subcommittees were useful. The Chair argued that it would be best that it had a flatter organization. There did not seem to be consensus either way so the Chair asked Jim Frysinger to work with the SCC14 Chair to discuss this matter further. Jim agreed.

11. Old Business: None

12. Next SCC14 Meeting May 11, 2017

13. Adjournment at 15:54.

SCC14
November 14, 2016
Agenda Item 10.1

Proposed Conventions for SCC14 review

Proposed Conventions for SCC14 Reviewers

- Why?
 - Provide easy reference for reviewers of Standards for metric units
 - Provide abbreviated document for Working groups to help them focus on key requirements for metrication May lead to additions to IEEE Style manual to facilitate the development of documents that meet the requirements of metrication
 - Expect a two page, three max 'Convention Document' (or maybe checklist)
 - Would be made accessible on-line for those preparing standards
 - May be places where it can be added to MyProject and Instructions in the future, after some experience in using it is gained
 - Could direct users to correct SCC14 Standard where a user can find more detailed information
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Example Conventions

- All measured and calculated values or quantities shall be expressed in metric units
 - Exceptions to use of metric units
 - A specific exception is given for trade sizes, such as AWG wire series and inch based standards for fasteners. Such data need not be translated into metric terms
 - It is preferred to provide a single figure illustrating dimensions, in metric dimensions, with inch-pound units data in parentheses after the metric units, rather than two separate figures????
 - Two sets of equations both in metric and inch-pound units can be provided????
 - Can exceptions be requested, if so, how, and who will follow????
 - If a value has been reported in metric units, but not the preferred units should it be rejected. For example, Newton/Square meter vs Pascal '(N/m² vs Pa)'
 - Metrication of Informative Annexes is desirable, but not required.
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Example Conventions (continued)

- Ten? most preferred metric units [top ten from SI-10] – preliminary could be list or table
 - Pressure: Pascal, Pa (psi)
 - Linear measure e.g. distance, length, width, depth) meters m (feet, inches)
 - Force: newton, N
 - Area: square meter, m^2 (Square feet, ft^2)
 - Density: kilograms per cubic meter kg/m^3
 - Energy: joule, J
 - Power: watt, W
 - When can hour, day month be utilized?
 - Flow
 - Torque: newton meter, $N\cdot m$
-

Motion to form Conventions Task Force

- Motion: To form a task force to develop a key metric conventions document, and present results to the SCC14 Committee for consideration of their adoption.
 - Discussion?
 - Vote
 - Volunteers for task force:
 1. _____
 2. _____
 3. _____
 4. Please contact Michelle Turner (m.d.turner@ieee.org) or Peter Balma (peter.balma@ieee.org) if you are interested in joining the task force
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