

IEEE Standards Coordinating Committee 14  
(Quantities, Units, and Letter Symbols)

Agenda

**2015-04-30 3:30-04:00**

[**year** corrected from 2014]

(30.04.2015 at 1:30 PM EDT)

By video-teleconference

Gordon Aubrecht, Bruce Barrow, Angelo Campanella, Jim Frysinger, Elizabeth Gentry, Michael Heinsdorf, Richard Peppin, Howard Ressel, John Terry Scott, Ambler Thompson

1. Roll call, quorum check, and adoption of agenda

We met the quorum requirement. Agenda adopted.

2. Secretary's minutes of last meeting

3. Approval of minutes of meeting of 2014 April 29

Terry Scott, SCC14-Rev: Somewhere Scott said that the reviewers had no idea of ... reviewers → IEEE copy editors

Anders Thor (fix the typo "Tor")

4. Chairman's report

IEEE training presentation on patents (annual requirement)

Ppt read. We have thoroughly studied this package.

Annual report on 2014 August 14 (copy provided); next due 2015 September

Submitted last August 2014.

Financial Report submitted; next due 2016 March 31

Submitted march 2015.

Chair reappointed 2015 January 08

Acknowledged the reappointment for a limited time. Frysinger has resigned.

SCC14 Policies and Procedures document (copy provided) submitted and approved on 2015 March 26. It will expire on 2020 December 31.

Summary Status of standards – These will be discussed as needed in the subcommittee reports.

See the provided spreadsheet (SASB-SCC14, 2013) for details.

– IEEE expiration dates

2018: 260.3, 260.4, 270, 280, 945, 1541  
2020: 260.1, SI 10  
– ANSI expiration dates in 2013  
260.4, 945, 1541

## 5. Reports of subcommittees

SCC14.1 – Frysinger — Revision due 2020 by IEEE rules; PAR submitted; WG P&P drafted

Revision due SI-10 by 2020. ASTM is 2017. PAR was submitted and approved. By the end of June, we should hear if the PAR is approved. We are required to have a Policies and Procedures (P&P) document, so Frysinger has drafted one.

SCC14.2 – IEEE Std 270-2006): Aubrecht — reaffirmed 2012 December 05, expires 2022

Nothing new to report.

SCC14.3 – IEEE Std 260.1-2004: Frysinger — expires 2020; ANSI expiration in 2015  
– IEEE Std 1541: Frysinger — expires 2018; ANSI expiration in 2013

Frysinger will submit PARs and begin work within the coming year.

SCC14.4 – Quantity symbols (Std 280-1985): Barrow — PAR extended through 2013; tied to P80000; std expires 2018. Now that P80000 has been withdrawn, what shall we do?  
–IEEE Recommended Practice for Preferred Metric Units for Use in Electrical and Electronics Science and Technology (Std 945): Barrow — Revision in progress.  
Barrow has asked for a few minutes here for a presentation.

We put in a PAR to develop an IEEE 80000, the PAR for 280 had its deadline extended (2018 is current expiration). Another part of IEEE signed an agreement prevented us from doing what we intended, so we withdrew the PAR. We have several years. Barrow missed this part of the discussion, and added in the end.

We talked about reaffirmation. All members will receive copies. We need to ID members to IEEE. We have a working group for 945, but does not have one for 280. We need volunteers. Bruce will notify us by email as to the membership. Campanella volunteered for 280. Barrow asked about the status of the 80000, but we don't have them available. Barrow agreed to move on both of these. We need a PAR to work; Barrow thinks we have a 945 PAR (Frysinger checked, we do), but not a 280 PAR. Frysinger and Ressel will be working with Barrow. There will be a revision of 945. There is controversy. Barrow asked: How does one settle if there are negative issues that cannot be resolved? Thompson thinks there is a 2/3 vote required. The weight-mass controversy erupts again!

SCC14.5 – Acoustics (Std 260.4-1996, reaff. 2008): New Chair needed — expires 2018; ANSI expiration in 2013

To be discussed under new business.

SCC14.6 – IEEE Std 260.3-1993): Aubrecht — reaffirmed 2012 August 30, expires 2022

Nothing new to report.

SCC14.7 – International System of Quantities: Thompson

This subcommittee should be withdrawn, according to Thompson. Moved and seconded. SCC14 had approved disbandment of SCC14.7 unanimously.

SCC14-Int – International report: Thompson

BIPM/CCU

- Redefinition of SI appears to be a go, final adjustments underway, 2018 CGPM. There are three different realizations of the Planck constant within the specified uncertainties. In June 2016, progress will be
- IPK comparison with BIPM working standard showed  $35.0 \times 10^{-9}$  error, in favor of US

Took from the “safe” and found disagreement of 35 parts per billion twice the size of the uncertainty (wanted 20 parts per billion for the kilogram).

- New SI Logo

This new logo was described.



- SI Brochure 2014 minor Supplement to 8th edition (2006)

This was a short supplement. There will be nothing further until the 9<sup>th</sup> edition is approved.

- CCU Working Group on Angles and Dimensionless Quantities in the SI (radian, steradian, s-1) ISO TC12/IEC TC25

Physicists started a working group to restore the radian and steradian to the SI. Metrologia has a paper from the working group, which Thompson asked us to read; he will send us an email with the link.

- Revision of ISO/IEC 80000 Series

All are currently under revision. On 26 June there will be an ISO TC12 meeting at NIST. Most changes seem to be small.

- ISO TC12 Plenary meeting and TC12/WG19 on 80000 series at NIST June 24-26, 2015

On 26 June there will be an ISO TC12 meeting at NIST. Most changes seem to be small and editorial. The effort is mainly to increase consistency and harmonization in the 13 parts of the standards. There were some errors in acoustics, which are being corrected.

- James Fryisinger resigned as DTA for US ISO TC 12 and TC 25, 3/31/2015

SCC14-Rev – Review: Barrow

Volunteers needed!!! Otherwise, he won't be able to proceed. Scott was disgusted with the process, because the people involved at IEEE have no knowledge of SI-10 and because of bureaucratic pettiness instead of the tutorials we used to write. Scott reminded us we should write a document for the IEEE copy editors explaining SI-10. We are not making much progress, which is frustrating. Barrow hasn't made it to Piscataway as was a possibility. Thompson volunteered the WERB from NIST as an example. Thompson will distribute this sheet.

The problem is that SI-10 is not like the other IEEE standards. The standards review board is part of the problem. Ressel was still interested in helping.

Fryisinger wondered if we could put something like that in SI-10.

SCC14-Leg – Legislative

Elizabeth Gentry Highlights

Publications:

- SI Superheroes Trading Cards (new)

The project aligns with a Public Affairs office YouTube video. Now there are 8 cards in the pack plus an introductory card plus a nemesis, Major Uncertainty. They would like to develop activities for middle school.

- SP 1181, Unit Pricing Guide - A Best Practice Approach to Unit Pricing (new)

The labels should help consumers make decisions, and this helps make a user-friendly label. Also, the guide shows the best practices. NIST will be doing testing.

Walmart, Pier 1 and others are interested.

- SP 365, Metric Conversion Card (updated)

Last updated in 1991. Two digits beyond the decimal place, made more calculator-friendly. SP811 is now exclusively online.

NCWM Animal Bedding Method of Sale Proposal

OWM has been working with leading U.S. compressed animal bedding manufacturers to amend the NIST HB 130 Method of Sale Regulation to require these products to be sold only by the expanded volume, which is the amount of bedding that the customer can expect to recover after the package is opened and the product is loosened and spread in a cage or stall. Animal bedding products are not subject to FPLA.

Under the proposal, packers may choose to exclusively label packages with only metric units, such as the milliliter, liter or cubic meter. It allows packers to include U.S. Customary units on an *optional* basis. This method of sale could be used as model to further encourage voluntary metric labeling on products not regulated under the FPLA. The proposal specifies that if retailers provide Unit Pricing, it must be presented in terms of price per liter (<http://www.ncwm.net/resources/dyn/files/1452597z58d3aec1/fn/3-LR-Master.pdf>). This is because the industry thinks Americans are familiar with that unit.

This proposal was developed in collaboration with some packers who would prefer to see one system of measurement used in unit pricing. This proposal might serve as a model for the future if it is adopted by the National Conference on Weights and Measures (NCWM). At this time, the proposal has been endorsed by the NCWM Laws and Regulations Committee and the full NCWM will consider for adoption at the upcoming Annual Meeting, Philadelphia, PA in July 2105.

#### Proposed State Metrication Legislation (Oregon, Hawaii)

- Oregon SB 166 – Introduced during the 2015 regular session and is described to establish the International System of Units (SI) as state's official system of measurement (<https://olis.leg.state.or.us/liz/2015R1/Measures/Overview/SB166>).
- Hawaii HB 36 – Originally introduced in January 2013 and is described as a law to make the metric system the official system of measurement in the State by 01/01/18 ([http://www.capitol.hawaii.gov/measure\\_indiv.aspx?billtype=HB&billnumber=36](http://www.capitol.hawaii.gov/measure_indiv.aspx?billtype=HB&billnumber=36)).

— USMA report: Young

#### 6. Other old business

Roster has been updated with tremendous help from Howard Ressel. Members now classified as “Voting” or “Voice only” to comply with new P&P document. Mail list has been updated to match roster.

#### 7. New business

Fryinger: Working Group Policy and Procedures documents need to be prepared and submitted for approval.

— “... IEEE-SA Standards Board maintains a baseline WG P & P, and may occasionally request to review a Sponsor's WG P & P for alignment.” Unanimous

Fryinger: Vote on approval of WG SCC14.1 Policies and Procedures Unanimous

Fryinger: New chair for 14.5, start work on Std 260.4

Peppin approved unanimously as chair.

Frysinger: Who will be the next Chair of SCC14?

- Must be a member of IEEE and also a member of IEEE-SA.  
IEEE-SA must approve and actually appoints the Chair.

There were no volunteers, so Thompson as vice chair takes over until the last meeting. Frysinger will help him.

- Our operations are guided by the IEEE-SA Standards Board Operations Manual is available at:  
<http://standards.ieee.org/develop/policies/opman/index.html> (HTML version)  
[http://standards.ieee.org/develop/policies/opman/sb\\_om.pdf](http://standards.ieee.org/develop/policies/opman/sb_om.pdf) (PDF version)
- Nominations
- Election

Frysinger: I am willing to remain on duty as the SCC14 webmaster for the time being, if the committee agrees to that. The duties include maintaining our website (which is woefully out of date) and our mail list.

#### 8. Review of action items: Aubrecht

A 280 PAR will be submitted by Barrow.

A 945 vote will occur, and the matter will be forwarded to SCC14.

Frysinger will submit 14.1 if and when approved.

Rich Peppin is new chair for 14.5, must now form a working group, and notify Frysinger and Thompson.

There was discussion about ASTM's role. They have thousands of standards. What do they have to do with 14.5? ASTM has an E-33 committee and ANSI a committee 1.1. Is there an interrelationship between 14.5 and 33? The working group could reach out to the ASTM and ANSI committees to try to make them comparable. Campanella and Ressel are both in position to do this. Can we write a standard acceptable to the other organizations? That's a worthwhile goal. There is a procedure to initiate a dual logo agreement. There can be an entity representative under IEEE rules. For now, there was a consensus that the 14.5 working group should draft a standard as compatible as possible with those of other organizations.

#### 9. Date for 2016 meeting — April in Gaithersburg? Video-conference?

The meeting date will be in the last two weeks of April to be decided in a doodle poll.