

# IEEE Standards Coordinating Committee 14

## Quantities, Units, and Letter Symbols

### Annual Report for 2010

#### 1. Scope

SCC14 studies questions regarding quantities, units, and systems of measurement, with particular emphasis on the International System of Units (SI), and it prepares recommendations and standards on those matters. It is responsible for providing current information on quantities and units to all organizations preparing IEEE standards, and for assisting all IEEE organizational units, as requested, in implementing IEEE Policy 9.19, Metric Policy (formerly numbered 9.20).

It is also responsible for the development of standards in the areas of metric practice and letter symbols, for ensuring consistency in these areas in standards that are issued by IEEE, and for providing current information on letter symbols and metric practice to all organizations preparing IEEE standards.

SCC14 works with the committees responsible for generating IEEE standards to help them meet the requirements of the Standards Board Implementation Plan for IEEE Policy 9.20 [Metric Policy], adopted March 16, 1995. As part of the coordination process, it reviews requests for individual exceptions and reports its recommendations to the Standards Board.

#### 2. Membership

The membership roster for SCC14 is attached.

Standards are prepared and maintained in the following six sub-committees, which are responsible for standards as indicated:

- 14.1 Metric Practice (Std 945; IEEE/ASTM SI 10)
- 14.2 Definitions (Std 270)
- 14.3 Unit Symbols (Std 260.1, Std 1541)
- 14.4 Quantity Symbols, electrical science and engineering (Std 280)
- 14.5 Quantity Symbols, acoustics (Std 260.4)
- 14.6 Mathematical Symbols (Std 260.3)

There are also three subcommittees that focus on coordination with other organizations:

14-Int Coordinates with IEC and ISO on matters of mutual interest; supports the U.S. Technical Advisory Committee for IEC TC 25 and the U.S. Advisory Group to ISO TC 12

14-Rev Reviews proposed IEEE standards and submits comments as part of the mandatory SCC14 coordination before they are submitted to RevCom

14-Leg Follows proposed legislative and regulatory actions that affect metrication, both nationally and internationally

#### 3. Activity Report

##### *Objectives and Goals for 2008/09*

SCC14.3: Revise/reaffirm Std 280. *Performance: IEEE Std 280 was extended in 2008, pending completion of P80000.*

SCC14-Rev: Reestablish SCC14 coordination activity by end 2008. *Performance: This is still a difficult area. One person volunteered to chair this committee but had to withdraw for personal reasons. Efforts continue to find another person to adopt this responsibility. Meanwhile, as time permits, others are doing occasional coordination reviews.*

SCC14-Int: Develop proposed "Modified" versions of ISO 80000-3 and 80000-4 for adoption as IEEE standards by end 2009. *Performance: Draft work is in progress, may continue into 2011..*

### **Objectives and Goals for 2009/10**

SCC14.1: Working with ASTM, revision of IEEE/ASTM SI 10. *Performance: balloted by IEEE in 2010; responses are being drafted in anticipation of imminent re-balloting.*

SCC14.3: Revise/reaffirm Std 260.1. *Performance: IEEE Std 260.1 was reaffirmed in 2010.*

SCC14-Rev: Reestablish routine and full SCC14 coordination activity by the end of 2010. *Performance: This is still a difficult area. One person volunteered to chair this committee but had to withdraw for personal reasons. Efforts continue to find another person to adopt this responsibility. Meanwhile, as time permits, others are doing occasional coordination reviews.*

SCC14-Int: Develop proposed “Modified” versions of ISO 80000-3 and 80000-4 for adoption as IEEE standards. *Performance: In progress; first round for comments within SCC 14 may occur this fall.*

### **Objectives and Goals for 2010/11**

SCC14.1: Working with ASTM, revision of IEEE/ASTM SI 10. *Performance: balloted by IEEE in 2010; responses are being drafted in anticipation of imminent re-balloting.*

SCC14.2: Revise or reaffirm IEEE Std 270-2006. *Performance: Working Group formed; decision was made to seek reaffirmation.*

SCC14.6: Determine whether to revise or reaffirm, or whether to withdraw this as superseded by the P80000 series and take appropriate action.

### **IEEE Staff Support Requirements**

Michael Kipness provides administrative support to ensure that SCC14 standards development work conforms with approved IEEE standards practice, and serves as staff liaison between the Standards Board and SCC14.

Don Messina is principal liaison concerning standards publication.

Sue Vogel provides staff liaison with ASTM as required by the joint sponsorship of IEEE/ASTM SI 10.

### **Summary of Other Activities**

SCC14 continues to maintain its close liaison with its counterparts in ISO and IEC. The US Technical Advisor for TC 25 and representative on ISO TC 12 (Dr. Thompson, NIST), and the US Technical Advisor for TC 1 (Prof. Showers) are members of SCC14. Dr. Thompson is also a member of the Consultative Committee on Units of the General Conference of Weights and Measures. Work is in progress for NIST to underwrite a grant to be administered by IEEE in order to have Mr. James R. Frysinger lead the U.S. TAG for ISO TC12/IEC TC 25 for the next five years.

James R. Frysinger, Chair of SCC14, maintains two websites for the committee -- (<http://grouper.ieee.org/groups/si10/index.html>, and <http://grouper.ieee.org/groups/260/1/>) with a portion that is open to the public.

### **Issues before SCC 14**

At the request of the SCC 14 Chair, our staff liaison (Michael Kipness) worked with other IEEE SA staff members to provide us with sales data for the standards that SCC 14 maintains. Apparently this required the development of a new database or database request. The figures, which were recently provided, are not fully understood. Two standards we do not maintain (IEEE Std 255-1963 and IEEE Std 484-1987) were included. One of those (484-1987) may have been included because its title includes the phrase “Letter Standards”. Monetary values are not provided for PDF copies downloaded. Some standards have multiple unit codes and the prices for the same standard might vary from one unit code to another. Mr.

Kipness has been asked to put the IEEE SA staff members responsible for this report in touch with the SCC 14 Chair to clarify these issues.

For at least five years, SCC 14 has asked IEEE SA, via our succession of staff liaisons and other staff members, to consider making the download of PDF copies of IEEE/ASTM SI 10 free to the public. This would of course be subject to agreement on the part of ASTM and ANSI. Making such downloads freely available might be seen as serving the public good. As an interim measure SCC 14 has asked IEEE SA to at least provide Working Group Chairs with complimentary copies so that they would be encouraged to take positive steps insuring that their proposed standards meet IEEE Metric Policy as implemented by the Standards Association. We have heard nothing from IEEE SA on either of these requests.

### ***Meeting Schedule***

The committee meets annually. In the past, this has largely been a physical meeting in the Washington, DC area, but telephonic participation has grown recently. In light of that and for the convenience of the members it met last on 2010 April 22 primarily by telephonic means, with the key station at NIST Headquarters in Gaithersburg MD and funded by them. The next meeting is tentatively scheduled for Thursday, 2011 April 21. This will also likely be a teleconference or perhaps a video conference or web conference. Between meetings the committee and its subcommittees work by means of electronic and telephonic correspondence.

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