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**April 1999** 

## **IEEE-SA Election Process in Place**

by Donald C. Fleckenstein

n fulfillment of one of its major goals, the IEEE Standards Association (IEEE-SA) was established as a membership organization and its members were authorized by the IEEE Board of Directors (IEEE BoD) to elect the IEEE-SA President-Elect and the members-at-large of the IEEE-SA Board of Governors (IEEE-SA BoG).

The membership of the IEEE-SA BoG is to consist of the Immediate Past President willing to serve, the President, the President-Elect, the Chair of the IEEE-SA Standards Board, the Immediate Past Chair of the IEEE-SA Standards Board willing to serve, and eight members-at-large.

Not all the necessary elements of the election procedures were in place last year; therefore, the election process could not be implemented for the 1999 service year. Now, the candidate selection process and balloting procedures have been approved so that the corporate office ballot for service in the year 2000 will include, for the first time, candidates for IEEE-SA elective positions. Only IEEE-SA members will receive ballots for the IEEE-SA candidates. Further, since the President of IEEE-SA serves as an IEEE corporate officer, only individuals who are both IEEE members and IEEE-SA members will receive ballots for the positions of President and President-Elect.

Because this is the first election and the IEEE-SA is following the example of the

IEEE by having three P's (Immediate Past President, President, and President-Elect), it is necessary to elect a President and a President-Elect in the first election. The elected President will serve in the year 2000 and the President-Elect will serve as President in the

Relatedly, in order to establish the two-year term plan for the members-at-large of the IEEE-SA BoG, all the members will be elected for service in the year 2000. The four members receiving the highest number of votes for a unique membership profile will serve two-year terms, while the four with the next highest number of votes for a unique membership profile will serve one-year terms. In the year 2001 and beyond, an election will be held for four members, each to serve two-year terms.

Candidates for the position of President-Elect are to have industrial or government experience, knowledge of and involvement in standards development activities, and proven leadership in their profession. Members-atlarge of the IEEE-SA BoG are to reflect the technical standards activities of the IEEE. To reach this goal, the standards programs of the IEEE entities were examined. It was concluded that the four societies having the highest number of standards projects would be assured of representation on the IEEE-SA BoG and the remaining four seats would be assigned to candidates from groupings of the

remaining societies. In an instance where qualified candidates are not available from these sources, the procedures allow for the naming of candidates to run for the open seats. There are also provisions to allow for petition candidates for all positions.

As the IEEE-SA moves forward to its first election, the achievement of a significant organizational objective is about to be realized. Each ensuing year will see improvements in the process and a resultant strengthening of the IEEE-SA and its programs. Watch your mail for a list of candidates, to arrive by mid-May, and remember that petitions need to be submitted to the IEEE corporate office by 12 Noon EST on 11 June 1999. Further information about the rules and procedures for this process, as contained in the IEEE-SA Bylaws and the IEEE-SA Operations Manual, can be found at http://standards.ieee.org/sa/index.html.

Donald C. Fleckenstein is a member-atlarge of the IEEE-SA BoG and Past-Chair of the IEEE-SA Standards Board.

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## Report by the President of the **IEEE Standards Association (IEEE-SA)**

by Donald C. Loughry

#### **IEEE-SA** and Institute Interactions

Tith an eye toward open communications, it is appropriate to provide you with some insight on key discussions and decisions at the

recent IEEE Board of Directors (BoD) meeting series, held this past February. Not only does the BoD meet, but a host of other entities such as the Technical Activities Board (TAB, Society connections) and the Regional Activities Board (RAB, Regional connections) also meet during that week. We in the IEEE-SA are forging relationships with these entities, which, by the way, is an activity very much in line with some of our strategic Standards goals. Following are some particular areas of interest to us.

A Transnational Committee, co-sponsored by both TAB and RAB, is focused on the IEEE's "Globalization" objective. Improving global participation and increasing representation on committees to be more in proportion to the demography of the IEEE's regional representation are two key goals. This committee is seeking IEEE-SA participation and support in promoting and applying a more globally-oriented thrust. With our standards development activities engaged in multinational interests, we have much to offer and we can leverage from this committee's interests and expertise. E. G. "Al" Kiener is our representative to the Transnational Committee.

One significant action in February was BoD approval of Policies and Procedures related to how we might better manage our standards meeting arrangements, particularly the larger ones involving several hundred participants and occurring in countries around the world. One key need is to ensure that the IEEE serves the public interest and does not jeopardize its not-for-profit tax status, as significant funds are collected and dispersed in the course of doing our job. The aim from a standards perspective has been to improve our overall performance without an undue burden on those arranging and managing standards development meetings. We have an opportunity to leverage some of the Institute's resources on conferences and meetings, as well as gain greater visibility and recognition. We have an imperative to conduct our affairs in a responsible manner. This is a topic you will be hearing more about later this year as we translate bylaw-like policies into much more pragmatic, operational guidelines.

During the course of the BoD Series, I had an opportunity to speak at the Society Presidents' Forum. Many societies are interested in building stronger links to the IEEE-SA and the overall standards development process. This interest coincides with the same strong. strategic direction taken by our IEEE-SA Board of Governors, as expressed in the February Standards Bearer article, "Strategic Initiatives Launched." A commitment has been formed to partner with the four societies having the most significant level of involvement with standards development, so as to improve the relationships and interactions between our technical societies and our Standards Activities. This is an important effort which you will be hearing more about in the coming months. Donald Heirman, IEEE-SA Standards Board Vice-Chair, leads the IEEE-SA in this important endeavor.

In summary, the preceding examples signal a new level of awareness by the IEEE BoD and other IEEE entities of our standards activities. There is a growing opportunity for the IEEE-SA to partner with these same entities and team up for some synergistic enhancements in our standards programs. Together we stand to gain a great deal.

#### **New IEEE-SA Corporate Member Benefits**

The IEEE Standards Association (IEEE-SA) is offering three new benefits for its corporate members. These include:

- An allotted number of individual IEEE-SA memberships for employees of corporate member organizations who meet the individual IEEE-SA membership criteria. This number is based on the dues structure:
- Ballot privileges on IEEE standards that impact the corporate IEEE-SA membership companies and industry; and
- A 25 percent discount on any multi-user level of the IEEE Standards On-Line Subscriptions, the IEEE Web-based annual standards subscription service.

For more information, contact Karen McCabe at k.mccabe@ieee.org.

#### **NESC Subcommittees Meet**

Seven technical subcommittees of the National Electrical Safety Code® (NESC®) met at IEEE headquarters in Piscataway, NJ, for three weeks in September and October, 1998. Approximately 125 members met to review 294 change proposals submitted for the 2002 Edition of the NESC.

From 1973 to 1994, the NESC was revised every three years. In 1994, the NESC Main Committee approved a five-year revision cycle for the NESC, commencing with the 1997 edition. A longer revision cycle allows for a more thorough review of proposals, as well as time for working groups to develop additional recommendations for inclusion in the Preprint.

Recommendations made at the meetings will be published in an NESC Preprint on 1 September 1999. Following publication of the Preprint, comments from the public and members will be due in May 2000. The 2002 Edition of the NESC will be published on 1 August 2001.

The NESC is adopted as law in the majority of states and Public Service Commissions across the United States.

For more information regarding the NESC, please contact Sue Vogel, NESC Program Manager, at s.vogel@ieee.org or visit http://standards.ieee.org/reading/ieee



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## FROM THE CHAIR OF THE IEEE-SA STANDARDS BOARD



by Richard Holleman

#### Information Rules!

In the recently published book, *Infor*mation Rules, by Carl Shapiro and Hal Varian, there are two chapters covering standards—"Cooperation and Compatibility" and "Waging a Standards War." I was especially interested in the

authors' views on open standards, who wins and loses from standards, the formal standards setting (IEEE is mentioned), and lessons learned.

While I don't intend for this to be a review or a promotion for the book, it does help to focus on a point that, I think, we often lose sight of when we are engrossed in our day-to-day, week-toweek, IEEE-SA Standards Board/Committee activities. The point is that in industry today, more than ever before, standards are strategic weapons. The processes, procedures, and activities for the development of IEEE standards provide the battlefield for engagements and victorious conclusions.

The military comparison, however, shouldn't be taken too far, or too literally, but it does emphasize the importance being placed on

standards by vendors, users, governments, and other stakeholders. For me, the role of the IEEE-SA and the Standards Board in this comparison cannot be overplayed. We have a huge opportunity and a responsibility to help the stakeholders successfully attain their strategic standards objectives. To be useful, our standards must be of the highest quality, must be available in the marketplace when needed, and must truly address user needs. By continuing to improve our use of electronic processing, increasing our continuous processing procedures, and working more closely with the IEEE technical societies sponsoring standards projects, we will turn opportunity into reality and success.

The corollary to "information rules" is, "he who has the information makes the rules." As volunteers and staff we are challenged to do our best to ensure that the rules have a positive and productive effect on the information, i.e., both the content of IEEE standards and ensuring that consensus and due process are maintained. Shapiro and Varian note that "standards change competition for a market to competition within a market." I believe we will increasingly become an even more integral part of that change and the marketplace it serves.

## Highlights of 18-19 January 1999 IEEE-SA Board of Governors (BoG) Meeting

At the 18-19 January 1999 meeting of the IEEE-SA BoG, the following actions were taken:

- As part of the overall strategic plan, it was agreed that the goal of the Globalization Ad Hoc Committee would be to concentrate on proactively soliciting recognition of IEEE's value as an international standards developer in the field of electrotechnology from IEEE members, customers, and key external organizations.
- The Nominations and Appointments Committee was asked to review the current election procedures and to recommend

refinements, as needed.

- The BoG agreed to continue to explore areas of mutual common interest with the National Electric Reliability Commission (NERC).
- The 1999 Standards Board Bylaws were approved as submitted.
- The meeting schedule for the balance of the year will be 17-18 May and 8-9 November; both meetings to be held at the IEEE Operations Center in Piscataway, NJ.

## Y2K Standards Available On The Web at No Charge

IEEE Std 2000.1-1998, IEEE Standard for Year 2000 Terminology, and IEEE Draft Standard P2000.2, IEEE Draft Recommended Practice for Information Technology Year 2000 Test Methods are available on the Web at no charge at http://grouper.ieee.org/ groups/2000/.

impact of the Year 2000 faced by all industries. We see both of these documents as

Year 2000 readiness and believe that by making them available to the public via our Web site at no charge will benefit industry and its Year 2000 efforts," stated Judith Gorman, Managing Director of IEEE Standards Activities.

## **IEEE ESSC Web Forum** Open

"We understand the global technology The IEEE Electronic Services Steering Committee (ESSC) has an interactive Web site at http://www.ieee.org/committee/essc valuable resources to all those working on /aug98. At the Web site is a list of topics

which IEEE customer, volunteer, and member input is requested. The role of ESSC is to take a fresh look at the IEEE's future offerings in electronic services, particularly those offered over the Web. The intent is to develop a plan for the Institute that maps what customers (members, companies, libraries, etc.) want from the IEEE two to five years in the future into a coherent strategy that addresses the policies, processes, and computing/communications/information infrastructure requirements needed to implement the services.

that the ESSC is addressing and about

APRIL 1999 **APRIL 1999** IEEE STANDARDS BEARER IEEE STANDARDS BEARER

# IEEE-SA STANDARDS BOARD

Piscataway, NJ

#### APPROVED PARS FOR NEW STANDARDS

**P802.1u** (C/LM) Standard for Virtual Bridged Local Area Networks—Technical and Editorial Corrections

P802.5x (C/LM) Standard for Virtual Bridged Local Area Networks: Source Routing—Supplement to IEEE Std 802.1Q

P802.15 (C/LM) Standard for Telecommunications and Information Exchange Between Systems—LAN/MAN—Specific Requirements—Part 15: Wireless Medium Access Control (MAC) and Physical-Layer (PHY) Specifications for Wireless Personal Area Networks (WPAN)

**P802.16** (C/LM) Standard for Telecommunications and Information Exchange Between Systems—LAN/MAN—Specific Requirements—Air Interface for Fixed Broadband Wireless Access Systems

**P958** (PE/ED&PG) Guide for Application of AC Adjustable Speed Drives for Electric Generating Stations

P1073.1.3.6 (EMB) Standard for Medical Device Communications, MDDL, Virtual Medical Device, Specialized, ECG

P1073.1.3.7 (EMB) Standard for Medical Device Communications, MDDL, Virtual Medical Device, Specialized, Blood Pressure

P1073.1.3.8 (EMB) Standard for Medical Device Communications, MDDL, Virtual Medical Device, Specialized, Temperature

P1073.3.2 (EMB) Standard for Medical Device Communications, Transport Profile, IrDA Based

P1484.15 (C/LT) Standard for Information Technology—Learning Technology—Data Interchange

**P1484.16** (C/LT) Standard for Information Technology—Learning Technology—HTTP Bindings

P1484.17 (C/LT) Standard for Information Technology—Learning Technology—Content Packaging

P1484.18 (C/LT) Standard for Information Technology—Learning Technology—Platform And Media Profiles

P1512.1 (SCC32) Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers

**P1512.2** (SCC32) Standard for Public Safety Incident Management Message Sets for Use by Emergency Management Centers

**P1512.3** (SCC32) Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers

P1512a (SCC32) Standard for Emergency Management Data Dictionary

**P1545** (SCC20) Standard for Parametric Data Log Format

**P1546** (SCC20) Guide for Digital Test Interchange Format (DTIF) Application

P1547 (SCC21) Standard for Interconnecting Distributed Resources with Electric Power Systems

P1549 (MTT) Recommended Practice for the Definition of Terms for Microwave Filters

#### REVISED PARS

**P1283** (PE/T&D) Guide for Determining the Effects of High Temperature Operation on Conductors, Connectors, and Accessories

**P1488** (SCC32) Standard for Message-Set Template (MST) for Intelligent Transportation Systems (ITS)

**P1512** (SCC32) Standard for Common Incident Management Message Sets for Use by Emergency Management Centers

#### PARS FOR STANDARDS REVISIONS

P390 (PEL/ET) Standard for Pulse Transformers
P516 (PE/T&D) Guide for Maintenance Methods
on Energized Power Lines

**P693** (PE/SUB) Recommended Practice for Seismic Design of Substations

**P738** (PE/T&D) Standard for Calculating the Current-Temperature of Bare Overhead Conductors

**P751** (PE/T&D) Guide for Wood Transmission Structures

**P935** (PE/T&D) Guide on Terminology for Tools and Equipment to be Used in Live-Line Working

**P946** (PE/ED&PG) Recommended Practice for the Design of DC Auxiliary Systems for Generating Stations

P1067 (PE/T&D) Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV AC and 750 kV DC

**P1100** (IA/PSE) Recommended Practice for Powering and Grounding Electronic Equipment

**P1307** (PE/T&D) Standard for Fall Protection for Utility Work

**P2001** (C/SCC) Recommended Practice for Internet Practices—Web Page Engineering—Intranet/Extranet Applications

**PC37.59** (PE/SWG) Standard Requirements for Conversion of Power Switchgear Equipment

**PC57.12.01** (PE/TR) Standard General Requirements for Dry-Type Distribution and Power Transformers Including Those with Solid Cast and/or Resin Encapsulated Windings

PC57.12.23 (PE/TR) Standard for Transformers— Underground-Type, Self-Cooled, Single-Phase Distribution Transformers with Separable, Insulated High Voltage Connectors; High Voltage (24 940 GrdY/14 400 V and Below) and Low Voltage (240/120 V, 167 kVA and Smaller) 18 March 1999

#### WITHDRAWN PARS

P378 (IM/HF&IM) Recommended Practice for Scattering Coefficient Measurement

**P802.9** (C/LM) Standard for Local and Metropolitan Area Networks—Integrated Services LAN Interface at the MAC and PHY Lavers

**P802.9b** (C/LM) Supplement for Functional Specification for AU to AU Interworking

P1003.14 (C/PA) Standard for Information Technology—POSIX® Multiprocessor Application Environment Profile

**P1003.18** (C/PA) Standard for Information Technology—POSIX® Standardized Profile—POSIX Interactive System Application Environment Profile

**P1175** (C/SE) Standard Reference Model for Computing System Tool Interconnections

**P1226.13** (SCC20) Standard for Parametric Data Log Format

**P1414** (PE/SWG) Standard for Common Requirements of IEEE Power Switchgear Standards

#### **CONDITIONS MET**

**492** (PE/EM) Revision Guide for the Operation and Maintenance of Hydro Generators

**1366** (PE/T&D) New Trial-Use Guide for Power Distribution Reliability Indices

**1393** (C/BA) New Standard for Spaceborne Fiber Optic Data Bus

1499 (C/DA) New Standard Interface for Hardware Description Models of Electronic Components

**C95.1a** (SCC28) New Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz—Supplement

#### **NEW STANDARDS**

**1076.1** (C/DA) Standard VHDL Analog and Mixed-Signal Extensions

1390.3 (SCC31) Standard for Automatic Meter Reading via Telephone—Network to Utility Controller

**1450** (C/TT) Standard Test Interface Language (STIL) for Digital Test Vector Data

1475 (VT) Standard for the Functioning of and Interfaces Among Propulsion, Friction Brake, and Train-borne Master Control on Rail Rapid Transit Vehicles

**2001** (C/SCC) Recommended Practice for Internet Practices—Web Page Engineering—Intranet/Extranet Applications

#### **REVISED STANDARDS**

**309** (NPS/NI&D) Standard Test Procedures and Standard Bases for Geiger-Mueller Counters (project also known as N42.3)

**802.11** (C/LM) Standard for Information Technology—Telecommunications and information exchange between systems—LAN/MAN area networks—Specific requirements—Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications

**C37.14** (PE/SWG) Standard for Low-Voltage DC Power Circuit Breakers Used in Enclosures

C37.111 (PE/PSR) Standard for Common Format for Transient Data Exchange (COMTRADE) for Power Systems

#### REAFFIRMED STANDARDS

**141-1993** (IA/PSE) Recommended Practice for Electric Power Distribution for Industrial Plants

**334-1994** (PE/NPE) Standard for Qualifying Continuous Duty Class 1E Motors for Nuclear Power Generating Stations

**525-1992** (PE/SUB) Guide for the Design and Installation of Cable Systems in Substations

**C57.105-1978** (PE/TR) Guide for Application of Transformer Connections in Three-Phase Distribution Systems

**C62.42-1992** (PE/SPD) Guide for the Application of Gas Tube and Air Gap Arrester Low-Voltage (Equal to or Less than 1000 V rms or 1200 V dc) Surge Protective Devices

#### WITHDRAWN STANDARDS

**463-1993** (IA/PCI) Standard for Electrical Safety Practices in Electrolytic Cell Line Working Zones

802.6c&h-1993 (C/LM) Local and Metropolitan Area Networks: Supplements to ISO/IEC 8802-6

896.3-1993 (C/BA) Recommended Practice for Futurebus+ $\! ^{\circledR}$ 

**896.4-1993** (C/BA) Standard for Conformance Test Requirements for Futurebus+®

999-1992 (PE/SUB) Recommended Practice for Master/Remote Supervisory Control and Data Acquisition (SCADA) Communications

**1002-1987** (C/SE) Standard Taxonomy for Software Engineering Standards

**1109-1990** (PE/SUB) Guide for the Interconnection of User-Owned Substations to Electric Utilities

**1209-1992** (C/SE) Recommended Practice for the Evaluation and Selection of CASE Tools

1298-1992 (C/SE) Standard Software Quality Management System, Part 1: Requirements

#### ABBREVIATIONS

C/BA C/DA C/LM C/LT C/PA C/SE C/SCC	Computer/Bus Architecture Computer/Design Automation Computer/LAN MAN Computer/Learning Technology Computer/Portable Applications Computer/Software Engineering Computer/Standards Coordinating	PE/EM PE/NPE PE/PSR PE/SPD PE/SUB PE/SWG PE/T&D	PE/Electric Machinery PE/Nuclear Power Engineering PE/Power System Relaying PE/Surge-Protective Devices PE/Substations PE/Switchgear PE/Transmission & Distribution
C/TT	Committee Computer/Test Technology	PE/TR PEL/ET	PE/Transformers Power Electronics/Electronic Trans-
EMB IA/PCI	Engineering in Medicine & Biology Industry Applications/Petroleum Chemical Industry	SCC20	formers Standards Coordinating Committee 20 (Abbreviated Test Language for
IA/PSE	Industry Applications/Power Systems	00004	All Systems [ATLAS])
IM/HF&IM	Engineering Instrumentation and Measurement/ Technical Committee 4, High-Fre-	SCC21	SCC 21 (Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage)
	quency	SCC28	SCC 28 (Non-lonizing Radiation)
MTT NPS/NI&D	Microwave Theory and Techniques Nuclear and Plasma Sciences	SCC31	SCC 31 (Automatic Meter Reading & Energy Management)
PE/ED&PG	/Nuclear Instruments and Detectors  R Power Engineering/Energy Develop-	SCC32	SCC 32 (Intelligent Transportation Systems)
	ment & Power Generation	VT	Vehicular Technology

## Highlights of the 18 March 1999 IEEE-SA Standards Board Meeting



At the 18 March 1999 meeting of the IEEE-SA Standards Board, the following actions were taken:

- Donald Heirman was unanimously elected as Vice-Chair of the IEEE-SA Standards Board for 1999. This will be his second year serving in this capacity.
- Gary Robinson received an award for his service and leadership as the first chair of the Registration Authority Committee from 1991 to 1998 (see picture above; from left to right: Dick Holleman, Gary Robinson, and Don Loughry).
- Donald Loughry, IEEE-SA Board of Governors (BoG) President, reported that the 1999 objectives for the BoG were condensed into nine major activities. Globalization, particularly in conjunction with the IEC, will be one of the major efforts. Don also

stressed that the aim of the Standards Board, Standards Association, and the Industry Standards and Technology Organization is to work in harmony.

- Scott MacFarland, Director, New Products in the Publications Department at the IEEE, gave a presentation on electronic publishing, focusing on the Electronic Professional Information Connection (EPIC), a three-part program of publication initiatives.
- The following motion was unanimously approved by the IEEE-SA Standards Board: "That a Web version of the Standards Association Standards Board Policy and Procedures (Bylaws and Operations Manual) be the authoritative version over the printed version."
- The Standards Department, in cooperation with the Institutional Research Department of the IEEE, is developing a global survey to determine how volunteers and customers view ANSI accreditation. A preliminary report is expected in June.

The Chair of SCC10 (Terms and Definitions) has resigned. If anyone is interested in assuming this position, please contact r.kershner@ieee.org.

The IEEE-SA Standards Board will postpone its 7–9 December 1999 meeting series until 28–30 January 2000, to take advantage of the opportunity to meet in Singapore in conjunction with the IEEE Power Engineering Society Winter Power Meeting. As a result, the following dates have been revised:

- 1) The submittal deadline for PARs and drafts will be 17 December 1999 for the 28–30 January 2000 meeting and
- 2) The submittal deadline for PARs and drafts for the 28–30 March 2000 meeting will be 19 February 2000. The March meeting will be two weeks later than normal.

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### **AWARDS SPOTLIGHT**

Hassan Yarpezeshkan, 449-1998

Don McLaren, 492-1999

Hanna E. Abdallah, 605-1998

Bill Lidinsky, Tony Jeffree, Mick Seaman, 802.1Q-1998

Joseph M. Gwinn, 1003, 13-1998

James P. Hanna, 1029,1-1998

Thomas A. Bruce, Carol Gann, Robert G. Brown, 1320,2-1998

Cheri Warren, 1366-1998

Fred J. Orlando, Stephen Rankin, William Schneider, 1393-1998

John Densley, 1407-1998

Mukund U. Modi, Jose De La Cruz, Harold Davis, 1445-1998

Gabe S. Moretti, Doug Dunlop, Kathy McKinley, 1499-1998

Lowell Johnson, 15068-2: 1999 (ISO/IEC) (IEEE Std 1387.2-1995)

Ronald C. Petersen, Om Gandhi, John D'Andrea, C95.1, 1999 Edition

Al Maguire, Jeff D. Walters, C136,18-1999

Al Maguire, C136.33-1999

Joel L. Lazewatsky, N42.27-1999

Leonard L. Tripp, IEEE Software Engineering Standards, 1999 Edition

## The Role of SCCs in Standards Development

by Donald Heirman

hen you see the acronym "SCC" in the Standards Bearer you may not have a clue what it stands for—but Standards Coordinating Committees (SCCs) are a vital link in the extension of standards development activity beyond a single IEEE society into other standards development organizations and also into other societies.

Proposed standards are normally developed in the technical committees of the IEEE societies. There are occasions when the scope of a standards activity is too broad to be encompassed in a single society, or a society may find itself in a position where it is unable to carry out the work needed to meet an identified need. In such instances, the IEEE Standards Association (IEEE-SA) Standards Board will establish its own committees to perform the required functions.

As stated in the IEEE-SA Standards Board Operations Manual, SCCs can be formed via two types of proposals: Type 1 proposals outline the desirability of coordination among societies where the proposal might cover those societies' interests in part. The Standards Board chair then invites the particular IEEE societies to participate. The Type 2 proposal is similar in that it can come from a volunteer, but instead the coordination proposal is first sent to all IEEE society and council presidents along with the following information:

- Scope of work for the proposed SCC;
- Need for and feasibility of the proposed SCC and why it should not be worked by a single society;
- Chair nominee and the chair's willingness to serve:
- Any necessary budget estimates for costs and revenue to support the
- An invitation for a society/council to sponsor the work.

The notified society/council presidents then are given an opportunity to sponsor the activity. If not, the proposal reverts back to a Type 1 and the Standards Board takes action.

The work of the SCCs is wide and varied. The chair has to be an IEEE-SA member, but the other members can be appointed by the SCC chair, a participating society, or the Standards Board itself. This flexibility brings together experts from a broad spectrum of interests and directly contributes to the success of the standards activity of these SCCs (which have standards-related outputs).

In 1998, SCCs were especially active, new ones were formed, and even those that were inactive came back to life as the Board increased its interests in SCC activity. Here are but a few examples:

• SCC 10, which is responsible for the IEEE Dictionary (IEEE Std 100) as well as reviewing definitions in proposed IEEE standards and revisions, was reactivated in 1998. The search for a Chair of the eightmember committee is underway to replace Bruce Barrow, who stepped down. We all wish to thank Bruce for his forward-looking work on revitalizing the committee in 1998. If interested in applying for the chair position, please contact Don Heirman at d.heirman@worldnet att net

- One notable new committee resulted from the merging of SCC 23, Dispersed Storage and Generation, with SCC 21, Photovoltaics, into the newly renamed SCC 21, Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage, with Chair Richard DeBlasio working the consolidated effort.
- SCC 34 is another newly-formed committee specializing in measuring and calculating electromagnetic fields that might indicate conditions that are unsafe to humans using medical devices. Ron Petersen of Lucent Technologies is the chair and is spearheading this very active SCC meeting every other month. Its first thrust is to study the electromagnetic fields from cellular telephones.
- Newly-formed SCC 36 will coordinate the development and maintenance of standards for the Utility Communications Architecture (UCA). This work will be coordinated among the relevant committees of the Power Engineering Society, the Communications Society, the Computer Society, and with appropriate external bodies including ANSI, ISO, IEC, and gas and water organizations.

There are many significant examples of continued activity from our SCCs—too many to mention in this short article.

Where does this leave our members? With an opportunity to participate! The SCCs are always looking for more participation! The chairs are the contacts. The best way to get to them is to contact Rona Kershner at r.kershner@ieee.org. You can also get more information by visiting the Standards Board Web site at http://standards.ieee.org/board/stdsbd/scc.html. The author can be contacted at d.heirman@worldnet.att.net. Give us a call—see if our SCCs fill your standards needs—and "sign up!"

Donald Heirman is the Vice-Chair of the IEEE-SA Standards Board and serves as the SCC Coordinator.

#### Significant coordinating efforts and scopes are highlighted below:

#### **SCC Number and Title**

- 04 Electrical Insulation
- 10 Terms and Definitions
- 14 Quantities, Units, and Let- 29 Stationary Batteries ter Symbols
- 18 National Fire Protection Association Standards
- 20 Test and Diagnosis for Electronic Systems
- 21 Fuel Cells, Photovoltaics, Dispersed Generation, and 35 Complex Systems: Defini-Energy Storage
- 22 Power Quality

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## ITS—Critical Standards for the 21st Century

by Thomas M. Kurihara

he Intelligent Transportation Systems (ITS) provision in the Transportation Equity Act for the 21st Century (TEA-21) emphasizes the development of the ITS National Architecture and an ITS body of standards. TEA-21 includes general provisions for:

- 1. The US Department of Transportation (DOT) to develop, implement, and maintain a national architecture and body of standards
- 2. The national architecture to promote ITS interoperability and efficiency:
- 3. Standards-setting organizations to use the national architecture and body of standards as appropriate. [The IEEE Standards Association (IEEE-SA) is one of five standards developing organizations tasked to develop ITS standards.]

Significantly, TEA-21 requires additional actions by the DOT to identify "critical" standards and to then tie federal funding for ITS projects to their adherence to those standards. In a Report to Congress on 1 June 1999, the DOT is mandated to identify and to give the status of standards "critical to interoperability" or to the development of other standards. Further, the DOT is empowered to establish "provisional standards" that are essential to the "timely achievement" of general goals for establishing a national architecture and a body of standards for ITS.

A "critical" standard is defined by TEA-21 as one that either ensures national interoperability or is necessary for the development of other standards. In addition, TEA-21 charges the DOT Secretary to "...ensure that the intelligent transportation systems projects...conform to the national architecture, appropriate standards or provisional standards, and protocols...." The principal emphasis of the conformity requirements promoting interoperability of ITS appears to be the requirement to facilitate the movement of travelers and commercial vehicles across jurisdictional boundaries, to ensure the "interoperability" of electronic tags and in-vehicle devices with roadside devices, and to provide infrastructure-related safety and traveler information.

The TEA-21 Critical Standards: Proposed Criteria and List of Standards, issued by the ITS Joint Program Office (JPO), US DOT, 29 October 1998, concludes that, "...only ITS that interface with and provide services to mobile systems, especially vehicles, require national interoperability. Only the Interface to the vehicle is important in this criterion. The vehicular components may or may not be standardized; they are only required to support a standardized communications interface to the roadside." The two categories of ITS are classified, broadly, as those of traveler information systems and vehicle-toinfrastructure communications.

Foundation standards, as defined by the JPO, are those standards that are essential for developing other standards that cross multiple ITS functions. Examples given are:

- The National Transportation Communications for ITS Protocol (NTCIP) family of standards being developed jointly by the American Association of State Highway Transportation Officials (AASHTO), Institute of Transportation Engineers (ITE), and National Electrical Manufacturers Association (NEMA); and
- IEEE Draft Standard Data Dictionaries for ITS (P1489) and IEEE Draft Standard for Message Set Template for ITS (P1488).

Listed as critical standards are:

- IEEE Draft Standard for Message Sets for Incident Management (P1512) and
- IEEE Draft Standard for Message Sets for Vehicle/Roadside Communications (P1455),

which are being developed cooperatively with the American Society for Testing and Materials (ASTM) committee responsible for specifications for DSRC Layers 1 and 2. The criteria and the list of standards were published in the Federal Register, Vol. 63, No. 245, 22 December 1998, pp. 70836-70841. The comment period closed on 21 January 1999. There were no major objections to the proposed rule-making provisions.

Separate from the issues of criticality and interoperability is the concern about "testing of standards" to assure that their use will achieve the goals for interoperability and permit the exchange of data among ITS economically and efficiently. An ITS program initiative for the testing and appraisal of ITS standards is being started. IEEE supports the effort and is acting cooperatively to help the program succeed. The testing will be conducted at the field level, at the sites of actual ITS deployment. Toni Wilbur of the Federal Highway Administration (FHWA) JPO, is designated as the Program Manager. Subsequent updates on ITS will cover the unfolding of the standards testing program.

For more information about ITS standards development, contact Robert Gottschalk (r.l.gottschalk@ieee.org), chair of the IEEE-SA Standards Board Standards Coordinating Committee 32 or Tom Kurihara (t.kurihara@ieee.org).

Thomas M. Kurihara is the IEEE Intelligent Transportation Systems Standards Program Manager.

## IEEE Standards IT Services—1998 Highlights

by Jay Iorio

EEE Standards information-technology services and capabilities progressed in a number of areas in 1998. For the first time, in July, we logged more than one million monthly hits on our Web server—that's about double the number of hits over the previous 12 months. This number continues to grow and is now approaching two million. Other, more revealing numbers (data transferred, number of users, etc.), substantiate this encouraging growth pattern.

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entire collection of active IEEE Standards documents for sale, individually and as subscription packages. Our search engine allows users to search dozens of IEEE Web sites from one location. New working groups and committees are setting up presences on our site every month—we are now serving hundreds of committees with everything from e-mail reflectors to full-blown Web sites. Furthermore, behind the scenes, our publishing systems have evolved into the informationprocessing backbone that holds all of these

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Jay Iorio is the Technology Advisor for IEEE Standards Activities.