



IEEE STANDARDS BEARER



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The NesCom2000 Initiative: Electronic PAR Submissions

by Jim Carlo and Jim Isaak

The goal of the NesCom2000 initiative is to provide for the electronic distribution of Project Authorization Requests (PARs) via the Web. Global electronic access will enable a wide range of developers and customers to review the project objectives before and after approval by the IEEE Standards Association (IEEE-SA) Standards Board. Today, PARs are submitted in paper form and, after approval, are difficult to retrieve, except by special request to the IEEE Standards staff. With electronic submission and placement on the Web, the wide dissemination of project goals will be facilitated.

Submittal of a PAR is one of the most important steps in the IEEE standards development process as the PAR is the document that defines a project, distributes information about the project to others, and provides the framework for the development of the standard. The sponsoring group submits all PARs developed within the IEEE to the New Standards Committee (NesCom) for review: (a) to ensure that the project's scope and purpose are clearly stated, (b) to provide a forum for coordination of the developing standard with other groups, and (c) to address key legal issues relating to safety, copyright, etc.

Over the next two years, the NesCom2000 initiative will move forward without detriment to the due diligence or integrity of the current system. In addition to providing widespread visibility of IEEE standards development, another advantage of the NesCom2000 initiative is to minimize the working group and sponsor administrative effort for PARs while facilitating the process. In the future, NesCom review of PARs will be handled electronically and feedback will get to the PAR submitter very quickly. The efforts of NesCom2000 will increase the speed of PAR review by NesCom, reduce IEEE staff effort, and establish a "continuous process" where PARs are reviewed on a continuous basis, rather than at the staggered quarterly meetings of the IEEE-SA Standards Board and NesCom. In addition, the electronic format will allow submitters to provide technical scope explanations in a less constrained form than the bounded paper format available today.

An electronic PAR form is available at <http://standards.ieee.org/guides/par/index.html>. The form is in two parts. The first part is the electronic submission that contains the normal PAR information. The second part is

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One Year of IEEE Standards On-Line

by Pushpa Krishnaswamy

IEEE Standards On-Line recently reached its one-year anniversary. Through the service, numerous standards users have experienced the advantage of immediate access to IEEE's world-renowned technical standards—anywhere, anytime. The service is especially helpful to IEEE Standards users in far-off places who prefer not to wait four to six weeks for the mail to deliver their standards to them.

Three subscriptions are currently available, with at least three more to become available by the fall of this year. The subscriptions available now are Local Area Network/Metropolitan Area Network (LAN/MAN) 802, Power Transmission and Distribution (T&D), and Software Engineering. Substations, Switchgears, and Bus Architecture standards will be added to the list by the fall.

(continued on page 8)


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FROM THE CHAIR OF THE IEEE-SA STANDARDS BOARD

by Richard Holleman

Recently, during the Region 8 meeting in Piscataway, a participant from Russia asked me if an IEEE Standards Association (IEEE-SA) standards committee could be organized in his country. His question and comments from some of the other participants reminded me of the Institute's slogan, "IEEE—Networking the World." It is a very relevant theme for the SA. I think of it as, "Networking the World Through Standards." For me, this expresses the basis upon which the activities of the SA and the SA Standards Board are established, and globalization is certainly a key element.

More specifically, in the SA strategic plan, one of the major goals is to maximize the recognition of IEEE standards worldwide through the development of appropriate relationships with external entities. This goal was developed in response to the Institute's overall goal of implementing full globalization of the IEEE in five years. The use of IEEE regional entities worldwide (e.g., sections as focal points for IEEE standards activities in that region) is one of the sub-goals included in the SA strategic plan. The intent is to create a form of national committee to further promote the globalization of IEEE-SA standards activities.

None of this is being undertaken simply to increase the worldwide presence of the IEEE, but rather in response to the inquiries and inter-

ests exhibited by many IEEE members in many countries throughout the world. This was very evident in 1997 when the Standards Board met in Mexico City, and I expect it will be an active topic of discussion during the September Standards Board meeting in Europe, where there will be a day of joint activities with the European Telecommunications Standards Institute (ETSI) at its Sophia-Antipolis headquarters.

Simply stated, the first challenge before us is to provide an effective organizational structure that can carry out IEEE-SA standards activities in a manner that supports the needs of industry, government, the general public, and the members of the Institute on a global basis. Next, we must maintain and consistently improve the existing processes and procedures for the development and approval of IEEE standards, especially through further cooperation and increased interaction with the technical societies, as well as through the use of new methods for the development and promulgation of industry-based standards. Finally, with the potential for increased regional representation in SA activities and involvement in standards development, we can begin to accomplish the critically important goal of globalization.

Hopefully, in 1998, progress will have been made in many of these areas. As I indicated in my answer to Region 8 participants, there are more opportunities than limits to what we can do, provided we are truly committed to change. Through the successful execution of the SA strategic goals, these opportunities will become reality.

IEEE Partners with NEMI

by Karen McCabe

Under the auspices of the IEEE Standards Association (IEEE-SA)—and its initiatives to make available standards-related information developed outside of the traditional standards process to meet the needs of industry today—IEEE has partnered with the National Electronics Manufacturing Initiative, Inc. (NEMI) to produce and disseminate the IEEE/NEMI Low-Cost Open Architecture Controller Specification.

Peer reviewed by a balanced group representing industry, academia, and user groups, the IEEE/NEMI document defines the software interface for a controller by defining a set of Application Programming Interfaces (APIs). Industry, the primary users, will benefit economically from using this specification primarily by reducing the time it takes to

bring a product to market.

With IEEE-SA's focus on industry needs, dissemination of this document to a broad standards-specific/industry audience can accelerate the benefits of the open architecture approach and expose the concept of a specification for a low-cost, open architecture controller. Ultimately, interest in the community will be heightened and the document can be put into the standards process to be published as an IEEE standard.

Plans are to make this document available on the IEEE Standards web site. Look to the Web site at <http://standards.ieee.org> for new details regarding the project.

Karen McCabe is the Manager of Business Communications for IEEE Standards Activities.

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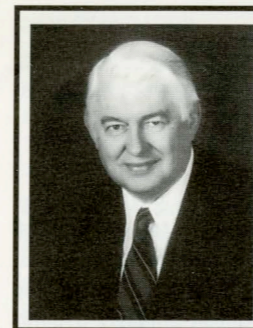
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Report by the President of the IEEE-Standards Association (IEEE-SA)

by John Rankine

The IEEE-SA Board of Governors held its third meeting of the year on 15 May. It was a hard-hitting meeting, as is needed by any ambitious organization to get things on track. The focus was on the fundamental policy issues that must be handled expeditiously to maintain IEEE as a key player in international standardization. The paramount challenge is to deliver to industry what it needs, particularly in fast-moving technologies.

At its 3 May meeting, the Executive Committee of the IEEE Board of Directors very positively received our proposal for a new entity to enable IEEE to launch a new category of program whereby industry can get fast and responsive answers to immediate standardization needs. The ways in which this might be done are under intensive study and legal review. Two white papers, one on Industry Centric Standards and a second on a proposed Industry Standards and Technology Council, have been distributed for comment, and the latter is undergoing review by legal counsel. Industry is making clear to us that corporations want to have direct input into standards development, and events bear out every other week that this is what industry is doing via consortia and other means.

What follows are some highlights of our Board of Governors activities, in partnership with the staff.

With regard to management services, we now have one new program under contract, National Electronics Manufacturing Initiative, Inc., Herndon, VA, where we are supporting peer review, editing, and publishing—hard copy and Web.

The IEEE Standards Association Strategic Plan maps with that of the Institute's—we now have goals and objectives which are reflective

of the Institute's overall strategy.

We are keenly aware that new approaches and ways of doing things, however vital, will not always please everybody. For this reason, we have appointed an outstanding Appeals Board of seven highly experienced and fair-minded individuals, including a former IEEE President.

The challenges we have to meet are also requiring special efforts by talented people, which means we cannot overlook awards and recognition. Thirty-four Working Group Chair Awards have been given since our last meeting. There are currently five Standards Medallions under ballot. The Steinmetz Award candidates have been processed and the final nominee will go to the IEEE Board of Directors for approval. The call for Standards Board Distinguished Service Award nominees will be sent out in November and a new chair is being sought for the Awards Committee.

Our IEEE-SA membership now numbers over 1500, plus two organizational representatives, five corporate members, and one government member. We expect the membership to jump with the implementation of the new SA membership balloting requirement in June.

In conjunction with the thinking of the Executive Committee of the IEEE Board of Directors, we have decided that the planned Standards Association elections be put forward to 1999. Some good news is that the IEEE Standards Association dues will remain the same for 1999, by far the lowest in the field of standards development.

Finally, I must report on how hard your IEEE-SA Board of Governors is working. They are a very dedicated and open-minded team who welcome your input to be sure we are meeting your interests. The staff and volunteer cooperation is superb and a model for the Institute.

Let us have your input. You will get a prompt and polite reply. ♦

IEEE Registration Authority Committee Establishes Procedures to Acquire TEDS ID Number

by Kang Lee

In connection with the recently developed IEEE Std 1451.2-1997, Standard for a Smart Transducer Interface for Sensors and Actuators—Transducer to Microprocessor Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats, the IEEE Registration Authority Committee (RAC), working with the Committee Chair and the 1451.2 Working Group Chair, has established procedures on how transducer producers should submit proposals requesting extension TEDS ID numbers.

IEEE Std 1451.2-1997 defines a set of specifications for smart connectivity between transducers (sensors or actuators) and microprocessors through the introduction of the TEDS concept. A TEDS is the manufacture data for the transducer and may include the manufacturer's name, type of transducer,

uncertainty, etc., as well as optional calibration parameters, if required, for the device.

The procedure for acquiring an extension TEDS ID number is as follows.

1) An applicant must send IEEE a Proposal for Industrial Extension TEDS (PIET).

2) An IEEE-appointed independent expert, who will provide the applicant with feedback regarding any suggested changes according to the requirements in the standard, will review the proposal. The applicant's final proposal, after meeting all the requirements of the standard, will be assigned a unique extension TEDS ID number.

The standard defines the digital interface and standardized TEDS data format. It also outlines the communications protocols that allow the accessing of the TEDS, reading of sensor data, and setting of actuator. In addition to the mandated and optional specifications for the TEDS, the standard also provides some flexibility for manufacturers to add extensions to the TEDS. Blocks of functional addresses are reserved for extensions to be used by industry.

The standard can be purchased from IEEE by calling 1.800.678.4333 (in the U.S. and Canada) or 1.732.981.0060.

For more information on IEEE Std 1451.2-1997 and other IEEE P1451-related activities, please contact Kang Lee, TC9 Committee Chair, at kang.lee@nist.gov or Stan Woods, 1451.2 Working Group Chair, at woods@hpl.hp.com. The IEEE Registration Authority can be reached at i.ringel@ieee.org or fax 1.732.562.1571. ♦

Kang Lee is the TC9 Committee Chair.

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Standards Meeting Facilitation

by Donald Loughry

This year is bringing changes to how meetings are handled within the IEEE and within the standards-development community of the IEEE Standards Association (IEEE-SA). Creating useful safeguards, leveraging Institute resources, and avoiding potential tax liabilities are some of the considerations being addressed by an Institute-wide effort to better orchestrate how the various entities of the Institute conduct their meetings. The overall objective is to facilitate rather than regulate.

The Meetings and Services Committee (MSC) has traditionally been a committee of the Technical Activities Board (TAB). However, TAB has proposed that the MSC should become a committee of the IEEE Board of Directors. As part of this, an extensive revision of the IEEE Policy and Procedures covering meetings has also been proposed. Since the IEEE Policy and Procedures govern actions for all the IEEE, these rules would cover standards meetings as well.

The IEEE-SA is now a member participant of the MSC and has a voice in developing the relevant procedures in a unique clause devoted to standards meetings. It is an accepted fact that a standards-development meeting is, indeed, a different type of meeting than the typical IEEE conference, seminar, or workshop. The nature of most standards meetings avoids, in large measure, exposing to risk the Institute's tax-exempt status, as few funds are collected. On the other hand, there are some standards-development meetings that involve hundreds of participating experts, where Institute liabilities are potentially significant.

To guide those of us working with the MSC, a set of underlying principles has been developed as a basis for IEEE-SA positions. The cornerstone of these principles rests on the notion that the majority of MSC policy and procedures related to standards meetings should apply to the few meetings that warrant the extra effort required to avoid tax liabilities, where significant funds are involved, and where coordination with other entities (societies and regions) is deemed useful.

Where do we stand today in evolving healthy guidelines applicable to standards meetings? Draft procedures have been written and are under revision, though the core content remains largely as initially presented at the March Standards Board meeting. The revisions relate to how the overall MSC document is being restructured to satisfy Institute needs. At the June Board of Directors meeting, the various entities endorsed the principles of these guidelines. Between the June and the September Standards Board meetings, the guidelines will undergo final review in anticipation of subsequent approval by the Board of Directors in November. When they are approved, the management of IEEE meetings should facilitate these aims: be conducted on a very professional basis, avoid jeopardizing the Institute's not-for-profit tax status, improve coordination among IEEE entities, and achieve the necessary accountability on projected budgets and incurred expenses. We anticipate the new MSC policy and procedures will, indeed, facilitate the standards meeting process. ♦

Donald Loughry is the immediate past Chair of the IEEE-SA Standards Board.

IEEE Standards Association (IEEE-SA) Balloting Requirements

You must be a member of the IEEE-SA if you want to be eligible to join a balloting group in order to vote on a standard at the sponsor level after 1 June 1998.

The IEEE-SA membership application can be found on the Standards Web site at <http://standards.ieee.org/sa/index.html#application> as a PDF file. For a printed copy, send a message to ieee-sa@ieee.org. Please provide your name, mailing address, phone, fax number, and e-mail address. If you do not have an e-mail address or access to the Standards Web site, you may contact Michelle Turner at 732.562.3825.

Highlights of the 25 June IEEE-SA Standards Board Meeting

- Membership in the IEEE-Standards Association (IEEE-SA) is now required in order to ballot on a document.
- The Standards Review Committee (RevCom) reviewed 36 items, approving 34 (7 with contingencies) and disapproving 2. RevCom has successfully implemented a consent agenda procedure. In compliance with Section 5.5 of the 1998 IEEE-SA Standards Board Operations Manual, RevCom will consider for approval only those submissions having all documentation, including recirculation ballots, complete at least 40 days prior to its meetings.
- The New Standards Committee (NesCom) approved all projects submitted for consideration. NesCom resolved to begin planning to modify its procedures such that (the first and all subsequent) requests for extension must include project status information and a project plan for completion. NesCom will revise the letter sent to working group chairs and sponsors at the beginning of the fourth year to offer guidance on support and mentoring, if the project needs assistance.
- The Procedures Committee (ProCom) reported that a matrix to review the alignment of IEEE and ISO/IEC document titles will be developed.
- The chair of SCC10 (Terms and Definitions) resigned. If anyone is interested in definitions work and would like to assume this responsibility, contact r.kershner@ieee.org.
- SCC30 (Analog Hardware Descriptive Language) has been disbanded. For information, contact r.kershner@ieee.org.
- The merger of SCC23 (Standards Coordinating Committee on Dispersed Energy Storage and Generation) with SCC21 (Standards Coordinating Committee on Fuel Cells, Photovoltaics, Dispersed Generation, and Energy Storage) was approved. Richard DeBlasio will serve as chair of the committee.
- The Standards Board approved the following motion:
The IEEE-SA Standards Board understands the benefits of Institute-wide support of minimal common policies and procedures as they pertain to standards development meetings, and endorses, in principle, the draft (22 May 1998) Policies and Procedures (per section 10.2 on Standards Development) now before the Institute's Meetings and Services Committee.
- The next meeting of the IEEE-SA Standards Board will be held on 16 September 1998 at the Royal Hotel and Casino in Mandelieu, France. ♦

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141-1993 (Revised as of 9 June 1998) IEEE Recommended Practice for Electric Power Distribution for Industrial Plants

1278.1-1995 IEEE Standard for Distributed Interactive Simulation—Application Protocols

1309-1996 IEEE Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9 kHz to 40 GHz

802.3x&y-1997 Specification for 802.3 Full Duplex Operation and Physical Layer Specification for 100 Mb/s Operation on Two Pairs of Category 3 or Better Balanced Twisted Pair Cable (100BASE-T2)

ANNOUNCING

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(continued from cover page)

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One subscriber's comment sums up the advantage of IEEE Standards On-Line. "It's great to have this access. I frequently travel to do customer support and as long as I have my laptop and a phone line, I've got access to all the IEEE docs that I might require."

The number of subscribers for IEEE Standards On-Line is also growing—many are international subscribers. This illustrates the growing importance of IEEE standards in the international arena. It shows that increased globalization requires companies and researchers to be aware of technical standards from other countries in order to remain competitive. IEEE Standards On-Line provides that competitive edge. ♦

Pushpa Krishnaswamy is the Product Manager of IEEE Standards Activities.

The IEEE-Standards Association Proposes a Full-Service Standards Program

by Andrew Salem

The IEEE-Standards Association (IEEE-SA) has proposed to the Executive Committee of the IEEE Board of Directors that it authorize the formation of an umbrella organization to engage in standardization and standardization-related programs that cannot be carried out under the present authority of the IEEE Standards Board and the IEEE societies. The new organization would be managed and controlled by IEEE and the IEEE-SA Board of Governors would monitor its activities.

This mode of operation is not unique for standards-developing organizations like IEEE. Recently, ITS America formed a similar organization, and there are many precedents for such organizations within the standards community; the Society of Automotive Engineering Review Institute, the Automotive Industry Action Group, and US CAR are a few examples.

The new organization will enable IEEE to be a full-service standards institution to the industries it serves. ♦

Andrew Salem is the Director of Industry Relations for IEEE Standards Activities.