

# SOCIETIES

## IEEE Electromagnetic Compatibility Society (S-27)

### Headquarters:

IEEE Operations Center  
445 Hoes Lane, P.O. Box 6804  
Piscataway, NJ 08855-1331  
Phone: (732) 981-0060  
[www.emcs.org](http://www.emcs.org)

**President:** Ghery Pettit, [ghery.pettit@intel.com](mailto:ghery.pettit@intel.com)

### The Institute of Electrical & Electronics Engineers

(IEEE), the world's largest professional engineering society, is a global organization of individuals dedicated to improving the understanding of electrical and electronics engineering and its applications to the needs of society. The parent organization has over 360,000 members, approximately 70 percent of whom belong to technical groups such as the EMC Society.

Membership in the IEEE is on a qualified basis, with a basic annual fee of between \$140 and \$180 depending on the region of the world. The U.S. fee is \$183. The Institute offers major medical and life insurance at low group rates, and each member receives a copy of the monthly publication, *Spectrum*. Affiliate, associate, and student memberships are available for those who do not qualify for regular membership; and special arrangements are provided for those temporarily out of work. Members may join one or more of the 39 technical societies by paying the additional individual society fee(s). The EMC Society has an annual fee of \$30. Student memberships are \$15.

The EMC Society, which enjoys a membership of over 5000, functions through a Board of Directors elected by the Society membership. The Board includes 20 members-at-large who serve staggered 3-year terms. The Executive Board consists of the President, President-Elect, Immediate Past President, Secretary, Treasurer, and five Vice Presidents, who oversee the activities of standing and technical committees. The officers are elected by the Board of Directors. The annual IEEE International Symposium on Electromagnetic Compatibility is sponsored by the Board of Directors, which also coordinates activities of standing technical and ad hoc committees.

EMC Society publications include *Transactions on EMC*, a quarterly journal which features state-of-the-art papers on interference technology and EMC, and the *EMC Society Newsletter*, a quarterly newsletter of society activities, industry developments, practical papers, and notices of meetings, regulations, and new publications.

The EMC Society also has a group of distinguished lec-

turers who are available to present talks to IEEE and other organizations. The Society subsidizes the lecturers' expenses, and organizations are encouraged to contact the society for further details.

Chairmen of these committees welcome assistance and indications of interest in committee activities from the EMC Society membership. EMC Society activities are provided by 54 chapters with members in 61 countries worldwide.

A Committee Directory, listing officer, board, committee, and chapter contacts' names, addresses, and telephone numbers, is available on the IEEE EMC Society website at [www.emcs.org](http://www.emcs.org).

The EMC Society is also active in technical conferences and symposia through its sponsorship of the annual International Electromagnetic Compatibility Symposium and participation in other worldwide symposia. Symposia and conferences are announced in the *EMC Society Newsletter*.

The IEEE Symposium on Electromagnetic Compatibility will be held in Long Beach, Calif. USA from August 14-19, 2011. Visit the Symposium website at [www.emc2011.org](http://www.emc2011.org).

The EMC Society has published a number of standards. For information on EMC Society and other IEEE standards, contact the IEEE Operations Center, 445 Hoes Lane, P.O. Box 6804, Piscataway, NJ 08855-1331; Phone: (732) 981-0060.

## 2012 Events

### IEEE EMC Society Board of Directors Meetings

- March 16-18, 2012, Scottsdale, Arizona
- August 5 and 9, 2012, Pittsburgh, Pennsylvania
- November 16-18, 2012, Raleigh, North Carolina

### IEEE EMC Chapter Colloquium and Exhibition "Table-Top Shows"

- March 5, Williamsburg, Virginia, Advances in Antenna Test and Measurement, Various speakers, with keynote address by Erik Vedeler, Head of Electromagnetics and Sensor Branch at NASA Langley Research Center
- March 27, Milwaukee, Wisconsin, Jeremy Campbell, PE, General Motors, Applied Technology Center, "Designing a Product to Meet Today's Emission and Immunity Requirements"
- April 11, Beaverton, Oregon, Elya Joffe, Lead author of the book "The Grounds for Grounding", will discuss grounding and other EMC-related topics
- May 8, Chicago, Illinois, Speakers and topics to be announced
- May 16, Detroit, Michigan, Todd Hubing of

- Clemson University on Automotive EMC Topics  
October 11, Santa Clara, California, with speakers Doug Smith on ESD and Dr. Ege Engin of San Diego State University on Power Integrity

## IEEE Product Safety Engineering Society

**While product safety had been addressed in** various committees over the years, there was never a professional society or symposium solely devoted to product safety engineering as a discipline until recently. The IEEE Product Safety Engineering Society (PSES) began operation on 1 January 2004.

The field of interest of the Society is the theory, design, development and implementation of product safety engineering for electronic and electro-mechanical equipment and devices. This includes the theoretical study and practical application of analysis techniques, testing methodologies, conformity assessments, and hazard evaluations.

The Society's mission is to strive for the advancement of the theory and practice of applied electrical and electronic engineering as applied to product safety and of the allied arts and sciences.

The Society provides a focus for cooperative activities, both internal and external to IEEE, including the promotion and coordination of product safety engineering activities among IEEE entities. In addition, the Society will provide a forum for product safety engineering professionals and design engineers to discuss and disseminate technical information, to enhance personal product safety engineering skills, and to provide product safety engineering outreach to engineers, students and others with an interest in the field. The Society is accepting members at any time during the calendar year, both full IEEE members and affiliate members. Membership is available at [www.ieee.org/services/join/](http://www.ieee.org/services/join/).

The IEEE Product Safety Engineering Society works closely with various IEEE Societies and Councils that also include product safety engineering as a technical specialty. Currently there are 14 chapters with more in the formation process.

Every year, the PSES hosts a Symposium on Product Compliance Engineering. The next conference will be in Portland, Oregon, USA on November 5-7, 2012. The Symposium will consist of Technical Sessions, Workshops, Tutorials and Demonstrations specifically targeted to the compliance engineering professional. Attendees will have the opportunity to discuss problems with vendors displaying the latest regulatory compliance products and services. For more information, visit <http://www.ieee-pses.org/symposium/>. Past papers from the Symposia are available in IEEE Xplore or on CD (for a fee).

In addition to hosting an annual conference, the PSES provides the opportunity for product safety engineers to publish technical papers in a newsletter. See <http://www.>

[ieeepses.org/newsletters.html](http://ieeepses.org/newsletters.html). For further information and details on the Society, including becoming an author, please visit the website at [www.ieee-pses.org](http://www.ieee-pses.org).

## dB Society

**This unique, interesting, and exclusive fraternity** of EMC engineers was founded in 1975 by 10 eminent EMC engineers. The purpose of the dB Society is to open doors within the EMC community. Its primary objectives are to greet and to welcome new engineers, suppliers, vendors, and manufacturers to the EMC community and to assist them in establishing contacts in the EMC field.

The following membership requirements are unique and rigidly enforced:

- Ten years of service to the EMC community,
- Five years of service to a recognized professional, EMC organization,
- Sponsorship by two Duo-Decade members,
- Favorable recommendations by three other recognized individuals in the EMC community, and
- Acceptance by the Admissions Board.

Business meetings and informal, relaxed get-togethers take place during major EMC functions. A formal evening social function is the highlight of each year and is usually conducted during the IEEE EMC Symposium. All meetings are for members only.

U.S. membership is limited to 100 EMC engineers. There are Society affiliates in the United Kingdom, India, and Israel. Qualified candidates are invited to write to:

### The dB Society

22117 NE 10th Place  
Sammamish, WA 98074  
FAX: (425) 868-0547  
E-mail: [j.n.oneil@ieeepes.org](mailto:j.n.oneil@ieeepes.org)

## ESD Association

### Headquarters:

ESD Association  
7900 Turin Road, Building 3  
Rome, NY 13440-2069  
phone: 315-339-6937  
fax: 315-339-6793  
email: [info@esda.org](mailto:info@esda.org)  
website: [www.esda.org](http://www.esda.org)

**Founded in 1982, the ESD Association is a professional** voluntary association dedicated to advancing the theory and practice of electrostatic discharge (ESD) avoidance. From fewer than 100 members, the Association has grown to more than 2,000 members throughout the world. From an initial emphasis on the effects of ESD on electronic components, the Association has broadened its horizons to include areas such as textiles, plastics, web pro-

cessing, cleanrooms, and graphic arts. To meet the needs of a continually changing environment, the Association is chartered to expand ESD awareness through standards development, educational programs, local chapters, publications, tutorials, certification, and symposia.

### **ELECTROSTATIC DISCHARGE (ESD) TECHNOLOGY ROADMAP**

In the late 1970s, electrostatic discharge, or ESD, became a problem in the electronics industry. Low-level ESD events from people were causing device failures and yield losses. As the industry learned about this phenomenon, both device design improvements and process changes were made to make the devices more robust and processes more capable of handling these devices. With devices becoming more sensitive through the year 2010, it is imperative that companies begin to determine the ESD capabilities of their handling processes. The ESD Technology Roadmap can be downloaded at: [www.esda.org](http://www.esda.org)

### **ANSI/ESD S20.20 CONTROL PROGRAM STANDARD AND CERTIFICATION**

A primary direction for the association is the continued implementation of a facility certification program in conjunction with ISO registrars. With the association's ESD control program standard, ANSI/ESD S20.20: Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices), the Association offers a means of independently assessing a company's ESD control program and of issuing a formal ANSI/ESD S20.20 certification.

The ANSI/ESD S20.20 standard covers the requirements necessary to design, establish, implement, and maintain an ESD control program to protect electrical or electronic parts, assemblies and equipment susceptible to ESD damage from Human Body Model (HBM) discharges greater than or equal to 100 volts. Developed in response to the Military Standardization Reform Act, ANSI/ESD S20.20 has been formally adopted for use by the U.S. Department of Defense.

Although ESD programs have been part of some ISO 9000 audits in the past, the assessment frequently has been cursory and actual judgment of the program has been left to the individual auditor. ANSI/ESD S20.20 provides a formal, consistent process standard that can be audited. It provides a single, auditable ESD standard for OEM's, suppliers, and contractors. To date, there are approximately 132 facilities in 13 countries that have become ANSI/ESD S20.20 certified.

Accredited registrars conduct the actual assessments of the companies. The association has developed a training program for the registrars and supervises registrar witness audits. This independent assessment of a company's ESD control program could be performed as part of the company's ISO 9000 surveillance audit or as a separate audit. Currently, there are 161 trained auditors in 13 countries who have been certified to conduct ANSI/ESD S20.20 audits.

In addition, the ESD Association offers an ESD program

documentation review service. For a fee of \$1,500 (US), members of the ESD Association's Facility Certification committee will review your ESD program documentation and will compare it to the requirements listed in ANSI/ESD S20.20-2007. Facilities that choose to become certified will use the ANSI/ESD S20.20-2007 standard as the basis for their certification. A report will be provided that describes the areas that need to be improved for documentation to be compliant with ANSI/ESD S20.20-2007. This service should be considered a MUST for any company that is preparing for facility certification based on ANSI/ESD S20.20-2007.

### **SYMPOSIA, TUTORIALS, AND PUBLICATIONS**

As part of its commitment to education and technology, the association holds the annual EOS/ESD Symposium, which places major emphasis on providing the knowledge and tools needed to meet the challenges of ESD. Scheduled for September 9-14, 2012, at the Westin Tucson, La Poloma, Arizona, USA, the annual Symposium attracts attendees and contributors from around the world. Technical sessions, workshops, authors' corners, seminars, tutorials, and technical exhibits provide a myriad of opportunities for attendees to expand their knowledge of ESD.

In addition to tutorials and seminars, the association offers a number of publications and reference materials for sale. These range from proceedings of past EOS/ESD Symposia to textbooks written by experts in the field of ESD.

## **TechAmerica**

### **Electromagnetic Compatibility Committee (G-46) Headquarters**

TechAmerica  
1401 Wilson Blvd., Suite 1100  
Arlington, VA 22209  
Phone: (703) 284-5344  
[www.geia.org](http://www.geia.org)

**TechAmerica is the association that was created by the merger of AeA and ITAA.** Earlier in 2008, ITAA and GEIA merged. The result of these mergers is an organization that is the leading voice for the U.S. technology industry, which is the driving force behind productivity growth and jobs creation in the United States. TechAmerica is the technology industry's only grassroots-to-global advocacy network. With nearly 1200 member companies, 20 regional councils and offices in Beijing and Brussels, the association represents the full spectrum of the technology industry.

TechAmerica is the technology industry's only grassroots-to-global advocacy network. The organization has expanded initiatives in areas such as: information Assurance / Information Security, Identity Management, Cloud Computing, Global Sourcing / Globalization, Intelligence agencies, Department of Defense & NASA, and State & Lo-

cal programs and public policy advocacy.

TechAmerica provides programs for business development, networking and market intelligence in the Federal arena, dealing with government entities such as Department of Defense, Homeland Security, Federal Communications Commission, Federal Trade Commission, Congress, as well as with state and local governments.

TechAmerica has a team of public policy professionals at state, federal and international levels, that allow the organization to successfully influence legislative and regulatory issues that affect member companies.

In addition, TechAmerica offers an active standards development program to provide industry with proven solutions to business process challenges. The program is nationally and internationally recognized for its leadership and expertise in the development of standards. Configuration Management, Systems Engineering, Systems Safety, Earned Value Management, Logistics, Reliability and Electromagnetic Compatibility (EMC) area where TechAmerica is involved in standard.

The Electromagnetic Compatibility (EMC) Committee (formally known as G-46) deals with the system-oriented discipline that ensures electromagnetic compatibility in electronics design. The Committee develops technical criteria and procedures to guide the design engineer. Its work also includes spectrum management and conservation; secure communications; and electromagnetic emissions, susceptibility, control, and characterization.

The EMC Committee was established to provide an industry/user position on government specifications, regulations, and standards. Participation has expanded to include G-46 representation on the various committees drafting government specifications and standards. For example, G-46 participated on the working committees for MIL-STD-464A and MIL-STD-461E and provided update recommendations to MIL-STD-461F. The scope of G-46 activities has expanded to foster and facilitate the EMC discipline for the benefit of TechAmerica member companies.

Committee activities include spectrum management and conservation; personnel safety; and health care electronics design, usage and installation in terms of regulated and non-regulated electromagnetic (EM) emissions and immunity. Inter- and intra-environmental areas as they affect systems, subsystems and equipment, subassemblies, and components are also areas of concern. In addition to other activities, committees:

- Review, assess, advise, and coordinate related activities of organizations/individuals in government, industry, and technical societies.
- Assure that EMC legislation, regulations, specifications, standards, requirements, and evaluation procedures are adequate for procurement and application.
- Assure that EMC legislation, regulations, specifications, standards, requirements, and evaluation procedures are harmonized with their commercial counterparts to the maximum extent practical for procurement and application.

- Propose and recommend action and provide support to other organizations, as deemed desirable.
- Coordinate and promulgate information to facilitate advancement of the state-of-the-art.

Additional information on TechAmerica and the EMC Committee (G-46) can be obtained at (703) 284-5315, phyllis.call@techamerica.org, or via the GEIA website at <http://www.geia.org>.

## Society of Automotive Engineers

### Committee AE-4, Committee Headquarters:

Society of Automotive Engineers  
400 Commonwealth Drive  
Warrendale, PA 15096-0001  
Phone: (724) 776-4841

**SAE International is a professional society of engineers** dedicated to a broad spectrum of engineering disciplines within the aerospace and automotive fields. Under the SAE Aerospace Council, technical standards committees address disciplines ranging from electrical power to multiplex signal characteristics—and from fiber optic data transmission to electromagnetic compatibility. The many elements of EMC are handled by SAE Committee AE-4, Electromagnetic Compatibility, which was organized in 1942 under the Aerospace Council. The committee is composed of technically qualified members, liaison members, and consultants—all of whom are responsible for writing standards on electromagnetic compatibility.

Committee AE-4 provides assistance to the technical community through standardization, improved design and testing methodology, and technical forums for the resolution of mutual problems. Engineering standards, specifications, and technical reports are developed by the Committee and are issued by the Society for industry and governments worldwide. Objectives of Committee AE-4 are to advance the state of technology, to stabilize existing technology, to obtain a uniformity of EMC requirements among government agencies, and to further the interests of the EMC technical community. The theme of “design before the fact” for EMC is a guiding concept. Special attention is given to maintenance of EMI control requirements consistent with the rapidly advancing state-of-the-art.

The following is a partial list of documents that have been issued to assist in implementing SAE objectives. For a complete list, visit the SAE website at [www.sae.org](http://www.sae.org) or call SAE Customer Service at (724) 776-4841.

### AEROSPACE RECOMMENDED PRACTICES (ARPS)

ARP 935A	Control Plan/Technical Construction File
ARP 936A	Capacitor, 10 mF for EMI Measurements
ARP 958C	Electromagnetic Interference Measurement Antennas, Standard Calibration Method
ARP 958D	Electromagnetic Interference Measurement Antennas, Standard Calibration Method



- nas, Standard Calibration Method
- ARP 1172 Filters, Conventional, EMI Reduction, Specifications for
- ARP 1173 Test Methods for EMI Gasketing
- ARP 1267 EMI Measurement of Impulse Generators, Standard Calibration Requirements and Techniques
- ARP 1481A Corrosion Control and Electrical Conductivity in Enclosure Design
- ARP 1705 Coaxial Test Procedure to Measure the RF Shielding Characteristics of EMC Gasket Materials
- ARP 1870 Aerospace Systems Electrical Bonding and Grounding for Electromagnetic Compatibility and Safety
- ARP 1972 Recommended Practices and Procedures for EMC Testing
- ARP 4043A Flightline Bonding and Grounding of Aircraft
- ARP 4242 Electromagnetic Compatibility Control Requirements, Systems
- ARP 4244 Recommended Insertion Loss Test Methods for EMI Power Line Filters

### AEROSPACE INFORMATION REPORTS (AIRS)

- AIR 1147 EMI on Aircraft from Jet Engine Charging
- AIR 1209 Construction and Calibration of Parallel-Plate Transmission Lines for EMI Susceptibility Testing
- AIR 1221 EMC System Design Checklist
- AIR 1255 Spectrum Analyzers for EMI Measurements
- AIR 1394A Cabling Guidelines for Electromagnetic Compatibility
- AIR 1404 DC Resistivity vs. RF Impedance of EMI Gaskets
- AIR 1423 EMC on Gas Turbine Engines for Aircraft Propulsion
- AIR 1425A Methods of Achieving EMC of Gas Turbine Engine Accessories, for Self-Propelled Vehicles
- AIR 1499 Recommendations for Commercial EMC Susceptibility Requirements
- AIR 1662 Minimization of Electrostatic Hazards in Aircraft Fuel Systems
- AIR 1700A Upper Frequency Measurement Boundary for Evaluation of Shielding Effectiveness in Cylindrical Systems
- AIR 4079 Procedure for Digitized Method of Spark Energy Measurement

### SAE AE-4 ELECTROMAGNETIC ENVIRONMENTAL EFFECTS (E3 OR EMC) COMMITTEE

The SAE AE-4 E3 Committee provides a technical, coordinating, and advisory function in the field of E3. The focus is on problem areas in which committee expertise can be effectively applied at the national and international levels. Electrical and electronic accessories are studied for compatibility within systems and with various communications media. Engineering standards, specifications, and technical reports are developed and are issued for the general information of industry and government.

In the past, subcommittees have included AE-4R, Aircraft Radiated Environments, and AE-4H, High Power RF Simulators and Effects. AE-4 E3 holds national meetings in

conjunction with the IEEE EMC Society Symposium, usually held in August at various locations. Additional information about meetings or more specific information on the activities of the Committee can be obtained by contacting:

Dorothy Lloyd

Aerospace Standards Specialist  
Society of Automotive Engineers

400 Commonwealth Drive  
Warrendale, PA 15096-0001  
Phone: (724) 776-4841

dlloyd@sae.org

or the Chairman, Gary Fenical, gfenical@lairdtech.com.

Visit the SAE's Technical Standards Committee Forum website at <http://forums@sae.org>.

## iNARTE

**iNARTE, Inc. (The International Association for Radio, and Telecommunications and Electromagnetics, Inc.)** was founded as a non-profit membership/certification organization in 1982. With the advent of deregulation and the Federal Communications Commission's "encouragement/urging" private industry to establish certification standards to fill the licensing void, iNARTE initiated and developed a comprehensive certification program for telecommunications engineers and technicians.

In 1988, a Command of the United States Navy, seeking a credible and respected certification entity, selected iNARTE as the administrative agent for the certification of engineers and technicians in the field of electromagnetic compatibility (EMC).

In 1993, iNARTE, certified by the Federal Communications Commission (FCC) as a Commercial Operators License Examination Manager (COLE Manager), was authorized to administer all examination elements for FCC licensure (formally an FCC responsibility).

In 1994, the ESD Association selected NARTE to implement and administer a certification program for Electrostatic Discharge Control Engineers and Technicians.

During 1997, two nations, China and Japan, requested iNARTE assistance in the establishment of specific in-country certification programs comparable to and able to meet iNARTE certification standards.

In 2000, iNARTE established the Unlicensed Wireless Systems Installer certification to identify fully qualified design and installation personnel. This certification accredits professionals who design and install wireless systems that do not require a license from the FCC—including information systems, security systems, and transportation systems.

In 2001, iNARTE developed an Agreement with the IEEE EMC Society for the co-promotion of awareness and education in EMC/EMI fields. Today the EMC Society is the keeper of the body of knowledge from which the iNARTE examinations are derived.

In 2003 iNARTE, together with specialist partners, developed the Product Safety certification program. The Product

Safety program accredits professionals who use hazard-based analysis to identify and develop solutions to eliminate or minimize safety hazards. In 2004 iNARTE signed an Agreement with the IEEE Product Safety Engineering Society, PSES, to co-promote awareness and education in Product Safety. Today, technical experts within the PSES assist iNARTE in the development of the examination question pools.

In 2006 iNARTE executed Agreement with ANSI ASC 63, the Accredited Standards Committee on EMC, for the purposes of joint cooperation and promotion in education and technical achievement in EMC engineering.

By 2007, the global interest and participation in iNARTE Certification programs had resulted in almost one quarter of members being from overseas countries. In recognition of this, the iNARTE Board of Directors voted unanimously to change the Association name to the, "International Association for Radio, Telecommunications and Electromagnetics, iNARTE."

As iNARTE, an agreement of mutual support and cooperation was signed with the ESD Association in 2007. The ESDA will assist iNARTE in formulating and maintaining the question pools from which certification examinations are derived.

Website: [www.inarte.org](http://www.inarte.org)

## ACIL—The American Council of Independent Laboratories

### The American Council of Independent Laboratories

(ACIL) is the trade association representing independent, commercial engineering, and scientific laboratory, testing, consulting, product certifying, and R&D firms; manufacturers' laboratories; related non-profit organizations; and consultants and suppliers to the industry. The organization was founded in 1937. All ACIL activities focus on its mission: to enhance members' success by providing advocacy, education, services, and mutual support and by promoting ethics, objectivity, independence, and free enterprise.

ACIL is a voluntary, non-profit membership organization. Programs are determined by members, administered by an elected Board of Directors, and supported by a professional staff operating from headquarters in Washington, D.C.

### ACIL'S CONFORMITY ASSESSMENT SECTION

ACIL's Conformity Assessment Section consists of firms with wide and varied interests, all performing testing, listing, or labeling in accordance with applicable safety and performance standards, and/or materials testing and resolution of product and structural problems. Several committees have evolved within the Section to meet the needs of its diverse membership, including the EMC Committee, the U.S. Council of EMC Laboratories, and the Third-Party Product Certifiers Committee. In January 2005, the Section sponsored a booth at the Consumer Electronics Show that advocated the advantages of independent third-party test-

ing and the capabilities of ACIL member EMC laboratories.

### ACIL'S EMC COMMITTEE

ACIL's EMC Committee was established in 1996 to address the common concerns of the ACIL EMC community. The Committee sponsors educational sessions at ACIL meetings that include both technical and policy issues such as mutual recognition agreements (MRAs). The Committee updates members on the latest developments, upcoming requirements, and activities in the field—both domestic and international.

In January 2002, ACIL published a 143-page document, Technical Criteria for the Accreditation of Electromagnetic Compatibility (EMC) and Radio Testing Laboratories, a checklist to assist both assessors and laboratories.

The Committee also formed the U.S. Council of EMC Laboratories (USCEL) in an effort to aid U.S. laboratories in addressing technical issues arising from the U.S./EU MRA and other global concerns. As the USCEL Secretariat, ACIL provides staff and supports volunteers active in this important area.

Over the past several years, ACIL has administered round robin proficiency testing programs with two artifacts; allowing laboratories to make both AC line conducted and radiated emissions measurements over the frequency range of 0.15–30 MHz and 30 MHz–1 GHz, respectively. While continuing the round robins in the frequencies noted above, ACIL has launched another round robin with a new test artifact. This artifact will allow participating laboratories to demonstrate proficiency for radiated emissions measurements in the frequency range of 1–18 GHz. Emissions measurements above 1 GHz are becoming increasingly common with the advent of fast processors and wireless devices in the 2.4- and 5-GHz bands.

ACIL also was instrumental in the formation of the Telecommunication Certification Body Council (TCBC). New rules establishing TCBs were adopted by the FCC in December 1998, providing more options for manufacturers—they can now choose to have their product certified by either the FCC or a private certification body (TCB). A TCB may approve equipment subject to certification (e.g., transmitters, telecom terminal equipment, or scanning receivers). The TCB Council addresses the specific concerns of the TCB community and all constituent bodies are permitted to participate.

### U.S. PRODUCT CERTIFIERS

Key U.S. product certifiers are ACIL members and are reaping many benefits, such as participation in the ACIL Third-Party Product Certifiers Committee (3P<sup>2</sup>C<sup>2</sup>). This Committee provides a forum for members to discuss and to act upon various issues of common interest. This committee formed the American Council for Electrical Safety to serve as a forum among testing laboratories, regulators, and electrical inspectors.

Website: [www.acil.org](http://www.acil.org)