TIA

Telecommunications
Industry Association

Annual Report
2003

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Mission Statement

TIA represents providers of communications and information technology products and services for the global marketplace through its proven strengths in standards development, domestic and international public policy, and trade shows. Our worldwide activities facilitate business development opportunities and a competitive, innovative market environment. The association strives to further members' business opportunities, economic growth and betterment of humanity through improved communications.

TIA is the industry's core connection to the global communications marketplace, providing representation, information, technology and business opportunities.

Letter from the Leadership

During the industry's three-year downturn and current recovery, TIA has re-doubled its efforts to bring value to its members, focusing on our core capabilities — standards, public policy advocacy, SUPERCOMM and other lead generation activities.

As the recovery moves along with starts and stops, we are determined to promote broadband deployment in all its forms, from fiber to third-generation wireless, with the intent of leading the industry to a sustained turnaround. In October we announced our five-point strategy for a lasting telecom recovery, which calls for:

- A national broadband policy to foster job creation and investment in our sector.
- Implementation of an FCC framework for broadband deregulation, reducing regulatory obstacles to building last-mile connections. We believe a strong, pro-investment policy is needed.
- Legislative incentives for broadband deployment to stimulate build-out of nationwide networks.
- Spectrum allocation from federal to non-federal use, with funding of relocation costs so advanced commercial wireless services are ensured.
- Increased federal funding for telecommunications research. Long-term research benefits many sectors, however, our country is losing its R&D leadership position.

We believe that if action is taken supporting these five points, the potential for job growth is great and investments in telecommunications networks will have other significant ripple effects.

Meanwhile, it seems appropriate to look back at some of TIA's 2003 accomplishments:

On the standards front, more than 1,000 volunteers and staff again decreased internal intervals for their work, while also reducing operational costs. TIA led development of voice over Internet protocol standards for equipment, including security framework for IP telephony. Work continued on Project MESA (Mobility for Emergency and Safety Applications) in cooperation with the European Telecommunications Standards Institute. Likewise, TIA continued to provide cost-efficient secretariat services for the Third Generation Partnership Project 2, as well as support for critical infrastructure protection and homeland security activities.

Within the advocacy arena, the association was active domestically and globally. In the United States, we achieved a landmark victory as the FCC adopted our proposal that incumbent local exchange carriers not be required to unbundle and make available to their competitors new, last-mile broadband facilities. On the international front, TIA promoted broadband activities in Asia-Pacific and Latin America, led on providing industry's input to free trade agreements and updated members on Iraq's reconstruction.

Regarding demand generation, SUPERCOMM 2003 produced solid leads among high quality service provider and enterprise attendees, even as the show decreased in size due to the industry's downturn. The third SUPERCOMM in Asia grew in all aspects in New Delhi, and TIA's USA Pavilion in the ITU TELECOM WORLD in Geneva was the largest national area in the show. Also, *TIA's Telecommunications Market Review and Forecast* report was successfully produced and marketed, as were several events such as Ventures 2003, a Wi-Fi session and the association's Advantage Series, aimed at small business development.

Looking ahead to 2004, we see renewed growth for the industry, and we solicit your participation to assist the TIA staff as we work to improve the economic climate. Thank you for your ongoing support.

Sincerely,

Michael D. Kennedy

Matthew J. Flanigan

Michael D. Kennedy
TIA Chairman
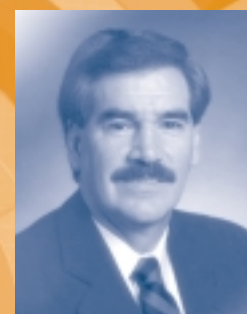
Matthew J. Flanigan
TIA President

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Industry Report

U.S. Market*

Spending in the U.S. telecommunications industry as a whole totaled $721 billion in 2003, rising 4.7 percent.

U.S. spending on telecommunications equipment totaled $143 billion in 2003, down a modest 0.7 percent from 2002. Network equipment, consumer telecommunications equipment and wireless capital expenditures declined in 2003. The enterprise market expanded 3.9 percent after two years of minimal growth, helped by spending on Internet protocol (IP) equipment.

Spending on transport services was essentially flat in 2003 at $285 billion. Local exchange services revenues decreased 2.9 percent. Long-distance services spending fell 8.2 percent, its third consecutive decrease as the shift from wireline to wireless in long-distance traffic continued. Offsetting these declines in 2003 was a 14.3 percent increase in wireless services to $89 billion, surpassing long-distance services ($78 billion) for the first time.

Specialized services — high-speed Internet access, unified communications, videoconferencing public room services and audioconferencing service bureau spending, and Web conferencing — are a small but rapidly growing segment of the industry. Spending in 2003 reached $18 billion, up 34.2 percent over 2002.

Spending on services in support of enterprise network and customer premises equipment, and wireline, cable, wireless and broadband networks grew 11.6 percent to $274 billion in 2003. Support services include maintenance and repair, logistical support, integration of products from different vendors, technical assistance for hardware and software operations, end-user training and information technology consulting.

The U.S. telecommunications market will grow at a projected 9.2 percent compound annual rate in 2004-07, reaching $1 trillion in 2007.

International Market* and Trade in Telecom Equipment**

For the international market, *TIA's 2004 Telecommunications Market Review and Forecast* covers Canada and Mexico, Western Europe, Eastern Europe, Latin America and Asia-Pacific. Spending on telecommunications equipment and services for the five regions increased by 7.8 percent in 2003 to $1.4 trillion.

After declining for two consecutive years, equipment spending (network and enterprise) rose by 2.8 percent to $246.7 billion in the five regions. Landline transport services grew 2.8 percent to $426.9 billion. Spending on wireless services reached $327.5 billion, a 12.1 percent increase.

Total U.S. trade volume in telecommunications equipment dipped in 2003 by 7 percent to $44.2 billion. U.S. imports of telecommunications equipment rose 4.7 percent to $30 billion while exports fell to $14.2 billion, a decrease of 10.4 percent. Canada leads the top five export markets for telecom equipment at $2.5 billion, with Mexico, Japan, the Netherlands and the United Kingdom following.

2003 U.S. Trade in Telecommunications Equipment**
($ Millions)

	2003		2002	
	Imports	Exports	Imports	Exports
35,000				
30,000	30,000		28,700	
25,000				
20,000				
15,000		14,200		15,800
10,000				
5,000				
0				

Imports & Exports

Top 10 U.S. Export Markets for Telecom Equipment ($ Millions)

Source: U.S. International Trade Commission

Country	2003	2002	Percent
Canada	2,507	2,648	-5.3
Mexico	1,337	1,536	-12.9
Japan	1,162	1,249	-6.9
Netherlands	994	1,157	-14.2
United Kingdom	883	829	6.6
China	630	726	-13.1
Germany	543	540	0.4
Hong Kong	498	525	-5.2
Korea	395	509	-22.5
France	349	348	0.3
Subtotal:	**10,499**	**11,414**	**-8.00%**

The 2003 U.S. Telecommunications Market

($ Millions)

Source: *TIA's 2004 Telecommunications Market Review and Forecast*

Total:
$720,500 (4.7% change)

Category	Growth over 2002 (%)
■ Equipment & Software	-0.7
■ Transport Services	0.2
■ Specialized Services	34.2
■ Support Services	11.6

$143,142

$285,296

$273,900

$18,162
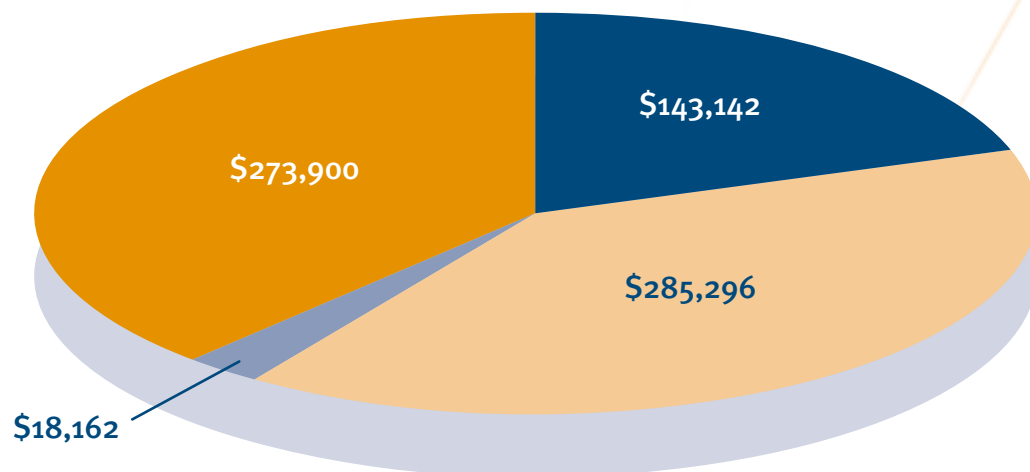
Advancing Standards Development

Standards development at TIA continued at full throttle despite difficult economic conditions in 2003. The Standards and Technology Department took every opportunity to work with its program leadership to reduce costs, including hosting meetings at TIA instead of hotels and limiting travel to only essential trips. These efforts resulted in reduced meetings costs and resources spent on supporting the groups. Human resources devoted to supporting standards development were also consequently reduced.

Accomplishments

TIA and its engineering committees, subcommittees and working groups continued to meet industry demand for standards documents and accomplished much in 2003.

- 93 new projects were opened, 78 standards proposals were issued and numerous items were reviewed by the Technical Standards Subcommittee (TSSC).
- 150 documents were published, reaffirmed, revised, upgraded or withdrawn.

As secretariat, the association maintains more than 1,000 documents counting both TIA and the Third Generation Partnership Project 2 (3GPP2) items.

Staff made improvements to TIA's Web site and file transfer protocol (FTP) sites in 2003. These sites contain copies of the TIA Engineering Manual, advisory notes and forms used to process standards. In addition, wireless and wired local area networks usage has been expanded for on-site distribution of work products created during engineering committee meetings.

A major initiative launched at the request of the TIA board was a survey of the projects and priorities of the various standards groups supported by TIA, "recasting" and possibly renaming or restructuring them to show more visibly how they directly support new technologies being developed across the industry.

International Participation

On the international standards front, TIA participated in the work of the International Telecommunication Union (ITU) and its Telecommunication Standardization (ITU-T) and Radiocommunication (ITU-R) sectors, as well as the work of the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and ISO/IEC Joint Technical Committee 1 on Information Technology (JTC1).

Major issues such as support for public protection and disaster relief activities, as well as intellectual property rights policies for copyright on source code used in Recommendations (ITU standards), took a great deal of time. TIA updated the ITU on changes, enhancements and new features added to its third-generation wireless standards referenced by ITU-R as part of the union's International Mobile Telecommunications (IMT)-2000 initiative to develop global 3G standards.

The association also stayed actively involved in the Inter-American Telecommunication Commission (CITEL), an agency of the Organization of American States, and participated in the Global Standards Collaboration (GSC) meeting hosted in Canada in early 2003.

TIA continued its role as participant and the secretariat to 3GPP2. Together with the European Telecommunications Standards Institute, TIA also sponsors Project MESA — Mobility for Emergency and Safety Applications. Project MESA is a public safety partnership that represents the first international initiative to involve users and organizations from the public protection, disaster response and civil defense sectors in the development of user requirements and specifications to meet broadband mobile communications needs. Interest in public safety standards has continued to grow both domestically and internationally as all seek interoperability of first responders.

TIA continues to handle the industry demand for standards documents through the tireless work of the more than 1,000 industry participants on scores of committees and working groups.

TIA continued to serve as a sector coordinator in support of Presidential Decision Directive 63 for the Information and Communications Sector (I and C Sector) regarding Critical Infrastructure Protection (CIP). With the release of President Bush's Homeland Security Presidential Directive 7, the previous I and C Sector is now broken into the Information Technology Sector and the Telecommunications Sector. Both transitioned to the new Department of Homeland Security in 2003. Furthermore, TIA has a board seat on the Partnership for Critical Infrastructure Security (PCIS), which handles cross-sector CIP issues.

Leadership Roles

TIA maintained several other leadership roles in standardization in 2003, many of which are ongoing.

- Participated on the American National Standards Institute (ANSI) Board of Directors and ANSI Executive Committee as well as in ANSI's Executive Standards Council, Company Member Forum, Consumer Interest Forum and Patent Group.
- Chaired the ANSI Organizational Member Forum.
- Held leadership positions in the U.S. National Committee to the International Electrotechnical Commission.

In addition, TIA's Dan Bart was named as the Private Sector Co-chair of ANSI's Homeland Security Standards Panel, and Susan Hoyler was named Convenor of the Telecommunications Infrastructure Wireless Internetworking Group under IEC Sector Board 4.

MESA Steering Committee Chairman John Oblak, E.F. Johnson, addresses participants at the partnership project's sixth meeting. TIA is a forum for public safety standards.

TIA's most popular standards include:

- ▶ TIA/EIA-568-B Series, Commercial Building Telecommunications Cabling
- ▶ TIA/EIA-569-A, Commercial Building Standards for Telecommunications Pathways and Spaces
- ▶ TIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures
- ▶ TIA/EIA-136, TDMA Cellular PCS
- ▶ TIA/EIA-IS-2000 Series, cdma2000® Series

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Influencing Public Policy

TIA is a respected advocate for public policies that promote competition, innovation and investment, and that foster a climate conducive to the emergence of new technologies. As the industry remained in an unstable condition in 2003, TIA's public policy efforts focused on bringing about a sustained telecom recovery. The association released its Five Point Plan, which called for:

- National broadband policy
- Implementation of FCC's framework for broadband deregulation
- Legislative tax incentives for broadband deployment
- Spectrum allocation for new services
- R&D funding for the communications sector

Domestic Policy

TIA's domestic agenda in 2003 emphasized supporting the adoption of policies that promote the widespread deployment of next-generation networks and technologies, including broadband in all its forms, as well as effective management of the nation's spectrum resources. As the evolution to a telecommunications infrastructure built on packet and Internet protocol (IP) technologies gained momentum, the association also committed more resources to address the revolutionary impact of IP-enabled applications and services on the legacy regulatory and policy structure.

Meanwhile, the ongoing focus in Washington, D.C., on homeland security meant continued interest in issues such as critical infrastructure protection, funding for interoperable communications equipment for first responders and electronic surveillance.

■ Broadband Deployment

TIA supported the multi-pronged initiative of the FCC to craft a minimally regulated space for broadband. The FCC's 2003 decision in the Triennial Review of the Network Unbundling Rules proceeding was a historic win for TIA and the industry. The agency explicitly adopted the proposal of TIA and the High Tech Broadband Coalition, which TIA helped form, to relieve from the unbundling requirements new fiber and packet electronics deployed in broadband networks. TIA's sustained engagement with the commission throughout the course of the proceeding was critical to the final outcome.

In addition, the association supported the Broadband Internet Access Act and other legislative efforts to offer fiscal incentives for broadband deployment, particularly in rural and underserved areas.

■ Voice over IP

The continued emergence of IP-enabled applications and services is transforming communications. Voice over IP (VoIP), in particular, will present significant policy questions if and when its acceptance in the marketplace leads to its widespread substitution for traditional, circuit-switched wireline telephony. In 2003 TIA crafted a statement of principles on the regulation of VoIP, which was to be formally approved as association policy in early 2004, calling for minimal regulation and urging a refrain from attempting to simply impose the legacy telephone model on IP services.

■ Spectrum Management

TIA's Spectrum Policy Working Group produced association filings in various FCC proceedings including:

- FCC Spectrum Policy Task Force Report
- E911
- Radio receiver standards
- Wireless broadband access in the 2.5 GHz band
- Additional unlicensed spectrum in the 5 GHz band

The association promoted spectrum policy positions internationally by participating in the International Telecommunication Union's World Radio Conference 2003. Matters related to public protection and disaster relief, radio local area networks in the 5 GHz band, and future World Radio Conference agenda items were emphasized.

TIA members (left to right) Peter Pitsch, Intel; Paul Kenefick, Alcatel; John Boridock, Texas Instruments; Tim Regan, Corning; and Doug Cooper, Catena Networks, discuss broadband technologies and regulations impacting the industry at TIA's 4th Annual Spring Policy Summit.

■ Telecom Research Funding

Increasing federal funding for telecommunications research is a TIA priority. Association staff met frequently with officials from the White House, National Academies of Science and Capitol Hill, as well as sent letters to the House Appropriations and Senate Finance committees about the need for increased funding.

International Policy

TIA addresses key market access barriers that members face in conducting business abroad and advocates policies that encourage growth in the telecom sector globally.

■ International Broadband Deployment

- ❚ Assisted the U.S. government in organizing a series of broadband workshops conducted at the 27th (March 2003) and 28th (October 2003) meetings of the Asia-Pacific Economic Cooperation (APEC) Telecommunications and Information Working Group (TEL). Additionally, TIA helped member companies obtain speaking roles, increasing their companies' exposure at APEC TEL and gaining access to government representatives from the region.

- ❚ Published and released its white paper, "The Economic and Social Benefits of Broadband Deployment" in October 2003.
- ❚ Wrote a substantial section of an International Telecommunication Union – Development Sector (ITU-D) draft report on "Broadband Access Technologies."
- ❚ Presented the benefits of broadband deployment to regulators, ministry officials and industry representatives from throughout the Americas at a meeting of the Inter-American Telecommunication Commission in El Salvador.

■ International Trade

TIA's International Committee updated and formally approved a set of international trade principles that will guide the association's trade policy activities. Examples of these activities include:

- ❚ Led industry cross-section of equipment manufacturers and service suppliers in discussions with the U.S. Trade Representative (USTR) and the Costa Rican government to ensure that Costa Rica made telecom commitments in the Central American Free Trade Agreement (CAFTA). Also provided regular advice to USTR and the State and Commerce departments on telecom industry priorities in CAFTA, the U.S.-Singapore and U.S.-Chile Free Trade Agreements. Lobbied for and gained passage and implementation of the Singapore and Chile FTAs.
- ❚ Led TIA delegation to and participated in the World Trade Organization (WTO) Ministerial Meeting in September 2003.
- ❚ Submitted comments to USTR for its annual Section 1377 Review (compliance with telecom trade agreements), and provided comments to USTR on the annual National Trade Estimate Report on Foreign Trade Barriers.

- Continued to advocate on behalf of members' interests, monitor and comment on China's trade policy and market. China has surpassed the United States as the world's largest telecom market. The U.S. Information Technology Office (USITO), TIA's affiliate, organizes events with the Chinese government and advocates on issues such as procurement policies, conformity assessment processes, standards, deployment of advanced wireless services and implementation of China's WTO commitments.
- Worked with TIA member companies to address critical market access barriers for their products in Korea.

Product–Oriented Divisions

In many instances, TIA pursues its members' interests in technical regulatory matters through its product-oriented divisions.

■ Wireless Communications Division

The Wireless Communications Division (WCD) continued to provide technical expertise for TIA filings on subjects as diverse as advanced wireless services (3G) spectrum allocation, spread spectrum devices, cellular and PCS rules, E911 services, hearing aid compatibility, radio receiver standards, spectrum reform, unlicensed devices and wireless broadband.

The division again focused attention on public protection and disaster relief efforts including participation in the FCC's National Coordinating Committee and Project MESA.

WCD's Technical Regulatory Issues Committee (TRIC) continued its dialogue with the FCC's Office of Engineering and Technology (OET) leading to streamlining the FCC's rules and accelerating FCC processing of wireless products' certification. The partnership between TRIC and the FCC lab has led to several process improvements.

WCD's Private Radio Section recommended changes to the FCC's rules for public safety transmitters and participated in the work of the National Coordination Committee and Project MESA.

TIA Chairman Mike Kennedy, senior vice president and director of global government relations, Motorola (left) and TIA President Matthew J. Flanigan (right) thank FCC Commissioner Kevin Martin (center) for speaking at the TIA board meeting. TIA meets regularly with the commissioners and their staff.

■ Satellite Communications Division

The mission of the Satellite Communications Division (SCD) is to address issues affecting the continued development of the satellite industry, such as interoperability and utilization of scarce spectrum. In 2003, the SCD oversaw the development of a standard for Internet protocol over satellite communications.

The SCD met with representatives of the Federal Bureau of Investigation, exploring a possible TIA role in developing and adopting a standard for lawful interception of satellite telecommunications under the provisions of the Communications Assistance for Law Enforcement Act of 1994. After considerable debate and investigation, the SCD decided not to pursue an electronic surveillance standard at this time.

■ User Premises Equipment Division

The User Premises Equipment Division (UPED) works on regulatory issues affecting manufacturers and suppliers of customer premises equipment (CPE).

Primary focus areas for UPED in 2003 were Section 508 of the Rehabilitation Act, the now privatized Part 68 of the FCC Rules and Regulations, voice over IP and E911 issues.

Section 508, which requires accessible electronic and information technology in the federal sector, spotlights making rapidly growing, feature-rich technologies available to individuals with disabilities.

Overseen by the Administrative Council for Terminal Attachments (ACTA), the now privatized Part 68 of the FCC Rules allows the industry to set technical requirements for new CPE via ANSI-accredited standards development organizations. It enables manufacturers to certify the products via a Supplier's Declaration of Conformity or other approved organizations such as certification bodies.

This has expedited the process for bringing innovative telecommunications equipment to the marketplace, has increased the choices of available CPE to consumers, and saved manufacturers millions of dollars a year.

The policy and regulatory implications of widespread deployment of voice over IP technologies have been discussed, especially as they relate to hearing aid compatibility and teletypewriters.

UPED supported establishment of a TIA position on the FCC's examination of the expansion of E911 rules to cover multi-line telephone switches and other products and services not previously covered by the E911 rules.

■ Fiber Optics Division

In 2003, the Fiber Optics Division (FOD) was an important contributor to TIA's aggressive advocacy efforts before the FCC on its series of proceedings to develop a framework for regulation of broadband services and facilities. The particular emphasis was on the FCC's Triennial Review of the Network Unbundling Rules. TIA successfully convinced the FCC to determine that the unbundling rules do not apply to new, last-mile broadband access facilities.

FOD's interest in the proceeding stemmed from its view that removing the regulatory disincentives to investment in new broadband facilities is critical to creating an environment conducive to pushing fiber deep into neighborhoods — to the curb and to the home. FOD was instrumental in an enormously successful TIA event at SUPERCOMM 2003 on the Triennial Review that featured remarks from FCC Commissioner Kevin J. Martin.

TIA's board of directors meets three times a year to discuss key issues relative to both TIA and the telecom industry. Pictured from left to right: Greg Jones, Texas Instruments; Jim Hjartarson, Catena Networks; Ralph Hayon, Natural Wireless; Greg Farmer, Nortel Networks; and Dan Gatti, BigBangwidth.

Building Business Opportunities

SUPERCOMM

Despite the economic challenges the industry faced in 2003, SUPERCOMM was well received by both exhibitors and attendees. Post-event survey data affirm that both constituencies ranked the 2003 show high in the areas of customer quality, size and the value the show produced. Satisfaction, in fact, was higher than for either the 2001 or 2002 shows.

SUPERCOMM 2003 brought together 25,000 industry professionals and utilized just under 279,000 net square feet. Audited attendance confirmed industry professionals from 101 countries, again demonstrating the show's global reach.

SUPERCOMM moves to Chicago's McCormick Place in 2004, June 20-24. Support for the show from the city and a broad base of affiliated organizations has been impressive. With its central location, global reach, and superb facilities, it is clearly the right host city as the industry positions itself for sustained growth.

Welcome signs of recovery are more abundant in 2004 and the dynamics of convergence, consolidation and globalization are increasingly impacting the strategies and performance of participating companies. These dynamics and more will dominate the dialogue, networking, collaboration and buying activities of the conference rooms, exhibit floors and hallways of SUPERCOMM 2004.

More than 25,000 industry professionals from 101 countries attend SUPERCOMM 2003 in Atlanta.

SUPERCOMM 2003 At-A-Glance

▶ 33 of the world's 50 largest service providers attended, representing 1.6 billion subscribers and $770 billion in total revenue.

▶ Sixteen service provider categories actively participated, including wireline, wireless, cable, satellite, utility, ISPs and ASPs, making it the world's largest annual gathering of service providers.

▶ Enterprise professionals seeking solutions to complex network and communications challenges also populated the floor. A "Who's Who" of corporate, government and military institutions have looked to SUPERCOMM in recent years as their primary communications resource.

An estimated 600 exhibiting companies and 30,000 industry professionals from more than 100 countries are expected to come together in June for what promises to be the most important and productive event in the show's long history of service to the industry. Beyond the exhibit floor, an educational experience led by more than 400 industry leaders and technical experts in 170 sessions will also enrich the SUPERCOMM experience. For more information, visit *www.supercomm2004.com*.

INTERNATIONAL

TIA offers marketing leads through world-class international exhibitions in markets experiencing explosive growth in telecommunications such as China and India. In addition, TIA organized the USA Pavilion at the International Telecommunication Union's ITU TELECOM WORLD 2003 exhibition to bring buyers and opportunities directly to participating companies.

SUPERCOMM attracts the industry's leaders. AT&T Chairman of the Board and CEO David Dorman addresses SUPERCOMM 2003 attendees at the opening keynote session.

Intent guests listen to opening speeches at Inaugural Plenary during third annual SUPERCOMM INDIA in New Delhi, February 4-6, 2004, at Pragati Maidan Exhibition Center. TIA Chairman Mike Kennedy of Motorola and more than half-a-dozen other VIPs addressed the session. Nearly 15,000 people attended the show.

SUPERCOMM INDIA

SUPERCOMM INDIA, which was certified by the U.S. Department of Commerce and endorsed by India's Ministry of Communications and Information Technology, was one of the highlights of 2003. The three-day exhibition and multi-track conference took place at the Pragati Maidan Exhibition Center in New Delhi, January 20-22, featuring more than 100 exhibiting companies, 12,000 business and government attendees, and 300 conference delegates.

The SUPERCOMM brand is an established hallmark of high quality educational programming and a world-class exhibition. Asia continues to offer significant business opportunities for TIA member companies, and the association is on the forefront of opening those markets to U.S. interests through high quality events such as SUPERCOMM ASIA 2001 launched in Shanghai and the China-U.S. Telecom Summit held in 1997 and 1999 in China, attended by China's Minister of Information and the U.S. Secretary of Commerce.

ITU TELECOM

TIA also organized the USA Pavilion at the prestigious ITU TELECOM WORLD 2003 in Geneva, October 12-18. The ITU shows attract high-level buyers from around the world. Organization of the USA Pavilion is a service through which TIA offers companies a complete exhibitor package that provides one of the best locations in the show. Exhibitors are ensured an excellent flow of traffic and housing reserved exclusively for USA Pavilion companies at the best venues. In addition, TIA assists its exhibitors with space selection, shipping, visas, customs, travel, site inspections and more.

The USA Pavilion in Geneva was the largest national area in the exhibition. USA Day and USA Dinner on October 14 enabled the pavilion's exhibitors to maximize networking opportunities. Watch for TIA's USA Pavilions at future ITU trade shows, such as the ITU TELECOM AFRICA in Cairo, May 4-8, 2004, and ITU TELECOM ASIA in Busan, Korea, September 7-11, 2004.

Growing the Industry

TIA offers programs to grow the market by promoting channels for convergence, education, emerging technologies and new customer opportunities.

Certification/Credentialing Programs

TIA's credentialing programs address today's convergence-capable workforce needs, help conserve member education resources, and provide outreach to IT professionals and employers. TIA continued to endorse two convergence certification programs:

- Certified in Convergence Network Technologies (CCNT) — a self-paced, online certification program.
- Convergence Technologies Professional (CTP) — a high-stakes, vendor-neutral foundation for convergence technology-related jobs.

During 2003, additional relationships were established with authorized training providers, increasing the number of training locations to over 75. Companies such as NEC and Toshiba joined the education advisory council, serving with representatives from Avaya, Cisco, First Telecommunications Corporation, IBM, Inter-Tel, Iwatsu, Mitel Networks and Siemens. These representatives helped develop and prepare for the launch of the CTP e-Learning curriculum, an online training alternative.

New Markets/Emerging Technologies

To assist members reach new markets, TIA held conferences on emerging technologies and trends including:

- Everywhere Networking: Where Wi-Fi® Meets Mobility for the Consumer and the Enterprise.
- Metro Ethernet Forum delivering an educational perspective on The State of the Union of Metro Ethernet.

*Wi-Fi is a registered trademark of the Wi-Fi Alliance.

- Wi-Fi: Distinguishing a Profitable Wi-Fi Model from All the Hype.

Convergence Content Creation

TIA continued to offer programs providing content for members through a combination of white papers, TeleForums and editorial submissions.

- Released white papers, such as "Category 6 Cabling: Static Discharge between LAN Cabling and Data Terminal Equipment."
- Hosted TeleForums such as:
  - Leveraging Your Channel Partnerships: Building Sustainable Business Models
  - Value of TL 9000 — What's the Return on Investment?
- Placed articles that discuss the return on investment for convergence solutions and address other topics such as opportunities for small/medium businesses in unified networks.

Small Business Focus

TIA's small business development initiatives serve member companies with annual telecommunications revenues of less than $35 million. Small companies comprise approximately 80 percent of TIA's membership.

The TIA Advantage Program for small companies is designed to connect these members with potential customers and spotlight opportunities that can directly impact companies' bottom line.

- Small Business Development Committee — Members received information about resources and networking opportunities to build partnerships and generate sales. The committee guided activities for the Advantage Series and the SUPERCOMM Marketing Program.
- TIA Advantage Series: Strategies and Solutions to Grow Your Business — A business development and educational event focused on tools and contacts for growth. The events feature government procurement and funding opportunities, a business management session and a profitable partnerships panel. In 2003, TIA hosted regional Advantage Series sessions in Richardson, Texas and McLean, Virginia.

Five companies add their names to the Supplier Diversity Challenge at SUPERCOMM 2003.
From left to right: Representatives from Valor Telecom, Solectron, NetCom Solutions, Int.,
OFS and TIA President Matthew J. Flanigan. Not pictured: Maya Communications.

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sales and marketing. Examples of activities in these areas included:

❚ Produced the second edition of *Profitable Convergence — Roots, Paths and Predictions for Evolving Channels* describing successful business models for convergence channel companies.

❚ Supported members' marketing messages through placement of bylined articles featuring members' solutions in trade publications, generating online and print visibility for TIA members.

❚ Released editions of the *TIA Channel Intelligence Report*.

❚ SUPERCOMM Marketing Program — TIA offered a shared promotions marketing program designed to boost small companies' presence at SUPERCOMM 2003. In addition, small company exhibiting members benefited from a member recognition full-page advertisement in the official program.

Capital Formation

TIA continued to support the capital formation program in 2003 to help members gain access to mentors and sources of venture capital.

❚ Hosted two-day regional venture capital forums, bringing together nearly 30 presenting companies and 40 venture capital firms.

❚ Provided mentoring sessions for companies seeking to obtain funding from venture capital firms.

❚ Released two editions of *VentureViews* — a TIA update on venture capital news.

Supplier Diversity

More than 500 people participated in the Supplier Diversity Summit at SUPERCOMM 2003. The eighth annual event of its kind, the summit focused on the state of the telecommunications industry and supplier diversity.

The morning session emphasized the changing telecommunications marketplace and the impact on the supply chain and customer. The afternoon session featured a panel of CEOs who discussed the strategic fit of diversity purchasing programs within their companies. The CEOs from CTDI, Verizon Wireless, Advanced Fibre Communication, BellSouth, Cisco Systems, Qwest, Lucent Technologies and SBC participated.

The 2002 results of the Supplier Diversity Challenge were announced at the event:

❚ Increased diversity spend to $5.6 billion against a total domestic procurement of $65 billion.

❚ Achieved an overall industry spend with diversity companies of 9 percent.

❚ Added five new companies to the Supplier Diversity Challenge.

Convergence–Capable Channels

During 2003, TIA offered a series of channel development initiatives focused on providing value to enterprise solutions channel partners. Channel initiatives offered support for operational excellence, strategic planning,

TIAB2B

TIAB2B, the association's business-to-business online exchange, helps members acquire new customers, sell product and obtain market share. It is a number-one communications resource on Google and has over 5,000 registered users representing more than 2,000 companies. TIAB2B has worked with American Tech Supply to gather thousands of products into TIAB2B's e-commerce catalogs.

Kron Communications and TIAB2B partnered in 2002 to launch the InTouche integrated communications platform on the site to help small- and medium-sized companies gain access to affordable email, voicemail and videoconferencing. The second generation release will be available in 2004, helping TIA promote broadband applications.

TIAB2B provides companies a place to post press releases, white papers, events and RFPs for free. The site also offers affordable fee-based services such as e-commerce, job listings, online advertising and Web site development. Visit *www.tiab2b.com*.

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Promoting the Industry

TIA's external communications promote the industry, issues vital to the association's membership, and TIA member technologies and services.

The association's proactive media outreach resulted in coverage in *The Washington Times, The Wall Street Journal, The New York Times, Los Angeles Times, Financial Times, CBS MarketWatch, San Jose Mercury News, Telephony, RCR, Reuters, Wireless Week* and *Communications Daily*, to name a few.

Broadband policy has been TIA's number-one priority and many interviews addressed this topic. As a founding member of the High Tech Broadband Coalition, TIA took an active role in that group's media outreach as well.

To educate end users and promote member technologies, TIA placed approximately six bylined articles in trade pubs such as *Phone+, Telecommunications* magazine and *RadioResource Mission Critical* magazine.

TIA's Web site, *www.tiaonline.org*, was selected as a finalist in the telecom category for the First Annual Webby Business Awards, which are judged by members of the International Academy of Digital Arts and Sciences. The Webby Business Awards honor the best business practices online.

Publications

TIA publications serve as an industry resource. *TIA's Telecommunications Market Review and Forecast* is the association's annual study providing an overview of telecom's interrelated segments including network services, enterprise and consumer, mobile and wireless communications, and international markets.

Other TIA publications include the Channel Benchmarking Report: *Profitable Convergence — Roots, Paths and Predictions for Evolving Channels*, online newsletters and the Standards and Technology Annual Report (STAR).

Internet and Web Development

TIA continued to implement new electronic tools for members and internal clients. In September, TIA launched a redesigned Fiber Optics LAN Section Web site (*www.fols.org*), which incorporated new database-driven functionality for the FOLS administrators to keep the site current. An all-new EIA-wide online meeting room scheduler was completed and launched in April 2003. This has significantly reduced overhead for the Electronic Industries Alliance, of which TIA is a sector member.

For the Standards Department, the Web team developed a robust intellectual property rights patent holder statement application and document archive. In May a new step-by-step online membership application was implemented to capture more data from applicants and generally make the task easier to complete. Shortly after the launch of the online membership application, 12 new member companies said the Web site contributed to their decision to join TIA.

The association continued to maintain and develop other internal Web sites, including *www.SUPERCOMM2004.com*, which underwent a major interim redesign in the fall. The final site was launched in the winter of 2003. In addition, TIA brought the SUPERCOMM Web site hosting back in-house, saving hundreds of dollars per month.

In 2003 the association's Web site achieved a total of 7.4 million external page views by nearly 1.2 million visitors, increases of 32 percent and 20 percent, respectively, over 2002.

Business Services • July Systems, Inc. • Juniper Networks, Inc. • Katolight, Inc. • Kawajiri & Associates • Kenwood USA Corp. • Kestrel Solutions • KIRK telecom, Inc. • Kohler Co., Power Systems Group • KRONE, Inc. • Kyocera Wireless Corp. • L.E.K. Consulting • La Marche Manufacturing Co. • Lantern Communications • Larscom, Incorporated • Laurel Networks • Lectron USA, Inc. • Leviton Manuf. Voice & Data Div. • Lexcom Telecommunications Co. • LG InfoComm U.S.A., Inc. • Liebert Corporation • Lightmaze Solutions AG • LightPointe • Lightwave Magazine • LinkAir Communications (USA), Inc. • Linkbit, Inc. • Litchfield Communications, Inc. • Littelfuse, Inc. • Lockheed Martin Corporation • LogicaCMG • Loop Telecommunications Int'l • Lucent Technologies, Inc. • LumenVox • Luminous Networks, Inc. • M/A-Com, Inc. • Magnetek Telecom Power Group • Mahi Networks • Management Resources International • MapInfo Corporation • Marconi • Marks Mobile Consulting, LLC • Marlin Leasing Corp. • Marstech Limited • Matsushita Elec. Works, R&D Lab, Inc. • Maxtech (USA) Co., Ltd. • MegaSys Computer Technologies • Megger • Megisto Systems, Inc. • MemoryLink • Meriton Networks, Inc. • Mesa Technical Associates, Inc. • MET Laboratories, Inc. • Metallic Power • MetaSolv Software, Inc. • Metric Test Sales • METRObility Optical Systems • Metropolitan Telephone Co., Inc. • MICROSENS, Inc. • Microsoft TV Division • Microtronix Systems Ltd. • Microwave Networks • Miller Freeman • Millimetrix Broadband Networks • Minerva Networks • Mitel Networks, Inc. • Mitsubishi Electric - MERL • Mobile-Mind, Inc. • Moreng Telecom Products • Moroney & Company, LLC • Motorola, Inc. • Movaz Networks, Inc. • MVLabs LLC • Myrio Corporation • NatCom Systems • National Technical Systems (NTS) • Natural Wireless, LLC • Navigation Solutions • Navini Networks • NDS • NEC America, Inc. • NeoPhotonics • Net to Net Technologies • net.com • NetDevices • Netrake Corporation • NetTest • Network Photonics • New Paradigm Resources Grp, Inc. • NEWS IQ, Inc. • Nexans, Inc. • NexTone Communication • Nokia, Inc. • Noran Tel Communications • Nortel Networks • Northern Technologies, Inc. • Northwest Information Services • Nova Electric • Nova, Inc. • Numerex Corp. • Occam Networks, Inc. • Odin TeleSystems, Inc. • OFS • Oki Network Technologies • OmniGuide Communications, Inc. • OmniOSS, Inc. • Omnitron Systems Technology, Inc. • Optek Technology • Orbacom Systems, Inc. • Ortronics, Inc. • Outside Plant Magazine • Overture Networks, Inc. • P.S. 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Enterprises • Racal Instruments, Inc. • Rackmaster Systems, Inc. • RAD Data Communications • Radian Heatsinks, Div. Intricast Co. • RadioFrame Networks, Inc. • RADirect • RadiSys Corporation • RAMiX, Inc. • RCC Consultants, Inc. • RedBack Networks, Inc. • REDCOM Laboratories, Inc. • Redknee, Inc. • Redline Communications, Inc. • RELM Wireless • Remee Products Corp. • Remote Switch Systems, Inc. • Research In Motion Corporation • RHK, Inc. • Rincon Research Corporation • RIT Technologies, Inc. • Rittal Corporation • Riverstone Networks • Rock Communications, Inc. • Rohde & Schwarz, America • Roxtec, Inc. • RP Wireless, LLC • RPM • RSM EquiCo • RTKL Associates, Inc. • Safetran Systems • Sage Instruments, Inc. • Sagitta, Inc. • Samsung Telecom. America • Sandvine Incorporated • San-O Industrial Corp. • Santera Systems • Sanyo Fisher Company • SBC Technology Resources, Inc. • SeaChange International • SEISCO • SENKO Advanced Components, Inc. • sentitO Networks • Server Technology • Sharp Electronics Corp. • Shindengen America • Show Management & Services • Sidoti & Company • Siemens Information and Communications • Siemens Subscriber Networks, Inc. • Siemon Company • Sierra Wireless America, Inc. • SiRF Technology, Inc. • SiteSafe • SNC Manufacturing Co., Inc. • SnowShore Networks • SolarFlare Communications, Inc. • Sonus Networks • SONY WTD • Sorrento Networks • Source, Inc. • Sparkle Power, Inc. • Spediant Systems, Inc. • Spirent Communications • Sprint North Supply • SS8 Networks, Inc. • SSH Communications Security, Inc. • Star Microwave Service Corp. • Steelcase, Inc. • Steleus, Inc. • Steven J. 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