Global Communications *Newsletter*

A New Era Begins in the Asia Pacific Region
By Byeong Gi Lee, Director of the AP Region

Effective this January, ComSoc's organization has been restructured. This major restructuring reflects the spirit of globalization that has been pursued by the volunteer leaders of ComSoc during the last few years. As a result of the restructuring, the Asia Pacific Region has been assigned a Directorship, namely, the AP Director, and the former AP Committee (APC) has evolved into a Board, the AP Board (APB). Consequently the APB and AP Director may be viewed as the upgraded continuations of the past APC and AP Chair, respectively.

Toward the end of 1997, the Nomination Committee of the APC recommended a candidate for the first AP Director, and the President of the Communications Society has affirmed the nomination. It is my great honor to serve as the first Director of the AP Region, the most dynamic and fast-evolving region in the world. Building on the foundations of the APC, I shall endeavor to further develop the Asia Pacific Region, building a solid infrastructure for the forthcoming new era.

Looking back on the history of the APC, we are obliged to the past APC Chairs, Professors Tetsuya Miki, Lin-shan Lee, and Tomonori Aoyama in particular, for their dedicated efforts and service which shaped the current form of the AP Region. Various AP Regional technical activities, namely APCC, ISPACS, and OECC, are a few of the examples of their collaborative efforts with other AP Regional volunteers.

The APB shall continue all the activities and services that have been conducted by the APC in the past, and will also expand them to better comply with the ComSoc restructuring requirements. We will continue to support APCC, ISPACS, OECC, and APNOMS, and will further promote AP Regional members' active involvement in ComSoc's technical committees, technical journals, and technical conferences. Also, we will continue and expand membership services such as distribution of conference information, AP e-mail networking, the AP home page, *AP Newsletter* service, reviewer list provision, Student Travel Grant program support, Distinguished Lecturer Tour program support, and so on. The APB will continue to be the center of the AP Region in conducting all of these technical activities and membership services.

In order to effectively fulfill the above objectives we have organized five Committees and have assigned each a specific job function. They are the Technical Affairs Committee (TAC, Koichi Hagishima), Meetings and Conferences Committee (MCC, Dan Keun Sung), Information Services Committee (ISC, Iwao Sasase), Membership Development Committee (MDC, Hyeong Ho Lee), and Chapters Coordination Committee (CCC, Kwang Cheng Chen). In addition, we have in the APB two Vice Directors (Naohisa Ohta, Sang Hoon Lee), two Secretaries (Taegwon Jeong, Naoaki Yamana-

ka), a Treasurer (Dong Ho Cho), five Advisors (Tomonori Aoyama, Lin-shan Lee, Tetsuya Miki, Desmond Taylor, and T. T. Tjhung), and the Asia Pacific Office (Fanny Su). (See list below.)

The TAC will be in charge of promoting technical activities within the AP Region and fostering the active involvement of AP Regional members in ComSoc's technical activities. The MCC will coordinate and support meetings and conferences within the AP Region in collaboration with the Technical Affairs Council (TAC) and other related ComSoc organizations. The ISC will keep the AP home page, publish the *AP Newsletter*, provide a liaison to the *Global Communication Newsletter* (*GCN*), and handle other information-services-related matters. The MDC will maintain the AP e-mail system, gather membership statistics, and support other membership-development-related matters. The CCC will coordinate the ComSoc Chapters in the AP Region and handle other Chapter-related matters within the AP Region.

ComSoc now stands at the turning point toward the new era of the globalized ComSoc. The newly established APB organization will enable a smooth transition into this new era, and the new APB officers are committed to laying a firm foundation toward this end. However, many things are unclear and as yet undefined. To be sure of a bright and successful future, we need the strong support and involvement of all ComSoc members, especially those in the AP Region. Please visit us at the AP homepage

http://www.fujitsu.co.jp/hypertext/flab/APR

and see how you can help the AP Region and ComSoc.

Asia Pacific Region Officers 1998–1999:
Director: Byeong Gi Lee
AP Advisors: Tomonori Aoyama, Lin-shan Lee, Norityoshi Kuroyanagi, Tetsuya Miki, Desmond Taylor, T. T. Tjhung
AP Office: Fanny Su Beh Noi, Jenny Long
Vice Directors: Naohisa Ohta, Sang Hoon Lee
Secretaries: Taegwon Jeong, Naoaki Yamanaka
Treasurer: Dong Ho Cho
Technical Affairs Committee: *Chair:* Koichi Hagishima; *Vice Chairs:* Guang Liang Li, Sang Wu Kim, Borhanuddin bin Mohd Ali; *Secretary:* Jun Nishikido
Meetings & Conferences Committee: *Chair:* Dan Keun Sung; *Vice Chairs:* Tak-Shing Peter Yum, David Everitt, Hiroyuki Morikawa; *Secretary:* Song Chong
Information Services Committee: *Chair:* Iwao Sasase; *Homepage Vice Chair:* Hideo Kuwahara; *Newsletter Vice Chair:* Teik Kheong Tan; *GCN Liaison:* Saewoong Bahk; *Secretary:*

An Overview of the Enterprise Networking Committee

By Roberto Saracco and Bob Braudy, Chair and Vice-Chair of EntNet Committee

The Enterprise Networking Committee, less than four years old, is relatively new. It sprang from people working in the Committee for Network Operation and Management (CNOM), which should not come as a surprise. Enterprises in the last decade have made information processes an important part of their effectiveness in creating products and doing business. An infrastructure supporting the flow of information and the supply–production–selling process is at the core of the enterprise, and one of its important issues is management. So that is the origin, but one should also say that this Committee was born out of understanding the role that technology and technical contributions can play in the enterprise. Today we can only say that such a vision has matured into reality, even more so.

Enterprise networking is the interconnection of corporate, departmental, local, and remote computing and communications resources to create an enterprise-wide information utility.

Enterprises are finding one technical answer to the interconnection of their information "banks" in intranets and a way to connect these banks to those of suppliers and clients through extranets.

Enterprises are based on information and information flow; that much is clear, and in a world that is moving more and more products in information-related forms, this is getting truer every day. At the European Community, as an example, a group was charged with the task of coming up with a vision of future superintelligent networks. It is clearly too soon to say if this vision has any root, or rather will spring any sprouts, but it may be interesting to consider. "Superintelligent" is taken to mean a kind of intelligence derived from the interplay of a number of "lower"-level intelligences provided by individual networks. The concept is similar to considering the global intelligence of a brain (not necessarily a human one) more than the sum of its constituent neuron chains and derived from the massive interconnections of the chains with one another. Out of this definition of superintelligent networks (and here we can imagine as basic components those of each enterprise) we derive a vision where chunks of value can be assembled anywhere in the overreaching network by anybody, thus harvesting values produced anywhere. The resulting value is greater than the sum of the individual parts and may itself become a chunk.

An example is in order. Suppose you have an idea to sell a set of china, and your creative contribution is to design the shape of the dishes. What you need is to grab some knowledge of porcelain, put some nice drawings on it, market the final product, and sell and distribute it. Well, each of these actions can be performed by other enterprises; what you need is to interconnect your enterprise with those others, perhaps even without their knowledge of each other and of your plan. A web of enterprise networks may get to work together to deliver the final product.

There is a clear trend in this direction, and of course it requires a good deal more than the technology available today. It needs contributions from many fields, including communications, information technology (databases, intelligent agents, adaptive networks, meaning representation), computation, and so on. The Enterprise Networking Committee would like to foster the convergence of and dialog between these many technologies. But its aims are even a little bit wider.

At the enterprise level you see the souls of business, people, and technologies working together. Intranets may remain a hollow shell if we don't beef them up with organizational and business considerations. Intranets allow information to be available anywhere in the enterprise; this changes the organizational model by flattening it. The abundance of information may be overwhelming, and may eventually result in loss of effective use of information.

The enterprise, thanks to or because of intranets and extranets, starts to have fading boundaries, and new relations are established between an enterprise and its suppliers, and between the enterprise and its clients.

However, there is one more aspect that is relevant to the Enterprise Networking Committee: the convergence of information technology and communications is happening first at the enterprise level. Here we have the PABX and LANs that are (slowly) converging into a single infrastructure; ICT is taking shape at the enterprise level as well. Our committee aims to be a bridge of interests for those in the communications and the information technology areas. To that effect we promote sessions on enterprise networking at conferences in both fields, solicit contributions to magazines, and sponsor seminars in conjunction with major events.

Our Committee focuses on end-to-end solutions. It addresses end user needs, new carrier services, and the emergence of many new products and networking vendors. Additionally it addresses the integration of new computer applications that may be distributed around the enterprise network. Examples of topics of interest to our Committee are:

• Reengineering business processes using computer and communications resources
• End-to-end network design, including capacity, reliability, routing, performance, cost, and so on
• Interconnection and interoperability of all pieces of an enterprise network, including local/wide global area networks, fiber interface, ATM, SONET/SDH, and client/server
• Integration of subsystems of enterprise networks such as mail gateways, LAN switches, routers, DB systems, security and authentication mechanisms, and so on
• Enterprise-wide computing, including distributed processing systems, network computers, distributed applications, and so on
• Private, public, and hybrid networking, including ATM and CPE-based implementations
• Integration of end-user-oriented services, such as video conferencing, multimedia, Internet services, into enterprise-wide solutions
• Enterprise information resource management and management of enterprise networks and integration of legacy systems

As you see, the field is broad and exciting. Do join our committee. We meet in conjunction with major conferences such as ICC and Globecom. Visit our web site (http://drogo.cselt.stet.it/Entnet) where you can get information on events and upcoming meetings, and participate in or activate a discussion thread.

New Homepage for the Asia Pacific Region
By Fanny Su Noi, Singapore

The AP (Asia Pacific) homepage has been renewed, and its site has been transferred from the NTT server to the Fujitsu server. You can visit the new homepage of the AP Region at
http://www.fujitsu.co.jp/hypertext/flab/APR

The new homepage includes greetings from AP Director Prof. Byeong Gi Lee, a new officers list, conference calendars in the AP Region, an APC meetings archive, an *AP Newsletter* archive, and so on. The homepage will be updated as occasion demands.

This homepage is maintained by Hideo Kuwahara, Information Services Committee Homepage Vice Chair. If you have any comments, please send e-mail to kuwahara@flab.fujitsu.co.jp.

IEEE Communications Society Meetings and Conferences
By Celia Desmond, Director of Meetings and Conferences

This is my first article as Director of Meetings and Conferences for IEEE Communications Society. Many of you may already know me from previous positions I have held, including Vice President–Membership (1994–1995), Director of Chapters (1993–1994), and IEEE Division III Director (1996–1997). Or, you may know me from the conferences in which I've had a significant organizing role, including INFOCOM '87, INFOCOM '89, CSECE '92, ICUPC '93, and ICC '97. So, while this is a new position for me, many of the issues are not. The areas of responsibility and focus for the Meetings and Conferences Department for 1998 have not changed significantly from previous years. These are:

• Establish strategic direction for ComSoc conferences

A working group is benchmarking the needs of our customers, what is the desired future direction, how well we are meeting those needs, what we need to do improve, and what possible strategies would help. Preliminary results obtained from a limited analysis by the committee indicate that we might need to put more focus on the needs of industry. Customer surveys will be performed at conferences during 1998 and the results will be used to determine out strategic direction.

• Manage ongoing conference activity by:
  – Ensuring that a steering committee is staffed, for each conference
  – Working with technical committees to design programs consistent with ComSoc's strategic direction
  – Set quality standards and review
• Renew industry support for ComSoc conferences by establishing the Exhibit and Patron Department
• Evaluate proposals for ComSoc cosponsorship of conferences, and approve as appropriate
• Monitor success of ComSoc conferences from the conference perspective, but also to ensure that we bring value to members and potential members. (Attendance at NOMS was 550–600, and financially the conference did well. Exhibits were held for the first time. This was successful, so it will be continued. Attendance at OFC was 7000. Thirty new members were recruited. Twenty members were recruited at the wireless trade show.)
• Participate in decision making regarding cross-portfolio initiatives which are implemented at conferences. Oversee and monitor implementation.
  – Membership rebate at NOMS and ICC

The Communcations Society is making a special offer to members at these conferences. Any Communications Society member who registers for these conferences will receive a $25 coupon which can be used toward ComSoc products or next year's membership. This is an offer we are pleased to make, but the logistics of ensuring that members do receive this value are not straightforward. If we go by the name in the membership database, comparing it to the name of the registrant, sometimes we find that people register under a name that doesn't match — a nickname, for example. If we use the member number, we find that not everyone includes the number. So we have decided to distribute certificates at registration, which the member must send back to claim the value. Hopefully this will prove to be an effective way to manage this process.
  – Multicasting at ICC/GLOBECOM
• Encourage continued active participation of members of the department
  – Reward members who make excellent contributions to the department
  – Certificates for conference General Chairs

Some of the people who spend quite a bit of their own personal time to make sure that Communications Society conferences do bring value to our members include the chairs of the various boards. These are:

Geographic Conference Boards
  Asia Pacific Region: Byeong Gi Lee
  Europe/Middle East/Africa: Horst Bessai
  Latin America: Bruno Vianna
  North America: Vijay Bhargava

Would You Convert?
The IEEE Membership Application Made Easier

Many people who join only an IEEE Society as Affiliates do not realize that they are not necessarily members of the IEEE.

Accordingly:

IEEE By-Laws I-103

1. Definition. The designation "Affiliate of IEEE Society" refers to individuals who are not members but who are entitled to participate in certain activities under provisions established by the Executive Committee as specified in these Bylaws. (see Bylaws T-402.3 and T-402.4)

IEEE B-Laws T-402.3 Society Membership

All Societies shall consist exclusively of IEEE members and Affiliates as may be recognized by the Executive Committee. No Society shall be recognized as joint with any other organization, society, or group outside the IEEE. However, Societies may cooperate with other organizations in the operation of joint committees and the holding of joint meetings and may invite members of such organizations and the public to their meetings.

All IEEE members, including those qualifying for special membership categories, may join any and all Societies upon payment of the appropriate dues. Affiliates do not qualify for any of these special categories.

IEEE By-Laws T-402.4 Society Affiliates

Society Affiliates are non-IEEE members who have been admitted by a Society to some of the rights and privileges of Society activities. The qualifications for Society Affiliates, limits in rights and privileges, and dues are established by the Executive Committee.

Hence, the Membership Development (MD) has implemented the Affiliate Conversion Campaign. This campaign is a promotion sent to all Affiliates who joined a Society after 1 Jan 1997 and have renewed for 1998. It offers the option of joining the IEEE for the rest of 1998 at a reduced rate (e.g., for Region 10, it would be calculated as US$91.00–US$35.00/2 (half year) = US$28.00 to be a full IEEE member till 31 Dec. 1998).

Please note, the program expires on 14 August 1998.

And, on another subject of IEEE membership application, on 15 February 1998, the IEEE Board of Directors voted to modify Bylaw I-106 so that non-student new members who are not applying for Senior Membership need no longer provide a reference or endorser on their membership application. Grade assignment will continue to be based on education and/or professional experience as specified in Bylaw I-105.

Questions concerning the Affiliate Conversion Program and the non-requirement of an endorser for new member applications should be directed to Membership Development (membership-info@ieee.org).

Networking R&D Cooperation with Japan
By K. R. Subramanian, Singapore

Minister for Communications Mah Bow Tan led a 20-member delegation to Japan from 15 to 18 February 1998. The visit, at the invitation of Dr. Shozaburo Jimi, Japan's Minister of Posts and Telecommunications, was intended to strengthen multimedia telecommunication cooperation between Singapore and Japan.

In Tokyo, Mr. Mah signed a Joint Cooperation Agreement on Multimedia Cooperation on 17 February 1998 with Dr. Jimi. The Agreement provides for high-speed connectivity to key global information centers. It also provides an umbrella framework for accelerated cooperation between Singapore's and Japan's research institutes for joint development of broadband multimedia applications. Under the agreement, Singapore aims to tap Japan's experience in the development of regional multimedia pilot towns and its construction of an advanced communication system model city. Singapore sees great synergy in linking Singapore ONE to the broadband networks in Japan.

In addition to the Ministerial Agreement, the delegation witnessed the signing of other significant cooperation agreements. Among them are:

- An Asia Pacific Information Infrastructure (APII) Agreement on Cooperation for the Promotion of the APII Test-Bed Project between the Telecommunication Authority of Singapore (TAS) and the Japanese Ministry of Posts and Telecommunications (MPT)
- A Multimedia Virtual Laboratory (MVL) Agreement between the National Science and Technology Board (NSTB) and Japan's Communications Research Laboratory (CRL)
- A Digital Broadcasting Agreement between the Singapore Broadcasting Authority (SBA) and MPT
- An Agreement on Collaboration in the field of Information-Communication Research and Development between Japan's CRL and five Singapore Research Institutes, which comprises the Centre for Wireless Communications (CWC), Kent Ridge Digital Laboratories (KRDL), Network Technology Research Centre (NTRC), Internet Research Development Unit (IRDU), and Singapore Advanced Research and Education Network (SINGAREN).

Members of the delegation included senior officials from TAS, NCB, NSTB, and SBA. Research institutes were the CWC, IRDU, KRDL, National Supercomputer Research Centre (NSRC), NTRC, and SINGAREN. Senior officials from Singapore Telecommunication and 1-Net were also represented in the delegation. The delegates visited the facilities of NTT Communication Laboratory, SONY Media World, CRL, Fujitsu Kawasaki Factory and Laboratory, KDD, and Tokyo Waterfront Research Centre.

Associate Prof. K. R. Subramanian, Director of the Network Technology Research Centre in NTU, was a member of the delegation and signed the R&D cooperation agreement with CRL of Japan. NTRC's research focuses on broadband networks, application, and services. There are ample opportunities for research cooperation in the areas of imaging, telemedicine, multimedia networking, and satellite Internet services.

Conference Management Boards
- Major Conference Boards
    GICB: Terry Kero
    INFOCOM: Harvey Freeman
    MILCOM: Eugene Ferrari
    NOMS/IM: Doug Zuckerman
- Directed Growth Conference Board: Harvey Freeman
- Session/Product Development Boards
    Applications and Systems Engineering: TBD
    Fundamental Research: Trevor Clarkson
    Product and Systems Development: Tomonori Aoyama
    Tutorials: Ben Leon
    Exhibit and Patron Programs: Bill Robinson
    These people all provide direction to the many others who organize the conferences themselves, and I would like to thank them all for their time, their efforts, their knowledge, and their vision.

Tomoaki Ohtsuki
Membership Development Committee: *Chair:* Hyeong Ho Lee; Vice Chairs: Dapeng Tien, Masayuki Murata; Secretary: Seung-Woo Seo
Chapters Codination Committee: *Chair:* Kwang Cheng Chen; *Vice Chairs:* Daehyoung Hong, Ryuji Kohno; *Secretary:* Chin-Liang Wang