

***IEICE Communications Society* GLOBAL NEWSLETTER Vol. 13**

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Introduction to IEICE Technical Committee Submission System

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1 Introduction

This article introduces an outline of the IEICE technical committee submission system. Every year, more than 200 technical conferences have been held by 68 IEICE technical committees with their high activities, and have provided opportunities for presentations and discussions to IEICE members.

There are several problems for global activities as follows:

1. English version of technical conference schedules should be also provided like Japanese version completely.
2. English submission forms should be prepared for all committees, when the technical conferences are held abroad.

The submission system has potential to solve above problems and used by most of the IEICE committees.

2 History

The most original version of the web form was developed by Professor Hidenori Kuwakado (Kobe Univ.) as a registration form of the domestic conference SITA2001, where the general chair was Professor Hatsukazu Tanaka (Kobe Institute of Computing)[1]. At the end of 2002, this registration form was migrated to the IEICE technical committee on communication systems (CS) and modified to be helpful for arrangement of English advance programs[2]. In 2003, taking an advice from Mr. Yoichi Maeda (NTT) who was the technical committee chair on CS, a drastic extension of the registration form was started in order to support all technical committees as a common system. At the same time, Professor Takaya Yamazato (Nagoya Univ.) at the technical committee on wide band systems (WBS) also started modification of the WBS form to be a common system as one part of the project of Engineering Sciences Society (ESS). I participated in the project and redesigned the system together with Mr. Hisatake Doi (EIZO NANO CORP.). Finally, all programs, HTML files and related tools were rewritten and revised according to kindly comments and requirements from technical committee secretaries.

3 System functions

The IEICE technical committee submission system provides functions of conference schedules, submission forms, advance programs, database of technical reports, download of search results, and so on. The system

functions are described in Table 1. In order to spread global information, providing English pages is very important. Most of public pages can be switched between English and Japanese pages. For this purpose, each form contains both text fields of English and Japanese for author's names, affiliations, paper titles, abstracts, keywords and so on.

The system is constructed on a PC server using famous open source tools called LAMP (It stands for Linux, Apache, MySQL and PHP/Perl/Python). The program is written in PHP scripts using HTML/mail templates. The program sizes are listed in Table 2. As a matter of fact, 39% of the program is for public pages and 61% of that is related to maintenance pages for secretaries and office staffs.

Table 1 System functions.

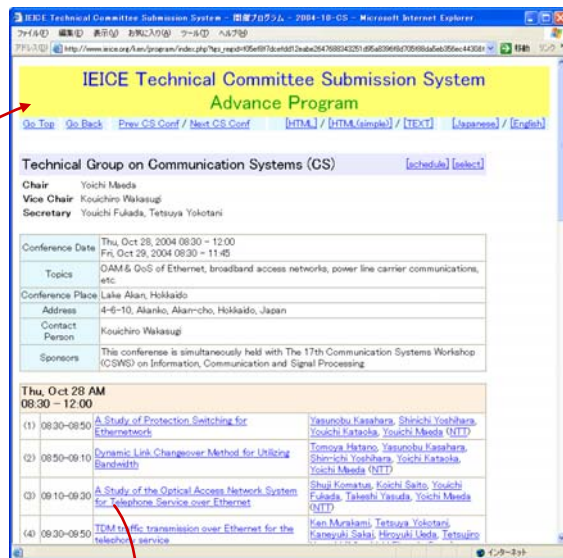
Category	Function
Schedule	-Schedule calendar
Submission	-Registration for presentation -Paper submission -Abstract & keywords submission
Program	-Advance program
Paper information	-Detailed information of technical report
Search	-Schedule search -Paper search -Download of search result
Maintenance (for secretaries)	-Registration of schedule and deadline -Confirmation of registration data -Arrangement of program -CSV download
Maintenance (for office staffs)	-Master data of technical committees -Sending request/announcement e-mails -Entering page/volume numbers -Transfer to related databases

Table 2 Program size of the system.

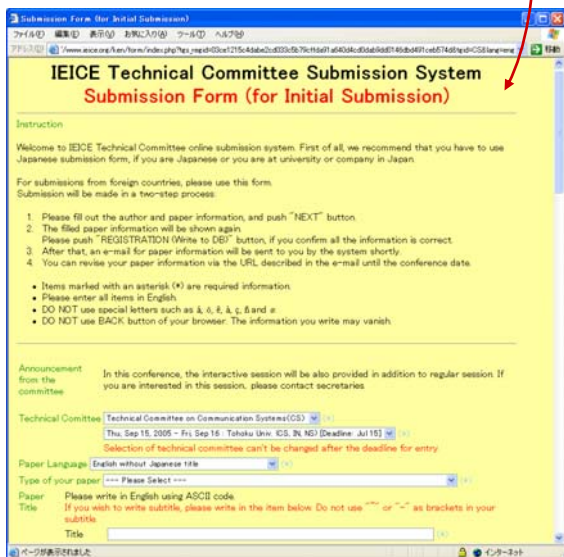
PHP scripts	23,000 lines	(912KB)
HTML sources	13,000 lines	(720KB)
Tools in C/SQL	1,400 lines	(34KB)
Mail templates	2,100 lines	(75KB)



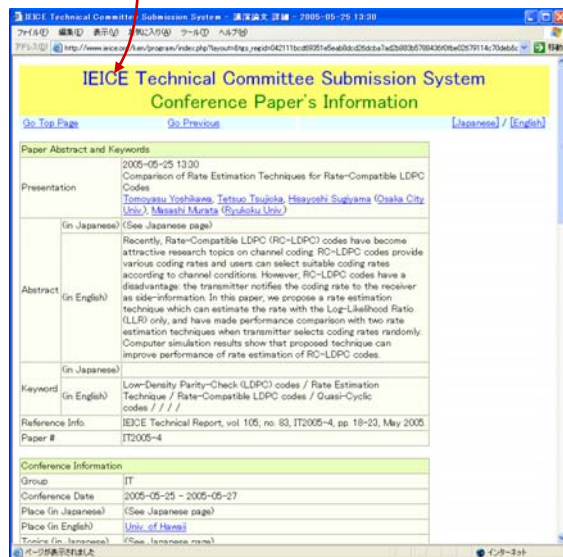
Conference schedule



Advance program



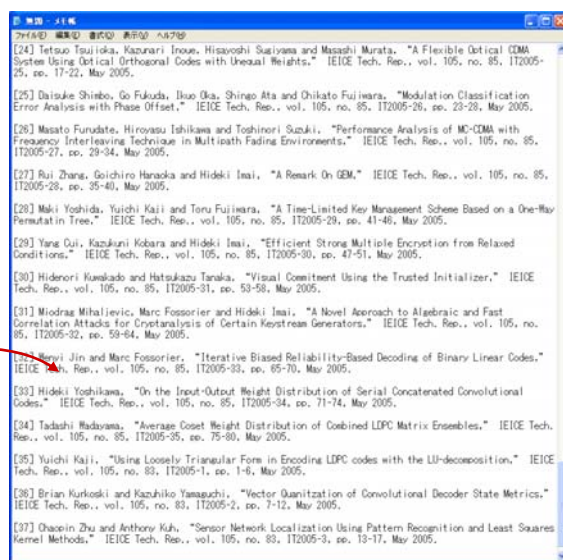
Submission form



Paper information



Search results



Downloaded search results

Note: For more detail, please visit to <http://www.ieice.org/ken/?lang=eng>

Fig. 1 Examples of web page views.

Examples of web page views are shown in Fig. 1. The IEICE members can browse conference schedules and their advance programs by giving various search conditions. It may be helpful for finding interesting conferences and presentations to participate in.

4 Utilization

The system has been worked from April 2004. The numbers of registered conferences and papers are listed in Table 3. Web access requests are classified into several categories of Table 1, and the result is depicted in Fig. 2. 65% of the access is for confirmation of conference schedules, advance programs and paper information. 22% of the access is related to search. The amount of access is increasing month by month as shown in Fig. 3.

5 Conclusion

In this article, the IEICE technical committee submission system was introduced. As future works, more improvements of functionality and speed-up of the system are remained.

Please visit to <http://www.ieice.org/ken/?lang=eng> and make use of the system.

6 Acknowledgements

The submission system is just only a database. It should have the latest information to become a useful system for the members. The system has been maintained by secretaries of the IEICE technical committees and all authors who made presentations. I am deeply grateful to the secretaries and the authors.

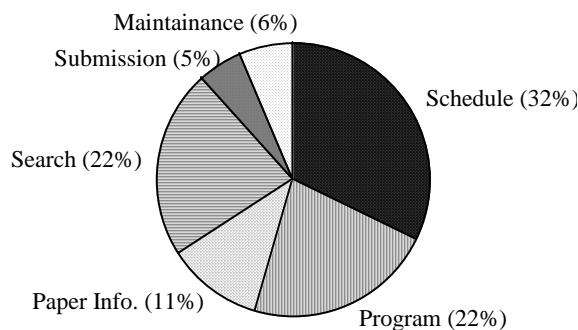
7 Reference

- (1) <http://www.sita.gr.jp/>
- (2) Iwao Sasase, et al., “Annual letter of CS technical committee – Technical meetings, 16th communication systems workshop (CSWS), etc. –,” IEICE Global News Letter, vol. 7, pp.13-14, March 2004.

Table 3 Registered conferences and papers.

	2004.4 - 2005.3	2005.4 - *
#Conferences	175	246 *
#Papers	3063	1720 *

*Note: Counted at the end of June 2005.



Date: 2005.1 to 2005.6

Fig. 2 Access requests by category.

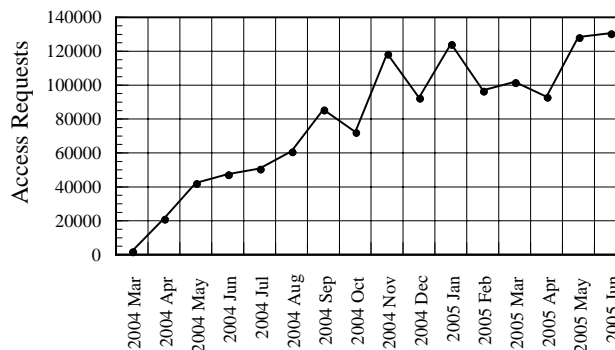


Fig. 3 Increase of access to the system.

Annual Report of Technical Committee on Network Systems

Iwao Sasase *, Keio University,
 Kou Miyake**, NTT DATA INTELLILINK Corp.,
 Tadashi Ito***, NTT,
 Hideki Kasahara****, NTT,
 Shoji Kasahara***, Kyoto University

*Chair, **Vice Chair, ***Secretaries, ****former Secretary

1. Introduction

This report covers the annual activities of The Technical Committee on Network Systems (NS) of the IEICE. We describe activity at the monthly technical meetings, recent research topics of the committee, and the research award for 2004.

2. Technical meetings

As a rule, this Technical Committee holds ten two-day technical meetings each fiscal year. The schedule from April 2005 to March 2006, consisting of nine technical meetings and one workshop, is shown in Table 1. Several of these are co-sponsored by the RCS (Radio Communication Systems), CS (Communication Systems) and IN (Information Networks), TM (Telecommunication Management), CQ (Communication Quality), PS (Photonics in Switching), and OCS (Optical Communication Systems) committees. In addition, the April technical meeting is co-sponsored by the ITC (International Teletraffic Congress) Japan Committee chaired by Professor Konosuke Kawashima of the Tokyo University of Agriculture and Technology.

Recently presented papers focus on technologies that support traffic control/measurement, multicasting, ad-hoc networking, and mobile networking. At each technical meeting, we host lectures by invited speakers who are experts in their fields. During this fiscal year,

we have had guest lectures on ubiquitous networking, traffic control for routers, VPN, and other topics. From June 2003, we started to foster the work of young researchers who have presented papers at technical meetings by inviting them to give a follow-up talk some months later. We call these “encouragement lectures.” We invited 13 young researchers to give such lectures in the past year. We will continue this system. The number of papers presented at our meetings in recent years is shown in Fig. 1; in general, the number of papers is increasing.

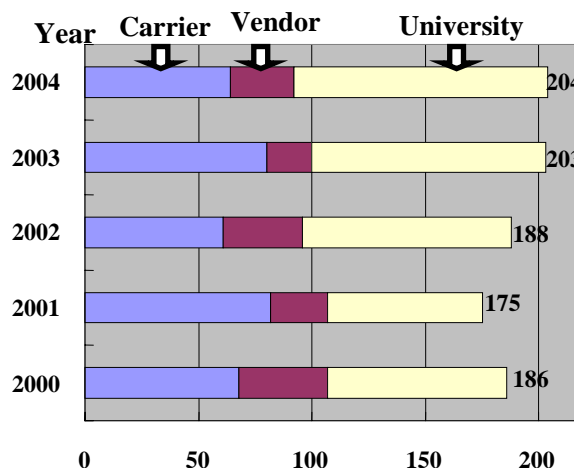


Fig. 1: Trend in number of papers presented at technical meetings.

Date	Place	Themes	Co-organizer
April 21-22	Nanzan University (Aichi)	Traffic	ITC Japan Committee
May 26-27	Nara Inst. Sci. & Tech. (Nara)	Next generation networks, SIP, presence	
June 23-24	Waseda University (Fukuoka)	CDN, multicasting	
July 21-22	Okayama University (Okayama)	Mobile networks	RCS
Sep. 15-16	Tohoku University (Miyagi)	Active networks, IP-VPN, Security, P2P	CS, IN
Oct. 20-21	Sporea Yuzawa (Niigata)	Networking technology for the ubiquitous era	
Nov. 17-18	Kunibiki Messe (Shimane)	Performance, quality of service	TM, CQ
Dec. 15-16	Ehime University (Ehime)	Photonic networks, photonic routing	PN
Jan. 27-28	Osaka Inst. Tech. (Osaka)	Photonic IP networks, photonic nodes	OCS
Mar. 2-3	Rizzan Sea-Park Hotel (Okinawa)	NS/IN Workshop	IN

3. Research Award 2004

The Technical Committee selected recipients of the Network System Research Award from among researchers that gave papers at monthly technical meetings from January 2004 to December 2004. The award is presented to the authors of the three or four best papers of each year. Last year's recipients attended the IN/NS Workshop, held in Okinawa in March 2005, as shown in Fig. 2. The abstracts of papers that won awards in 2004 are shown below.

Akeo Masuda, Toyoharu Sato, and Hideki Kasahara, "Distributed Database Processing for Realtime Resource Control Agent"

While numerous studies and implementations of QoS control of packet transmission over IP networks have been performed, the Diffserv model approach, in which aggregated flows are managed according to packet priority, achieves high scalability at the network layer. A separate function to perform admission control for each application flow is needed in this model. Because this function, which is called bandwidth broker, is supposed to be implemented as a centralized processing server system, a new scalability problem arises in the call processing performance. Recently, we have proposed a novel network resource mapping model, called the "virtual link multi-mapping model," that enables dividing the resource database and eliminates the performance bottleneck at the database access by load balancing. By using this mapping model, a portion of the available resources at each link is maintained at multiple databases. This causes inefficiency in resource utilization, due to the partition of the database resources. For example, when available resources are unevenly distributed at each database because of the distribution of requested resource, an admission decision, which checks one database, would reject the request, in spite of available resources in another database. This results in an increase in the call-blocking probability of resource reservation requests. In this report, we evaluate two methods to overcome this problem. In method 1, the request is transferred to another admission control process that checks another database. In method 2, the amount of available resources will be periodically adjusted to make them equal among the multiple databases. Simulation results of performance degradation caused by the call transfer in method 1, and the recovery of the call-blocking probability in method 2 are shown. Although the characteristics will differ according to some parameter settings, we confirmed that these methods are sufficiently good to overcome problems due to database partitioning.

Kosuke Yamazaki, and Kaoru Sezaki, "Spatio-Temporal Addressing Scheme for Mobile Ad Hoc Networks"

Recently, addressing problems in Mobile Ad-Hoc NETWORKS (MANETs) have attracted a lot of attention. MANET consists of mobile nodes with wireless interfaces and requires no infrastructure. Nodes

communicate with each other, if possible, within the communication range. If not, they use relay nodes to communicate in a wireless multi-hop fashion. In these types of networks, distributed network management is required. Moreover, if nodes can freely move, then the network topology frequently changes. Under this environment, a centralized architecture (server-client) does not perform well because of a low scalability and fault tolerance. Therefore, distributed network management should be used in MANETs. When designing addressing architecture, this point should be considered too. Most traditional architectures are centralized approaches. Server-client models are used like those in DHCP, so new addressing architectures must be designed for MANETs.

Traditional works about MANET addressing can be categorized into two types: IP-based addressing and hardware-based addressing. The former uses a limited IPv4 private address space, and the latter uses an IPv6 address space. Both of them have drawbacks and some solutions have been proposed. Most of their drawbacks are caused by a lack of unique addresses, and after each node selects a temporal address, a function called "Duplicate Address Detection: DAD" must be used to confirm its uniqueness. This process leads to the waste of resources.

In this paper, we propose a usage of location information and time stamp to assure address uniqueness. The address based on spatio-temporal information must be unique because two objects never exist at the same location at the same time.

Akihito Okura, Hiroshi Kawakami, Takeshi Ihara, and Akira Miura, "Proactive/Multipath QoS Control for IP-Based Cellular Network"

This paper proposes multipath control and proactive control to achieve a robust QoS control system in IP-based cellular networks. In these networks, many kinds of traffic share a common backbone as well as the Internet. Therefore, a method that can meet demands for quality is critical. Cellular networks are very susceptible to congestion. When an event occurs that causes congregations of people, such as sports events and natural disasters, communication quality is degraded at many terminals. For quality control in present IP networks, DiffServ has been proposed by IETF. DiffServ is a scalable technique that is promising because it divides traffic into several classes for priority control. However, if too much traffic concentrates on a single DiffServ router at the same time, it is difficult to maintain the communication quality. In this paper, we propose two functions to achieve QoS control using DiffServ. The first is multipath control using linear optimization. This function dynamically changes the paths of each traffic class according to the traffic situation. For instance, when all classes use the same path and the bandwidth availability of the paths increase, multipath control selects detour paths and eases the congestion by letting certain traffic use the detour paths. The second function is proactive control

using traffic anomaly detection. This function is proactive and discovers a symptom of congestion and initiates multipath control before the congestion actually occurs. By using this proactive control function, we can prevent quality degradation because the proactive control can prepare new paths even when a traffic increase is extremely rapid, as occurs when a natural disaster hits. We evaluate the multipath control and the proactive control by computer simulations using the NS2 simulator. These results indicate that both the multipath control and the proactive control improve system performance in terms of throughput and packet loss when rapid traffic change takes place.

Hirokazu Kobayashi, Taisuke Matsumoto, Shinkichi Ikeda, Masayuki Kumazawa, Makoto Funabiki, and Toyoki Kawahara, “Investigation of on-demand routing protocol based on attributes of terminal for Mobile Ad hoc Network”

An ad hoc network is a temporary network formed by a set of nodes in the absence of a supporting infrastructure. It is expected to be one of the key technologies for various applications, such as disaster recovery networks and wireless sensor networks.

A number of ad hoc routing protocols are currently being discussed and developed by different research communities in government, industry, and academia because it is difficult to utilize existing wired-based routing protocols for an ad hoc network. Most of the conventional ad hoc routing protocols determine the best routing path based on which route is the shortest from a source to a destination. However, if an ad hoc network consists of mobile terminals, the shortest hop route is not necessarily the optimal one. It is desirable to determine the best route in consideration of node attributes such as available resources, e.g., residual battery capacity, throughput, and network bandwidth limitations.

This paper proposes a novel routing protocol named Node Attributes-based On-Demand Routing (NA-ODR). In NA-ODR, the timing of forwarding a routing message is controlled according to the available node attribute information. By this technique, the better the matching of the node attributes, the higher the probability the node is selected as a forwarding node.

Our simulation results indicate that a possible problem of routing path re-establishment, which can arise due to insufficient battery power of a forwarding node, can be avoided if residual battery capacity is taken into account. It is also shown that if the number of entries in the routing table is defined as a node attribute, then that is effective for evenly distributing the burden among forwarding nodes.

NA-ODR does not have the necessity of adding node attribute information to the routing protocol messages, and does not need a new protocol sequence, either. Therefore, it allows a node to efficiently select the next forwarding node without increasing the total traffic load.

4. Future Plans

The Technical Committee has begun to plan a special edition of the IEICE Transactions on Communications B covering networking technology for seamless network services, which will be one of the key applications in the era of broadband services. The call for papers will be issued in September of this year. The Program Committee, which has 10 members, is chaired by Professor Iwao Sasase of Keio University, who is the chair of the Technical Committee. This feature edition will be published in August 2006.

In addition, the Technical Committee will organize four special events: an Open Symposium on “All-IP Mobile Networking Technologies” at the IEICE Society Conference in September 2005, an Open Symposium on “Personal Area Network Services in the Ubiquitous Age”, a Panel session on “Open Architecture for Communication Equipment”, and an English-language session on “Technologies and Architectures for Ubiquitous Network Systems” at the IEICE General Conference in March 2006.

In addition, to ensure the creation of a large number of high-quality papers in our technical field, we will continue to organize the IEICE Transactions on Communications B.

(For more information, please see our home page.

URL: <http://www.ieice.org/cs/ns/>)



Figure 2: Research award recipients and NS chair Prof. Sasase.

IEEE ComSoc Global Sister Societies Summit and ICC2005

Yasushi Yamao
Former Society Vice President, International Relations



Summary

The IEEE ComSoc Global Sister Societies Summit was held on May 16, 2005 at the Seoul COEX Convention Center, just prior to ICC 2005. Representatives from ComSoc's ten sister societies gathered and discussed their activities and the relationships among the societies. Kohei Shiimoto, the secretary of International Relations, and I attended the Summit. The Sister Society Agreement with ComSoc was also renewed.

Sister Society Summit

The delegates from the sister societies came from Brazil, China, Croatia, Eastern Europe, Hungary, Japan, Korea, Slovenia, and Taiwan.

Also in attendance were IEEE ComSoc President Curtis Siller, President Elect, Nim Cheung, Vice Presidents, and other liaison Directors. They expressed their hopes toward collaboration.

I presented a report on the current status of the IEICE Communications Society (IEICE-CS) membership statistics, publications, society activities, and recent collaboration with ComSoc. For example, mutual e-mail information delivery to each society member started last year, which can be applied to other sister societies.



Fig. 1 Agreement renewal signing ceremony.

Sister Society Agreement Renewal

The IEICE-CS and IEEE ComSoc concluded a sister society agreement in 1998. The agreement was renewed on the same day of the Summit. The IEEE ComSoc president Curtis Siller signed the renewed agreement as shown in Fig. 1. The agreement addresses:

- Dual membership for each Society member
- Cooperation regarding membership promotion
- Technical co-sponsorship in conferences

<p><u>ComSoc/IEICE-CS - Main Agreement</u></p> <p>THE COMMUNICATIONS SOCIETY (ComSoc) of THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. and the COMMUNICATIONS SOCIETY (CS) of THE INSTITUTE OF ELECTRONICS, INFORMATION & COMMUNICATION ENGINEERS (IEICE)</p> <p><u>Cooperation Agreement</u></p> <p>The agreement, renewed the 16 May 2005, is between the Communications Society (ComSoc) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the Communications Society (CS) of The Institute of Electronics, Information & Communication Engineers (IEICE), hereinafter referred to as the "Organizations". "Members" hereinafter refer to individual members, not corporate members.</p> <p>To implement this agreement, the following conditions are agreed upon by the Organizations:</p> <ol style="list-style-type: none"> I. Members of the ComSoc may submit papers to IEICE-CS-sponsored meetings with the same privileges and limitations as IEICE-CS members. Conversely, members of IEICE-CS may submit papers to ComSoc-sponsored meetings with the same privileges and limitations as ComSoc members. II. Members of IEICE-CS (ComSoc) may register for ComSoc (IEICE-CS) sponsored meetings at ComSoc (IEICE-CS) member rates. To implement this procedure, IEICE-CS (ComSoc) members must indicate on the registration form or at the registration desk that he or she is a member of IEICE-CS (ComSoc). III. Members of IEICE-CS (ComSoc) may subscribe to ComSoc (IEICE-CS) publications at reduced Sister-Society rates (reference: Publications Side Agreement). <p>The following stipulations apply:</p> <ol style="list-style-type: none"> A. IEICE-CS (ComSoc) members may purchase individual ComSoc (IEICE-CS) publications separately. B. Each Society will review sister-society rates for publications annually, rates for a given year should be set by the 30th of June of the preceding year. C. Subscription rates for each Society will include an option to receive publications via airmail at a price set by the Society. D. Each Society's publications will be shipped directly from the printer to the respective individual subscribers; there will be no bulk shipments of publications. E. Each Society will promote the sale of the other Society's publications to its members by including advertisements in promotional literature and publications, promotions by IEICE-CS and ComSoc will be within legal limits permitted to non-profit organizations. F. ComSoc (IEICE-CS) will invoice IEICE-CS (ComSoc) subscribers to their publications annually; individual subscribers will make subscription payments to the sister society. 	<ol style="list-style-type: none"> IV. ComSoc (IEICE-CS) provides Affiliate Membership to IEICE-CS (ComSoc) members providing the same privileges as regular members for publications subscriptions, access capabilities to on-line publications, and technical activities. <p>The following stipulations apply:</p> <ol style="list-style-type: none"> A. Regular IEICE-CS (ComSoc) Members (or higher grade) are eligible for Affiliate Membership in ComSoc (IEICE-CS). B. Each Society will review the Affiliate Member for annually; the fee for a given year should be set by the 30th of June of the preceding year. C. An Affiliate Member of IEICE-CS will automatically receive IEEE Communications Magazine monthly at no additional cost. An Affiliate Member of IEEE ComSoc will automatically receive IEICE Transactions on Communications monthly at no additional cost. D. Each Society will promote membership by including advertisements application forms in the other Society's promotional literature and publications. V. ComSoc (IEICE-CS) will give privileges to IEICE-CS (ComSoc) and cooperate with each other to promote mutual prosperity. <p>Both Organizations agree to the following items:</p> <ol style="list-style-type: none"> A. ComSoc will publish (in any of its magazines) at least one article every year (in English) prepared by IEICE-CS on feature topics to be commonly agreed. An officer from IEICE-CS will manage the preparation of these feature articles, submitting them for publication in collaboration with the ComSoc Director of Magazines (reference: Publications Side Agreement). B. IEICE-CS will publish (in any of its publications) at least one article every year that has appeared in a ComSoc magazine or journal in collaboration with IEICE-CS Directors and ComSoc Directors of Magazines and Journals (reference: Publications Side Agreement). C. ComSoc will provide technical co-sponsorship to established IEICE-CS sponsored meetings and conferences. Other IEICE-CS meetings and conferences will be discussed on a case-by-case basis to determine whether ComSoc technical co-sponsorship will be conferred. D. IEICE-CS (ComSoc) will publicize the other Society's web site and its URL, by including advertisements prepared by other Society in IEICE-CS (ComSoc) publications. E. IEICE-CS (ComSoc) will make its mailing list available for use by ComSoc (IEICE-CS) to promote their events. F. IEICE-CS (ComSoc) members may fully participate in ComSoc (IEICE-CS) Technical Committees. They are eligible to be Technical Committee Officers and to vote in Technical Committee elections. F. IEICE-CS (ComSoc) shall seek further cooperative activities for mutual prosperity. VI. This agreement is valid for the calendar years 2006-2009 (4 years) and is renewable for an additional four-year term by written consent of both parties before the 30th of April of the fourth year. VII. Either Organization may withdraw from this agreement at any time upon written notification to the other Organization at least one year in advance. The effective date of termination shall coincide with the end of the calendar year. 	<p>For and on behalf of The Communications Society (ComSoc) of The Institute of Electrical and Electronic Engineers, Inc. New York, NY, USA</p> <p><i>Curtis Siller</i> Curtis Siller, President Date: 16 May 2005</p> <p>For and on behalf of Communications Society (CS) of The Institute of Electronics, Information & Communication Engineers (IEICE) Tokyo, Japan</p> <p><i>Yoshihiro Akawa</i> Yoshihiro Akawa, President Date: 12 May 2005</p>
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Figure. 2 IEEE ComSoc Sister Society Agreement (Main Agreement).

The agreement is valid for 2006-2009.

ICC 2005

The ICC is one of the major international conferences sponsored by IEEE ComSoc. The Communications Society technically cosponsored ICC 2005, as presented in the Global Newsletter Vol. 12. For the contribution of IEICE-CS to ICC 2005, the executive committee of ICC 2005 thanked our society with "Plate of Appreciation," which is shown in Fig. 3.

The papers presented in the ICC sessions are grouped by technical area in Figure. 4. Wireless Communications and Wireless Networking sessions gathered large number of papers. Countries are also analyzed for the ICC papers in Figure. 5. The numbers of papers from Korea, China and Taiwan follow those from United States and Canada.



Fig. 3 Plate of Appreciation.

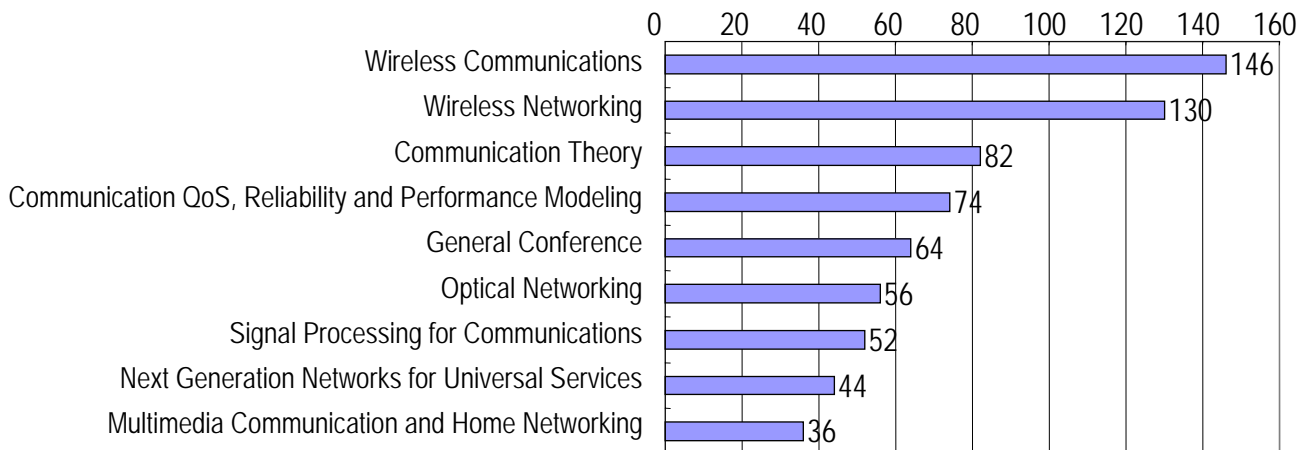


Fig. 4 The number of papers by technical area.

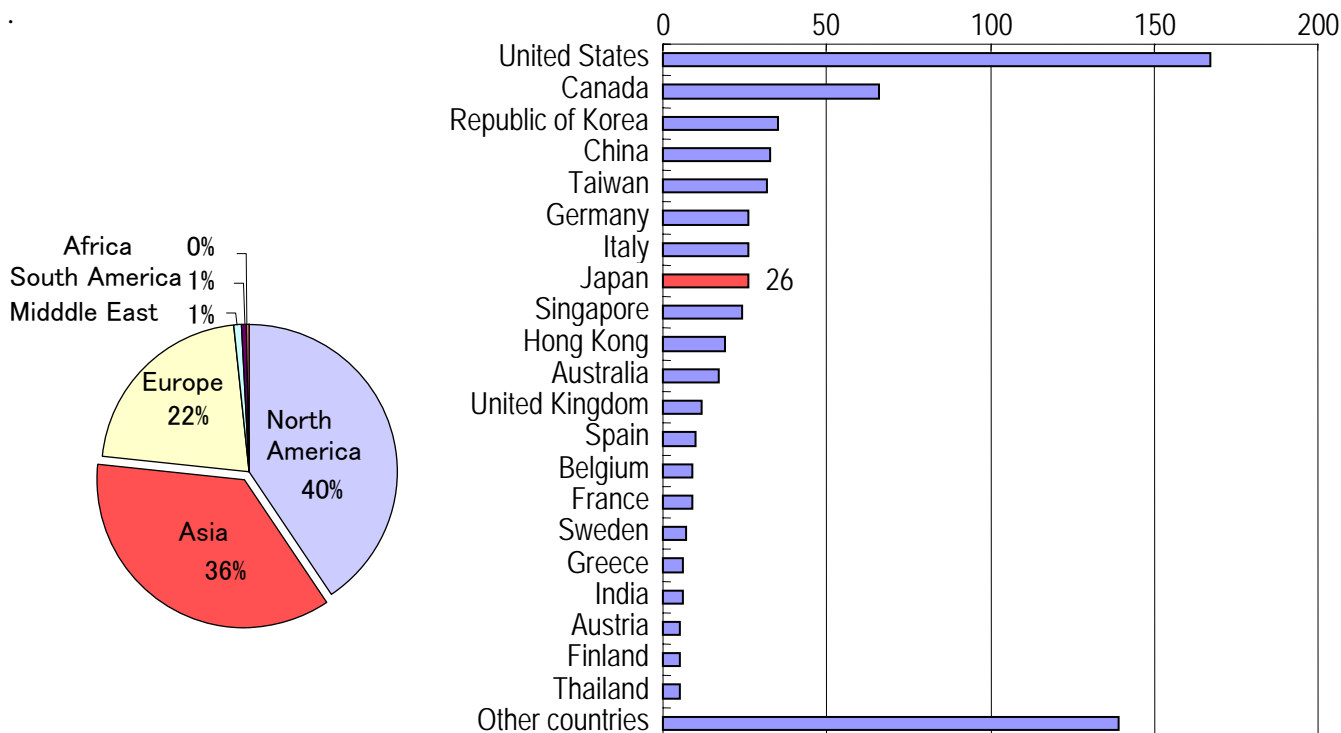


Fig. 5 The number of papers by country



IEICE Overseas Membership Page

The Institute of Electronics, Information and Communication Engineers

Membership for Overseas Candidates: IEICE has mainly two grades of membership: **Member** and **Student Member**. Member is mainly for people who are not students. Student Member is mainly for students. **Please be noticed that Overseas Membership applies only to candidates who reside outside of Japan and who have non-Japanese citizenship.** OMDP (Overseas Membership development program) is provided for candidates from countries/areas in Asia(except Republic of Korea and Taiwan), Africa, Central America, and South America. This program is designed so that IEICE can contribute to and support the progress of science and technology throughout the world. Scientists and engineers in these countries/areas are encouraged to apply to the program.

IEICE Societies and Publications:

Societies	Transactions	Topical areas covered
A. Engineering Sciences	EA:Trans. on Electronics	Engineering Acoustics, Noise and Vibration, Speech and Hearing, Ultrasonics, Digital Signal Processing, Analog Signal Processing, Systems and Control, Nonlinear Problems, Circuit Theory, VLSI Design Technology and CAD, Numerical Analysis and Optimization, Algorithms and Data Structures, Graphs and Networks, Reliability, Maintainability and Safety Analysis, Cryptography and Information Security, Information Theory, Coding Theory, Communication Theory and Signals, Spread Spectrum Technologies and Applications, Mobile Information Network and Personal Communications, Intelligent Transport System, Image, Vision, Computer Graphics, Language, Thought, Knowledge and Intelligence, Human Communications, Neural Networks and Bioengineering, Multimedia Environment Technology, Communication Environment and Ethics, Concurrent Systems, Measurement Technology, General Fundamentals and
B. Communications	EB:Trans. on Commun.	Fundamental Theories, Communication Devices / Circuits, Transmission Systems and Transmission Equipment, Optical Fiber, Fiber-Optic Transmission, Wireless Communication Technology, Terrestrial Radio Communications, Satellite and Space Communications, Optical Wireless Communications, Switching, Wireless Communication Switching, Network, Network Management / Operation, Software Platform, Internet, Antenna and Propagation, Electromagnetic Compatibility (EMC), Sensing, Navigation, Guidance and Control Systems, Energy in Electronics Communications, Terminals, Multimedia Systems, Broadcast Systems, Integrated Systems, Media Compound
C. Electronics	EC:Trans. on electron.	Electromagnetic Theory, Lasers, Quantum Electronics, Optoelectronics, Microwaves, Millimeter-Waves, Ultrasonic Electronics, Electronic Circuits, Electronic Materials, Organic Molecular Electronics, Electronic Components, Electromechanical Devices and Components, Semiconductor Materials and Devices, Integrated Electronics, Electron Tubes, Vacuum and Beam Technology, Electronic Displays, Superconducting Electronics, Storage Technology, Electronic Instrumentation and Control
D. Information and Systems	ED:Trans. on Inf. & Syst.	Computation and Computational Models, Automata and Formal Language Theory, Algorithm Theory, Complexity Theory, Computer Components, VLSI Systems, Computer Systems, Fundamentals of Software and Theory of Programs, System Programs, Software Engineering, Database, Contents Technology and Web Information Systems, Data Mining, Networks, Dependable Computing, Application Information Security, Distributed Cooperation and Agents, Artificial Intelligence and Cognitive Science, Human-computer Interaction, Office Information Systems, e-Business Modeling, Educational Technology, Rehabilitation Engineering and Assistive Technology, Pattern Recognition, Speech and Hearing, Image Processing and Video Processing, Image Recognition, Computer Vision, Computer Graphics, Multimedia Pattern Processing, Natural Language Processing, Biocybernetics, Neurocomputing, Biological Engineering, Music Information Processing, Kansei Information Processing, Affective Information Processing

Membership Charges (UNIT: YEN):

Membership grades	Entrance Charge	Annual Membership Fee	Additional Society Registration	Additional Transaction Subscription	Journal Subscription
Service coverage for overseas members	—	Included one Society and its Transaction	Registration of one more Society and its Transaction	Subscription to an additional Transaction of registered Society	(Written in Japanese only)
Member (overseas)	1,400	7,000	3,500(/1 Trans.)	3,000(/1 Trans.)	6,000
Member (overseas) with OMDP*	1,000	5,000	3,000(/1 Trans.)	2,500(/1 Trans.)	5,000
Member (in Japan)	2,600	13,000	3,500(/1 Trans.)	3,000(/1 Trans.)	-
Student Member (overseas)	0	2,000	2,000(/1 Trans.)	1,500(/1 Trans.)	6,000
Student Member (overseas) with OMDP*	0	1,000	1,500(/1 Trans.)	1,000(/1 Trans.)	5,000
Student Member (in Japan)	0	4,500	2,000(/1 Trans.)	1,500(/1 Trans.)	-

***OMDP** is to support members from countries/areas of Asia(except Republic of Korea and Taiwan), Africa, Central America, & South America.

***Affiliate Member** is a person who is not a specialist of fields which IEICE subject to and who have an interest to our fields. And when you want to join IEICE as an Affiliate Member, you need recommendation of the society which you want to belong to.

Notice

1. Annual Membership Fee includes one Society and one Transaction which you choose.

Example : If you want to subscribe to Transaction of EA, please check **Society Registration** as “A”, and your membership fee amounts to 7,000 yen / 5,000 yen.

2. If you want to register other Societies and Transaction, please check “Additional Society registration”.

Example : If you want to subscribe to Transaction of EA, and EB, please check **Society Registration** as “A”, **Additional Society registration (optional)** as “B”, and **Additional Transaction subscription (optional)** as “EB”. Your membership fee amounts to 7,000+3,500 yen / 5,000+3,000 yen.

3. If you want to subscribe to more than one Transaction in the same society which you register, please check “Additional Transaction subscription”.

Example : If you want to subscribe to Transaction of EA and A, please check **Society Registration** as “A”, and **Additional Transaction subscription (optional)** as “A”. Your membership fee amounts to 7,000+3,000 yen / 5,000+2,500 yen.

4. If you want to change membership from “Regular Member” to “Overseas Member”, you don’t need to pay an Entrance Charge.

Optional Rapid Mailing Service: Surface mail charge is included in the Annual Membership Fee. Optional rapid mailing service is available by air mail or surface air lifted (SAL) mail. The additional charge per year periodical depends on the mailing address, as shown in the following table.

Zones	Areas	Air mail	SAL mail
1 st	Asia; Guam; Midway islands	5,600 yen	3,200 yen
2 nd	Oceania; Near & Middle East; North & Central America; Europe	7,800 yen	4,400 yen
3 rd	Africa; South America	11,000 yen	5,600 yen

Further information:

Please contact **IEICE Membership Activities Section;**
Kikai-Shinko-Kaikan Bldg., 5-8, Shibakoen 3 chome,
Minato-ku, Tokyo 105-0011 JAPAN
 Fax +81 3 3433 6659
 E-mail: member@ieice.org
 URL: <http://www.ieice.org/>

IEICE Overseas Membership Application Form

The Institute of Electronics, Information and Communication Engineers

URL <http://www.ieice.org/eng/member/OM-appli.html> E-mail member@ieice.org

◆ Please type or print in English. The deadline for submitting application form is the 1st day of every month.

Personal Information

Full name: _____ Nationality : _____ Male Female

First name Middle name Last name

Prof. Dr. Mr. Mrs. Ms. Miss Place of birth: _____ Date of birth: _____
Day Month Year

Mailing Address

Home Office

Name of Company/School/College _____ Department/Section _____

Street _____ City _____ State/Province _____

Postal code _____ Country _____

TEL _____ FAX _____ E-mail _____

Academic Background

The highest academic degree: Ph.D. Masters Bachelors Others: _____

University/college/school of the highest academic degree _____ Month & year of graduation _____

(For Student Member) Academic degree which will be conferred on you. _____ Month & year when the degree will be conferred on you. _____

Application Information

I want to enter the IEICE from April October year: _____

Membership: I want to apply for the following membership (check one item!)

Member (Overseas) Student Member (Overseas)

◆ If you want to apply for OMDP, please check; OMDP (Overseas Membership Development Program)

Society registration (It includes one Transaction in English):

A: Engineering Sciences B: Communications C: Electronics D: Information & Systems

Additional Society registration (optional): A: Engineering Sciences B: Communications C: Electronics D: Information & Systems

Additional Transaction subscription (optional): EA: Fundamentals EB: Communications EC: Electronics ED: Information & Systems

A (Japanese) B (Japanese) C (Japanese) DI (Japanese) DII (Japanese)

Journal subscription (optional) (Japanese)

Remittance

Remittance is available only in Japanese yen by a credit card. (UNIT:YEN)

Entrance charge..... Journal subscription (optional).....

Annual charge..... Mailing option: Air mail.....

Additional Transaction (optional)..... SAL mail.....

Total remittance.....

Credit Card: MasterCard VISA AmericanExpress Card number: _____ Expiry date(Y/M) _____

Credit Card Holder: _____ Signature: _____

Endorsement

Endorsements by two IEICE Regular Members for Regular/Affiliate Member application and by one Regular Member for Student Member application is required. If it is difficult to find endorsers, please contact the IEICE Membership Activities Section by sending this sheet, and we will help you.

I recommend this applicant for IEICE membership.

Endorser's name Membership number Endorser's signature Date

Endorser's name Membership number Endorser's signature Date

Send this form to:

The Membership Activities Section, IEICE Headquarters Office, Kikai-Shinko-Kaikan Bldg., 5-8, Shibakoen 3 chome, Minato-ku, Tokyo 105-0011 JAPAN

From Editor's Room

● Society Conference in Hokkaido University

The IEICE Society Conference is coming. The next conference is held in Hokkaido University from September 20(Tue.) to 23(Fri.).

I have been to Hokkaido several times but mostly in summer season. So my memories of Hokkaido are vast expanse of purple lavender fields in Furano, avenue lines with poplar trees in Hokkaido University, Ramen in Ramen Yokocho, crab, sea urchin or Uni, salmon caviar or Ikura etc. Hokkaido reminds me of magnificent sight and fresh sea foods.

I did not know the autumn in Hokkaido and studied a little. According to the web site, autumn leaves starts at the end of September in Hokkaido. September and October are the best season for salmon. Salmon returns to the home river for the egg laying in autumn. About 90 % of the salmon harvest are reached in September and October. Natural (not cultured) salmon has low fat and a lot of vitamine, DHA and EPA.

Please enjoy fresh salmon returning from wide ocean in autumn Hokkaido..

IEICE Global News Letter Editorial Staff

2. Editorial Staffs of this issue

No special order is observed.



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