IEICE Communications Society **GLOBAL NEWSLETTER** *Vol. 17*
Contents

Enhancing services suitable for the members of the Communications Society

Yuji Inoue
President, Communication Society

1. Starting self-support accounting

It is an honor to serve as the President of the Communications Society for the coming year.

The Communications Society has introduced self-supporting operation and accounting this year, ahead of any of the other IEICE Societies. Recognizing that the Transactions and Technical Committees are valuable assets to the Society, we have adopted self-supporting accounting to increase the incentive for members to support the activities of the Editorial Committee of Transactions on Communications and the Technical Committees, and implement, in an expeditious manner, measures that have been adopted on the Society's own initiative, thereby further enhancing services provided to the Society members.

2. Initiating new activities

In this fiscal year, as the full-scale adoption of self-supporting accounting starts, we will make new budgetary provision to further revitalize the activities of the Technical Committees and the Editorial Committee, in order to enhance, boldly yet prudently, the quality of services to members, while at the same time strengthening the Society's financial base.

This year will also see the start of online publication of the Transactions. We expect that this will make the publication more convenient and economical to produce than before.

Other new services that will become available to the members this year include the publication of a new Society Magazine, which will feature articles on current hot topics, the compilation of a database of member information, and a member community service to facilitate exchanges between members, in particular members from enterprises and members who have retired from active duties.

The Communications Society has a large member base from industry, including engineers in enterprises who do not often participate in Conferences or meetings organized by the Technical Committees, or submit papers, but are involved daily in various enterprise activities in the telecommunications field. This broad membership base provides a basis for extensive collaboration between industry and academia. The planned new services are intended to enhance the professionalism of Society members, by strengthening the way in which Society activities assist in the accumulation and passing on of technology, skills, know-how, and the personal or organizational abilities of individual members, a service for which there is an acute need if the Society is to serve as not only an academic but a professional community.

3. Strengthening existing activities

Since last year, the Communications Society has been managed under the following organizational framework: "the Board of Directors", who deliberate and make decisions on important matters related to the entire Society, "The Editorial Board", which is in charge of publishing the Transactions, and "the Council of Technical Committee Representatives", which is responsible for the operation of the Technical Committees and Conferences. This framework is intended to allow the Board of Directors to focus on strategic issues of the Society, and delegate the responsibility and authority for Transactions and the operation of Technical Committees to the respective teams so that the Society can provide high-quality services for its members in a flexible and timely manner.

This arrangement will enable us to respond quickly to changes in the environment surrounding telecommunications. Specifically, it will enable us to provide the new services mentioned above, and to reinforce the Society's international activities, including the establishment of close relationships with IEEE ComSoc, VDE/ITG of Germany, and engineering societies in other Asian countries, and the co-sponsorship of international conferences with these organizations. Furthermore, it will provide us with the flexibility to address new technical fields by forming new Technical Committees, and to increase the opportunities for interdisciplinary studies through collaboration with a variety of external communities.

4. Providing services suitable for the members of the Communications Society

With a view to providing services suitable for its members, the Communications Society has studied specific issues related to self-supporting accounting, and, over the last couple of years, has initiated a number of reforms based on the results of that study. I was personally involved in the task force studying these issues and was deeply impressed by the dedicated efforts and enthusiasm shown by the members of the task force.

Although the new services may still be far from perfect, I would greatly appreciate your using them actively and providing feedback, so that together we can cause them develop and grow to provide a solid base for services for members.

Annual Report of Technical Committee on Network Systems

Kou Miyake*, NTT DATA INTELLILINK Corp.,

Iwao Sasase **, Keio University,

Miki Yamamoto***, Kansai University,

Tadashi Ito****, NTT,

Hideki Tode****, Osaka University,

Shoji Kasahara*****, Kyoto University

*Chair, **Former 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. It describes activities at the monthly technical meetings, recent research topics of the committee, and the research awards for 2005.

2. Technical meetings

As a rule, this Technical Committee holds ten two-day technical meetings each fiscal year. The schedule from April 2006 to March 2007, 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.
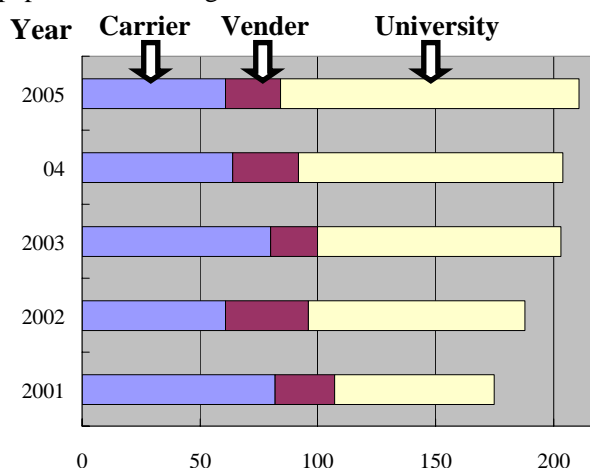

Fig. 1: Trend in number of papers presented at technical meetings.

Tabel 1: Technical meeting schdule

Date	Place	Themes	Co-organizer
April 20-21	Hotel Nikko Kochi (Kochi)	Traffic	ITC Japan Committee
May 18-19	Kyoto University (Kyoto)	Next generation networks, SIP, presence	
June 22-23	Iwate Prefectural University (Iwate)	CDN, multicasting	
July 19-21	Hokkaido University (Hokkaido)	Mobile networks	RCS
Sep. 14-15	Tohoku University (Miyagi)	VPN, Security, NAT, DDoS, P2P	CS, IN
Oct. 25-26	Kiryu City Arts Perfromaing Center (Gunma)	Networking technology for the ubiquitous era	
Nov. 16-17	Tottori University of Environmental Studies (Tottori)	Performance, quality of service	TM, CQ
Dec. 14-15	Nagoya University (Aichi)	Photonic networks, photonic routing	PN
Jan. 25-26	Hotel Sky Tower (Miyazaki)	Photonic IP networks, photonic nodes	OCS
Mar. 8-9	Okinawa Convention Center (Okinawa)	NS/IN Workshop	IN

3. Research Awards 2005

The Technical Committee selected recipients of the Network System Research Award from among researchers that gave papers at monthly technical meetings from January to December 2005. 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 2006, as shown in Fig. 2. The abstracts of papers that won awards in 2005 are shown below.

Takashi Matsuda, Fumitaka Nakamura, Yasushi Wakahara and Yoshiaki Tanaka, "Proposal of Traffic Features for P2P Discrimination"

In recent years, various new highly convenient applications of the Internet have enabled the rapid development and progress of the Internet itself. One such application is file sharing based on P2P (peer-to-peer) technology which is characterized by no utilization of any servers with centralized functions and which generally forms a unique logical network of users on equal terms. This file sharing has led to new services entering practical use and is still advancing rapidly. In accordance with the expansion of the file sharing network, the amount of related P2P traffic has been increasing continuously. On the other hand, copyright violation by the illegal circulation of copyrighted files through P2P applications has become a serious social problem. As a result, a technique for clearly distinguishing P2P traffic is strongly required, so that the traffic of illegal file sharing in the network can be controlled. Such a distinguishing technique is also required to analyze the traffic growth trend for efficient planning of the future network facilities. In this paper, we first propose some new features including New Connection Rate of pure P2P traffic, which are derived from the packet header information of layer 4 and below in order to identify the P2P users by observing network traffic. Then, we clarify a mechanism for automating the identification. SVM (support-vector-machine) is applied to the discrimination based on these features. Finally, the accuracy of the identification is demonstrated through the results of some experiments. These studies lead to the conclusion that the proposed features and identification method based on these features will play an important role in the field of P2P identification.

Tatsuya Mori, Ryoichi Kawahara and Noriaki Kamiyama, "Classifying Flow Characteristics using Naive Bayesian Classifier"

The statistics of flows gives us a meaningful insight for making practical network management. That is, if we could rapidly determine the anomaly flows that might significantly affect the network performance, then we could immediately take appropriate action against such flows to protect our networks. It also allows us to make nice controlling schemes or effective troubleshooting. To meet such an objective, we developed a method that probabilistically classifies flows according to their attributes. The key idea is to use the Naive Bayesian Classifier (NBC). The method learns the attributes of flows from measured traffic data. Then, it estimates the class of each flow using its attributes and the learned statistics such as likelihood probability and *a priori* probability. We evaluated the method using measured traffic data. Here, we consider the case where there are two classes, i.e., heavy-hitter flows and others. As the attributes of each flow, we use their source/destination IP addresses, pair of source/destination IP addresses, and source/destination port numbers. These values are hashed into a small space (say, 10 bytes) to save memory resources. We found that the method (1) achieves the classification with a low false probability and (2) is more robust than a naive approach, i.e., the proposed method can classify flows with unknown attributes. The method has good scalability because NBC can handle a massive amount of input data for both learning and classification with a one-pass scan.

Naoki Imai, Manabu Isomura and Hiroki Horiuchi, "A Unified Resource Switching using SIP/SIMPLE Method for Real-time Communications"

With broadband Internet connection being offered at low cost, person-to-person communications such as video phone, voice phone, e-mail, and messaging have begun to play an important role in our daily life. In addition to a static network environment, interactive communication in a mobile computing environment will soon be achieved by lightweight and high-performance devices on highly developed wireless infrastructures. However, the heterogeneity and ubiquity of terminals in a future FMC (fixed mobile convergence) networking environment will lead to a complex user experience. To avoid the problem, it is necessary that users can easily select communication resources according to their conditions. Moreover, they should be able to dynamically switch them to better-suited ones when the situation is changed.

Some conventional studies and standardization efforts provide mechanisms for switching communication terminals in the middle of a session. However, they support neither network switching nor simultaneous switching (i.e., both peers switch terminals at the same time). In this paper, we present a unified mechanism that achieves four kinds of resource switching.

(1) Network Switching: on a single terminal, a communication medium is switched to another one, or a network address of an interface is changed.

(2) Device Switching: a device on which applications are running is switched to another device without any functional components of the applications being changed.

(3) Application Switching: an entire application or any functions composing the application on a single device are changed.

(4) Composite Switching: each functional component of an application is handled separately by different devices (e.g., video phone data can be split into a video

stream to a laptop and a voice stream to a cellular phone).

We also show the implementation of the prototype and experimental results for a performance evaluation.

Takuji Tachibana and Shoji Kasahara, "Burst Cluster Transmission to Improve Fairness in terms of the Number of Hops in Optical Burst Switching Networks"

In optical burst switching (OBS) networks, the burst loss probability increases as the burst traverses intermediate OBS nodes. It is well known that this causes unfairness in the burst loss probability among bursts with different numbers of hops. In order to improve the fairness of the burst loss probability, several methods have been proposed in the literature, but they make the overall burst loss probability large, degrading the performance of the OBS network.

In this paper, in order not only to improve the fairness of the burst loss probability in terms of the number of hops, but also to decrease the overall burst loss probability, we propose hop-based burst cluster transmission. In this method, bursts with different numbers of hops are assembled simultaneously according to the burst assembly algorithm. With the assembled bursts, a hop-based burst cluster is generated so that the bursts in the cluster are arranged in order from the smallest number of hops to the largest one.

Then the hop-based burst cluster is transmitted along with multiple control packets according to the burst transmission scheduling. Here, a burst with a small number of hops in the cluster is transmitted before a burst with a large number of hops in the same cluster. When the proposed method is used, large-hop bursts are more likely to reserve wavelengths than conventional burst-transmission methods.

We evaluate the performance of the proposed method for a uni-directional ring network by simulation. Numerical examples show that the proposed method succeeds in providing fairness in terms of the number of hops, decreasing the overall burst loss probability.

Moreover, it is shown that the proposed method is effective for the OBS network where the number of nodes is large and/or the processing time of a control packet is large.

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 Program Committee, which has 10 members, is chaired by Professor Iwao Sasase of Keio University, who is also the chair of the Technical Committee. This feature edition will be published in August 2006.

In addition, the Technical Committee will organize a special event: an Open Symposium on "Recent Development of Next Generation Network (NGN) Technologies" at the IEICE Society Conference in September 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.

Workshop on Applications of Body Area Radiowaves

Kazuyuki Saito (Chiba University)
Teruo Onishi (NTT DoCoMo, Inc.)
Secretary of Technical Committee on
Applications of Body Area Radiowaves, IEICE

Kazuyuki Saito   Teruo Onishi

1. Technical Committee on Applications of Body Area Radiowaves (ABR)

From 1998 to 2006, the former Committee named "Technical Committee on Human Phantoms for Electromagnetics" has studied relations between electromagnetic wave and human body. In May 2006, the "Technical Committee on Applications of Body Area Radiowaves (ABR)" was established to improve the activities aimed at catching up the evolution of the latest technologies.

2. Workshop on Applications of Body Area Radiowaves

The "Workshop on Applications of Body Area Radiowaves" was held at Chuo University, Korakuen Campus on August 1, 2006 sponsored by the Technical Committee on ABR and the National Institute of Information and Communications Technology, Japan. In this workshop, seven researchers were invited from USA, EU, Korea, and Japan, and lectured the latest technologies on the body area radiowave. They are "biological effects of radiowave including medical applications", "UWB communication close to human body", "RF dosimetry", etc. The technical program of the workshop can be referred from [1]. In addition, the total number of audiences was approximately 60. Figures 1 – 3 are pictures of the workshop.

3. Acknowledgement

This workshop was held thanks to the cooperation of "Chuo University 21st Century COE program", "IEEE Antennas and Propagation Society Japan Chapter", "IEEE Electromagnetic Compatibility Society Japan Chapter", "Technical Committee on Antennas and Propagation, IEICE", "Investigation Committee on Electric Field and Current Induced in a Human Body Exposed to Non-uniform/Transient Electromagnetic Fields, EMC Technical Committee, IEEJ", "Technical Committee on Medical Information and Communication Technology, IEICE", "Technical Committee on Electromagnetic Compatibility, IEICE", "International Union of Radio Science Commission K Japanese Committee".

4. Reference

[1]Online[http://www.ieice.or.jp/cs/abr/jpn/abr_ws_tt_ 20060801.htm]

Fig. 1 Audience.

Fig. 2 Lecture.

Fig. 3 All lecturers with the executives of the technical committee on ABR.

Workshop for SANE2006 Report

Yoshiaki Suzuki (NICT)
Chair of the Space, Aeronautical and Navigational Electronics Technical Group

The 2nd international Workshop for Space, Aeronautical and Navigational Electronics (WSANE 2006) was held in Xidian University, Xi'an, China during April 9-12, 2006. This workshop covers the satellites, communication and navigation application system and remote sensing and radar technology.

In the opening ceremony of the workshop, the welcome speech address from the President of Xidian University (Photo-1). There were 64 presentations and more than 300 attendees through the workshop. We had 7 invited speakers presenting the result or outline of space airship Shenzhou-6(Photo-2), Chinese meteorological satellites FY-3, science mission using X-ray CCD observation system MAXI, Lunar satellite CHANG'E-1, Chinese navigation satellite and so on.

However this workshop covers various areas concerning space application technology, we made beneficial discussions and technical exchange through the workshop or banquet (Photo-3). On this occasion, we would like to appreciate all the local staffs successfully steering this workshop.

Schedule

April. 9 (Sun) Evening: Registration

April 10 (Mon.) Registration and Presentations

April 11 (Tue.) Presentations

April 12 (Wed.) AM: Presentations

Invited talks

1. Hong Yang (CAST), "Outline of Shenzhou-6 Spacecraft"

2. Huixian Sun, Xiaomin Chen (CSSAR, CAS), Yunsong Li (Xidian Univ.), "On-board Payload Data Management System for CHANG'E-1"

3. Yuheng Li (Xian Satellite Control Center), Kechu Yi (Xidian Univ), "Progress of TT&C on Chinese Meteorological Satellites"

4. Hiroshi Tsunemi, Kiyoshi Hayasida, Emi Miyata, Ken'ichi Torii, Hideki Ozawa, Naohisa Anabuki, Masaaki Namiki (Osaka Univ.), Kazuhisa Miyaguchi (HPK), Suzaku, Xis (JAXA etc.), "X-ray observation of celestial objects using the X-ray CCD"

5. Zhongming Zhao, Wenjie Wang   IRSA,CAS) ,"Review of Remote Sensing Applications in China"

6. Chunting Wang, Shenfu Pan, Jingqiao Chen, "Outline of Satellite Communications in china"

7. Li Bin (NERC), Li Wenduo(CETC54), Xu Shilong (NERC) ,"Development and Applications of China's Satellite Navigation Technology"

Photo-1: Welcome speech address from the President of Xidian University.

Photo-2: Prof. Hong Yang (CAST) giving the first invited presentation: outline of Shenzhou-6 spacecraft.

Photo-3: Reception at Chinese restaurant in the hotel

Welcome to the IEICE Overseas Membership Page   URL:*http://www.ieice.org/*

Membership for Overseas Candidates: Overseas Members may opt to join **one IEICE Society of their choice** and may request to **receive the IEICE Transactions of online version** of that Society. Furthermore, Overseas Members may request to receive the IEICE Journals and Transactions (published in paper) at an additional cost. Similar services are available to **Overseas Student Members.** Voting privileges in the IEICE election do not apply to Overseas Members. For detailed information on eligibility requirements for each type of Membership, please refer to the IEICE web site (http://www. ieice.org/eng/member/OM-appli.html). Note that the Overseas Membership applies only to candidates who reside outside of Japan and who have citizenship in countries other than Japan.

IEICE Societies and Publications

Society	Transactions	Editorial Subject Indexes
A (Fundamentals of Electronics, Communications and Computer Sciences)	A (Japanese Edition) EA (English)	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 Boundaries
B (Communications)	B (Japanese Edition) EB (English)	Fundamental Theories for Communications, Devices/Circuits for Communications, Transmission Systems and Transmission Equipment for Communications, Optical Fiber for Communications, Fiber-Optic Transmission for Communications, Switching for Communications, Switching for Mobile Communications, Network, Network Management/Operation, Internet, Wireless Communication Technologies, Terrestrial Radio Communications, Satellite Communications, Optical Wireless Communications, Antennas and Propagation, Electromagnetic Compatibility (EMC), Sensing, Navigation, Guidance and Control Systems, Energy in Electronics Communications, Terminals for Communications, Multimedia Systems for Communications, Broadcast Systems, Integrated Systems for Communications, Space Utilization Systems for Communications
C (Electronics)	C (Japanese Edition) EC (English)	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)	D (Japanese Edition) ED (English)	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

Journal of IEICE (written in Japanese only)

Membership Charges (UNIT : Japanese YEN)

Service coverage for overseas members	Entrance charge	Online Version		Paper version (optional)		
		Registration of 1society and its transaction (Online version)	Registration of additional society (Includes its transactions of Online version)	Journal (Written in Japanese, in paper version)	Transactions (Written in Japan or in English in paper version)	
					One	Tow or more
Member (overseas)	1,400	7,000	3,500(/1Society.)	6,000	4,000	10,000
Member (overseas) with OMDP*	1,000	5,000	3,000(/1Society.)	5,000		
Student member (overseas)	-	2,000	2,000 (/1Society.)	6,000		
Student member (overseas) with OMDP*	-	1,000	1,500 (/1Society.)	5,000		

NOTE
1. You need to choose one Society, and you can subscribe Transactions online of your registered society.
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 of web version, 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". Your membership fee amounts to 7,000+3,500 yen / 5,000+3,000 yen.
3. If you want to subscribe to one Transaction of paper version,, please check "Additional Transaction subscription (published in paper)".
Example: If you want to subscribe to Transaction of EC in paper version additionally, please check Society Registration as "A", and Additional Transaction subscription (in paper version) as "C" or as "EC". Your membership fee amounts to 7,000+4,000 yen / 5,000+4,500 yen.
4. If you want to change membership from Member (In Japan) to Overseas Member, you don't need to pay an Entrance charge.

Further information; please contact the IEICE Membership Activities Section:
E-mail:member@ieice.org FAX: +81 3 3433 6659

IEICE Overseas Membership Application Form
Please type or print in English.   Please send the form by FAX or by e-mail.
The deadline for submitting application form is the 1st day of every month.

Personal Information   Male
Full name: *Nationality:* _____   Female

First name   Middle name   Last name

Prof.   Dr.   Mr.   Ms.   *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

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 (**Membership fee includes one Society of Transaction of Online version.**):*
          A: Engineering Sciences   B: Communications   C: Electronics   D: Information & Systems

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

Additional Transactions of paper version (optional):
   EA: Fundamentals   EB: Communications   EC: Electronics   ED: Information & Systems
   A (Japanese)   B (Japanese)   C (Japanese)   D (Japanese)

Journal subscription (optional)   (Japanese)

Remittance Remittance is available only in *Japanese yen* by a *credit card*
Entrance charge………………………… _____ Journal subscription (optional)……………….. _____
Annual charge………………………… _____ Mailing option: Air mail……..……………. _____
Additional Society (optional)……...…. _____   SAL mail…………………. _____
Additional Transactions (optional)…… _____ **Total remittance…………………………** _____

Credit Card: MasterCard   VISA   American Express Card number: _____

Expiry date(YY/MM) _____ / _____   Credit Card Holder _____   Signature: _____

Endorsement *Endorsements by two IEICE Members for Member application and by one Member for Student Member application is required. If you have any questions or concerns, please ask member@ieice.org.*
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

From Editor's Desk

Society Conference in Kanazawa

By the time this issue comes out, we will have held our Society's Annual Conference (Sep. 19-22, 2006) in Kanazawa University, Kanazawa.

Kanazawa is one of the most beautiful historic cities with a wealth of tradition and culture.

The Communication Society's Awards Ceremony is also held there to celebrate awardees who have received the Society's major awards, such as the Communications Society Excellent Paper Award (newly established), the Distinguished Services Award, and promotion to Fellow of the IEICE, the highest level of membership.

This year, we will promote 17 members to Fellows of the Communications Society.

I would like to take this opportunity to congratulate all the awardees, and I hope that they will continue to participate in and support our Society's activities.

IEICE Global News Letter Editorial Staff

Editorial Staffs of this issue
No special order is observed

Jun OSAKI
Oki Electric Industry Co., Ltd.
Network Systems Company
Director, Membership services, IEICE Communications Society

Tomohiko TANIGUCHI
Fujitsu Laboratories Limited
Network Systems Laboratories
Director, Membership services, IEICE Communications Society

Shinji UEBAYASHI
NTT DoCoMo
Wireless Laboratories
Director, Membership services, IEICE Communications Society

Satoshi YOSHIZAWA
Hitachi
Central Research Laboratory
Director, Membership services, IEICE Communications Society

Call for Papers

Special Section on 2006 International Symposium on Antennas and Propagation

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Communications announces a forthcoming Special Section on "*2006 International Symposium on Antennas and Propagation*" to be published in **September, 2007**.

The 2006 International Symposium on Antennas and Propagation (ISAP2006) will be held in Singapore on November 1-4, 2006, which aims at providing an international forum for exchanging information on the progress of research and development in antennas, propagation, electromagnetic wave theory, and related fields. This symposium is organized and sponsored by *the IEICE Singapore Section*, and cosponsored by *the Communications Society of the IEICE*. By taking this opportunity the Special Section on ISAP2006 has been planned to publish articles which are **limited** to the papers **presented** at oral or poster session in ISAP2006. Your participation to the ISAP2006 and the contribution to this special section would be greatly appreciated.

1. Scope:

The major topics include, but are not limited to
- Antennas and Related Topics
- Propagation and Related Topics
- Electromagnetic Wave Theory
- Systems and Other Related Topics

Deadline information of ISAP2006 is provided at the web site: **http://www.isap06.org/**

2. Submission Instructions:

Papers have to be submitted by **December 14, 2006**. Manuscripts should be prepared according to the guideline given in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html, or you can refer to its brief summary attached to IEICE Transactions. The length of the paper should not exceed 8 printed pages in principle. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for other sections (60 days) because of the tight review schedule. In this special section, only electronic submission is accepted. Prospective authors are requested to follow the submission process described below carefully.

1. Authors have to present their paper at oral or poster session in ISAP2006 for submitting their paper to this special section. At least one of the authors must be an IEICE member when the manuscript is submitted for review. Deadline for online paper submission of the ISAP2006 is **July 31, 2006.**
2. Submit papers using the IEICE web site https://review.ieice.org/regist_e.aspx. The PDF file format is the only acceptable file format. Any other file formats, e-mail submission, or postal mail are NOT acceptable. Authors should choose the **[Special-EB]** *2006 International Symposium on Antennas and Propagation* as a "Type of Issue (Section)/Transactions" on the online screen. Do not choose [Regular-EB] Communications or other special sections.
3. The "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" have to be sent by postal mail to the following address (guest editor of this special section). Please write "Special Section on ISAP2006" on the envelope.

   Ryo Yamaguchi, Dr.
   Wireless Laboratories
   NTT DoCoMo, Inc.
   3-5 Hikarinooka, Yokosuka, Kanagawa 239-8536, Japan
   e-mail: yama@mlab.yrp.nttdocomo.co.jp

3. Editorial Committee of the Special Section on ISAP2006:

Guest Editor-in-Chief Le-Wei Li (National Univ. of Singapore)
Deputy Editor-in-Chief Koichi Ito (Chiba Univ.)
Guest Editors   Jiro Hirokawa (Tokyo Tech.), Hisato Iwai (Doshisha Univ.),
                 Ryo Yamaguchi (NTT DoCoMo)
Guest Associate Editors Makoto Ando (Tokyo Tech.), Shuichi Sekine (Toshiba),
                 Jacob Coetzee (National Univ. of Singapore), Zhi Ning Chen (Institute for Infocomm
                 Research), Zhong-Xiang Shen (Nanyang Technological Univ.), Qiang Chen (Tohoku
                 Univ.), Hiroyoshi Yamada (Niigata Univ.)

Please note that if accepted for publication, all authors, including authors of invited papers, are requested to pay for the page charges to cover the partial cost of publication. Authors will receive 50 copies of the reprints.

Important Notice

IEICE Transactions to Move from Journal to Online Format
<Access IEICE Transactions Online of Affiliated Societies to be Provided
at the Same Annual Charge>

The Institute of Electronics, Information and Communication Engineers (IEICE) is actively involved in the publishing of submitted manuscripts. However, one effect of these activities has been the steady increase in the journal's publishing costs, a situation that is putting a strain on our financial conditions. To avoid this vicious circle, in which the more actively we publish the greater our financial burden grows, our General Assembly of this May approved a change, effective April 2006, away from distribution of IEICE Transactions in the conventional journal format to furnishing the rights to access online versions. Also endorsed were revisions in the related regulations.

Accompanying this change, the online editions, which had been available free of charge, shift to a fee-based system under which only members have access the main texts of contributed manuscripts (access to the titles, author names and abstracts continues to be available to non-members as well). Under the present system, one version of the journal format IEICE Transactions has been included in the annual charge. From April 2006, access to the online editions of our affiliated Societies continue to be provided at the same annual charge (an exception to this is ELEX, which continue to be disclosed without charge to help raise its recognition).

Under the existing system, passwords are used to gain access to the main text of the manuscripts. With the new system, the passwords used to date are no longer accepted, with new passwords to be issued. We request the understanding and support of our members in this decision, with the new passwords sent to you through the regular mail service in March 2006.

The journal format, meanwhile, is sold at an optional price based on consideration of the costs involved. Preferential treatment is given to members wishing to receive journal versions in addition to the online edition, with the journal type to be sold as described below (the following information is an example of an Overseas Member; details on prices for other members are shown on our website).

For affiliated Societies, the online edition is included in the annual charge. The journal version is available at 4,000 yen for one publication, and 10,000 yen for a second publication. (For the same publication, this offer is limited to one copy, with the price from the second copy on to be the same as the regular market price.)

For additional Societies, access to that Society's online edition continues to be available for 3,500 yen (500 yen for the Society registration fee and 3,000 yen for the online access fee). The journal version is available at 4,000 yen for one publication, and 10,000 yen for a second publication. (In the same way, for the same journal this offer is limited to one copy, with the price from the second copy on to be the same as the regular market price.)