

# Global Communications Newsletter

January 1997

## What's Wrong with Eastern Europe?

By Andrzej Jajszczyk, Editor

At Globecom '96 in London I received the table shown below compiled by Horst Bessai, Chairman of EAMEC (Europe, Africa & Middle East Committee). This table contains the numbers of papers presented during the last two years at two major conferences organized by the IEEE Communications Society, IEEE International Conference on Communications (ICC) and IEEE Global Telecommunications Conference (GLOBECOM). Both conferences have gained strong reputations as fora for presenting leading-edge papers covering a broad range of topics related to telecommunications. They also make it possible to meet top researchers from industry and academia. This reputation is due to a long tradition of the conferences and also to careful reviewing process as well as a fair acceptance rate (e.g., at GLOBECOM '96 the acceptance rate was about 40 percent).

What strikes me while looking at this table is the poor performance of Eastern Europe in terms of the number of presented papers. This region represents, in general, a large intellectual potential and includes such countries as: Russia, the Ukraine, Poland, Hungary, Czech Republic, Croatia, Slovenia, Yugoslavia, Slovakia, Bulgaria, Romania, and others (for some of these countries the term "Central Europe" better describes their geographical location). As can be seen, the total number of papers from Eastern Europe per conference rarely exceeds two. I have browsed through earlier reports dating back to ICC '83 and found that this number is pretty stable over years; even the collapse of the Berlin Wall in 1989 had no visible influence. The only exceptions were conferences held in Europe, that is, ICC '84 in Amsterdam, The Netherlands (four papers), and ICC '83 in Geneva, Switzerland (four and a half papers), as well as GLOBECOM '92 held in Orlando, Florida (eight papers), where six papers were presented at the special session "Modernizing Telecommunications Networks — Accent on Eastern Europe". I tried to figure out possible reasons for this small number of presentations, and I would categorize them as follows:

- Prohibitive fees and travel costs
- Low communications research activity in the region
- Poor quality of papers submitted from Eastern Europe
- Profile of papers accepted at ICCs and GLOBECOMs not matching research results obtained in the region
- Low number of IEEE Communications Society members in the region
- Insufficient marketing of ICCs and GLOBECOMs in Eastern Europe

Now, a brief discussion of the above points. The first hypothesis was presented by a representative of

Yugoslavia at the recent meeting of EAMEC in London. I agree that this is a real problem. Fees on the order of US\$400 prerequisite to acceptance of a paper is equivalent to two months' salary of an engineer or a university professor in some countries of the region. Travel budgets of universities and other research institutions are also extremely limited. Although some researchers may apply for Professional Travel Grants (see the November issue of the *Global Communications Newsletter*), this initiative cannot fully solve the problem. On the other hand, I noted that communications researchers from Eastern Europe (especially from Hungary and Poland) attend numerous smaller and more specialized conferences around the world. As suggested by a colleague of mine, this could mean that engineers and scientists from this region prefer conferences and workshops of a more theoretical nature rather than ICCs and GLOBECOMs with their strong links with current and prospective applications. But this could also simply mean that conferences with a higher paper acceptance rate are preferred. I have a feeling that in some Eastern European countries the research results, in terms of published papers, are often evaluated with no quality of journals and conferences taken into account. Unfortunately, limited data concerning the number of submissions does not allow judging the quality of papers submitted from Eastern Europe. The total number of members of Communications Chapters in the region is now about 300, which is not very high but, in fact, could generate more papers for the major Communications Society conferences. Some more aggressive marketing of these events would probably help as well.

Summarizing my brief analysis, I believe that the reason for low attendance of ICCs and GLOBECOMs by researchers from Eastern Europe is a combination of the discussed factors, and this is probably a different combination for each country concerned. I would appreciate your comments on the topic at: [jajszcz@itti.ep.poznan.pl](mailto:jajszcz@itti.ep.poznan.pl).

	ICC '94	GLOBECOM '94	ICC '95	GLOBECOM '95	ICC '96	GLOBECOM '96
EAMEC	100	102	87	114	69	148.5
Western Europe	94	99	86	107	69	141
Eastern Europe	2	2	0	1	0	2.5
Africa & the Middle East	4	1	1	6	0	5
Outside North America	168	187	157	288.5	163.5	271
USA & Canada	172	177	218	163.5	183.5	133
TOTAL	340	364	375	452	347	404

Table 1. Papers presented at ICC and GLOBECOM conferences.

This month we have a report from Prof. Nirman Ansari, the ComSoc Chapter Chair of the North Jersey Section. As announced in the Chapters Corner of the August issue, the ComSoc North Jersey Chapter has been selected to receive the 1996 Chapter of the Year Award for their excellent activities.

The North Jersey Section serves the area which is the host of several technological universities (Rutgers University at Newark, New Jersey Institute of Technology, Stevens Institute of Technology, Fairleigh Dickinson University, University of Medicine and Dentistry of New Jersey) and a large number of high-tech companies (e.g., AT&T, Bell Labs-Whippany and Murray Hill, ITT, GEC Marconi, Allied Signal).

Despite such strong membership base, the North Jersey Communications Chapter was in a latency state in recent years until the election of a new chairman at the beginning of 1995. The Chapter's activities have since been increased significantly. The first task of the Chair was to provide means of faster dissemination of information among members as well as other interested professionals. The North Jersey Section has its regular monthly newsletter, but only activities arranged before the cut-off publication date (usually at least 1.5 month in advance) can be publicized.

The creation of the Chapter's as well as the Section's web page (<http://megahertz.njit.edu/~ieeenj/comm.html>) finally provided means for fast distribution of updated information about the Chapter/Section activities and services to members such as meeting announcements and job openings. Both the web page and a separate e-mail list for members without web access were created under the Chapter chair's supervision and maintenance. The Chapter's web page is linked to the IEEE ComSoc headquarters' web page.

### Chapter Activities

Most of the Chapter's activities are centered around meetings hosted at the ever expanding 45-acre campus of the New Jersey Institute of Technology (NJIT) in the University Heights section of Newark, in the hub of the New York/New Jersey metropolitan area. Most of the meetings are of technical nature including tutorial presentations, and are mostly attended by students, faculty, and engineers from New Jersey industries, 25 percent of whom are NJIT alumni. Occasionally, attendees come from as far as Pennsylvania. The centerpiece of each meeting is a technical presentation or tutorial followed by a question and answer period and discussion. To provide larger attendance and participation of practicing engineers, most of the meetings take place during early evening hours. Free pizza and soda are provided. The atmosphere of the meetings is very friendly with a lot of interaction among participants during which business cards are exchanged. The attendance figures have been in the range of 16 to 65 (the capacity of the hosting conference room), with an average of about 37 per meeting, and are generally experiencing a steady increase.

During 1995 and 1996, more than 25 meetings were organized or co-organized with other Society Chapters and the Center for Communications and Signal Processing Research at NJIT. The presentations, given by speakers from academia and industry, included a wide range of topics covering many "hot" telecommunications issues of great interest to ComSoc members. A three-part mini-series on design issues in wireless systems was given in the spring of 1996, and included talks on channel coding, distributed dynamic resource management, and handoffs. In October 1996, as part of the 1996-1997 IEEE Distinguished Lecture Series that was coordinated among the Toronto, Ottawa and North Jersey Chapters, T. S. Rappaport presented "Wireless Communications: Where It's Been and

Where It's Going." Other presentations cover topics represented by most of the ComSoc Technical Committees, including ATM networks, local loops, compression schemes, coding, optical networks, detection and estimation, and digital signal processing in communications.

The list of presenters includes many well known experts and budding engineers and researchers from industry and academia: M.G. Amin, Y. Bar-Ness, X. Chen, L. Cohen, H. Ge, F. Gutleber, J.M. Holtzman, C.L. I, B. Jelicic, J. Klapper, A. Kolarov, Z. Kostic, J. Leduc, J. Liebeherr, N. Mir, D. Moelker, R.L. Pickholtz, V. Poor, P.R. Prucnal, W.E. Stephens, B.R. Vojcic, B. Yuhass, and Y. Zhang.

Students who are members of the Chapter are also encouraged to make presentations. The North Jersey Section Student Presentation Nights were held in June 1995 and 1996. In addition, during one of the regular meetings, an election was held at which N. Ansari was re-elected as Chapter Chair. To ensure perpetuation of the Chapter's activities, a vice chair was also elected, a position currently held by Z. Siveski. The rest of the meeting was spent discussing plans and gathering feedback from participants for future activities.

### Future Plans

The Chapter will continue to serve ComSoc members and interested professionals in the North Jersey region by expanding cooperation with other Chapters and Sections, creating close links with local student chapters, and mobilizing members' participation and volunteerism. One of the immediate goals is to create an executive committee to plan for the next milestone of the Chapter.

## What Are "Sister" Societies?

To increase the benefits available to our members, the IEEE Communications Society has made cooperative agreements with several Sister Societies around the world. These agreements make it possible for ComSoc members to:

- Subscribe to the publications of these Sister societies at specially created rates\*
- Register for events sponsored by these Sister societies at special rates\*

Currently there are seven Sister societies that will soon be telling you about the publications and conferences that will be available and how you can subscribe or register:

Country	Full Name of Sister Society	Acronym
Brazil	Sociedade Brasileira de Telecomunicacoes	SBT
Beijing, China	China Institute of Communications	CIC
Beijing, China	The Chinese Institute of Electronics	CIE
Taipei, China	Chinese Institute of Electrical Engineers	CIEE
Italy	Associazione Elettrotecnica ed Elettronica Italiana	AEI
Japan	The Institute of Electronics Information and Communication Engineers	IEICE
Korea	Korean Institute of Communication Sciences	KICS
Russia	The Russian Popov Society for Radio Engineering, Electronics, and Communications	POPOV

\* The special rates vary from Sister Society to Sister Society, but will usually fall between the member and non-member rates of these Sister Societies.

See also: <http://www.ieee.org/comsoc/ss>

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# Message from EAMEC Chairman

By Horst Bessai

First of all, let me thank you for your continuous support of EAMEC activities. I am counting on fruitful cooperation with you during my forthcoming three-year term as Chairman. I take over this office from Dr. Federico Tosco (CSELT), who has more than ably led EAMEC in the past. We gratefully acknowledge his strong obligation and his efforts for the benefit of our committee.

Considering the wide geographical area, enormous cultural differences, and many other constraints, it will be difficult — if not even impossible — to guarantee adequate representation of countries, technical groups, and interests of minorities. Please bear with me if you feel that your ideas are sometimes not well reflected.

As I know very well, you are all kept busy by industry projects, teaching obligations, participation in other committees, and so forth. In addition, travel budgets of companies and universities are being cut. There are many good reasons to explain why, in the past, only a small number of EAMEC members were able to join the meetings at ICC and GLOBE-COM conferences. Considering these facts, let me ask a question: Do we really need the personal presence of some 60 technical and national representatives during EAMEC meetings? The answer to this question is up to you; my feeling is that there are better and more efficient ways to disseminate information, make decisions, and implement what our Region 8 ComSoc members really want.

Consequently, I propose a rather pragmatic short-term strategic plan which is primarily directed toward optimal management of future activities.

## Action Item #1 (Due date: end of '96)

Collect comments and suggestions on the following issues:

- How would you like to see future activities of EAMEC?
- Keep on doing business as in the past?
- Set up a number of standing subcommittees, such as Technical Activities, Regional Activities, and Meetings & Conferences? (see, e.g., Asia Pacific Committee)
- Stronger commitment and control of representatives?
- Closer collaboration of EAMEC members with regional Chapters?
- Implementation of special EAMEC pages on the Internet, linked to the ComSoc homepage?

## Action Item #2 (Due date: end of '96)

Prepare an updated list of contact addresses. People who do not respond or do not provide an e-mail address will be removed from the list of EAMEC members.

## Action Item #3 (Due date: end of March '97)

Review and evaluate suggested changes by Chairman and Past Chairman of EAMEC. Define and implement improved operational guidelines for EAMEC. Open discussions via e-mail alias (eamec@info.vub.ac.be) are both necessary and welcome.

## Action Item #4 (Due date: end of Oct. '97)

Monitor activities during a test phase of no more than six months. Summary report to be distributed by Chairman of EAMEC will include results and baseline for further optimization. Prepare a revised version of EAMEC Charter, if deemed necessary.

With respect to Action Item #1, may I ask you to write and tell me your opinions. I look forward to receiving your comments as references for future discussions. Please note that, within ComSoc, EAMEC represents an immense part of our scientific community. Your contribution is of vital importance if we want to create a strong network of volunteers who

share common interests. Your ideas need to be articulated and communicated first, before something can be moved.

Thanks again for your help.

Best regards

Horst Bessai

P.S.: If you are not sure about the scope of work of EAMEC, please have a look at our newly approved Charter. Copies are also available from our office in Bruxelles.

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## Conference Announcement

*1997 Asia-Pacific Symposium on Information and Telecommunications Technologies (APSITT '97)*

*March 13-14, 1997, Hanoi, Vietnam*

*Organized by Hanoi University of Technology (HUT)  
Institute of Electronics, Information and Communication  
Engineers of Japan (IEICE)*

*Supported by various institutions, including IEEE*

The purpose of this Symposium is to provide a forum for better understanding the latest status and plans in the Asia-Pacific region on information and telecommunications technologies and industries, and for exchanging ideas and views on advanced computer networking and information processing technologies toward future global multimedia communications.

## Technical Areas of Interest

**Network issues** — ATM, PCS, OCN, LAN, frame relay, Internet, Intranet, TINA, next-generation switching technologies, IN, access networks

**Audio-visual** — Video-conference, hypermedia, collaborative work, telematics

**Fundamental, common technologies** — DSP, coding, fiber optics, queuing, IP over ATM

**Services and applications** — Multimedia, multicast, information retrieval, VOD, WWW, Java

**Software and databases** — Distributed processing, object-oriented systems, neuro-computing, cyberspace

**Network management** — Performance design, telecommunications quality, reliability, security

**Policy and planning** — Regulations, policy of information technologies, information superhighway, global Internet

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See the home page of APSITT '97:

<http://www.ieice.or.jp/cs/c4p/APSITT97>

## IEEE ATM'97 WORKSHOP

May, 26-28, 1997, Lisboa, Portugal

The third IEEE ATM Workshop sponsored by the IEEE Communications Society has the objective of fostering the exchange of information among those working in the diverse areas of ATM. The Workshop Committee invites submissions and participation from researchers and developers in academia, industry and government.

Original contributions are invited on topics such as:

- ATM switch architectures, implementation and performance
- Scheduling for service integration (e.g., weighted fair queuing)
- ATM LAN switches
- ATM traffic modeling
- Video/image coding and transmission over ATM
- ATM standards
- Broadband signaling
- Traffic management functions and procedures
- Mapping services to transfer capabilities (ABR, VBR/SBR, etc.)
- Admission control and routing
- ATM internetworking
- Wireless ATM (terrestrial and satellite-based)
- Experience with operational ATM networks; ATM field trials
- IP/ATM interworking (TCP over ATM)
- Telephony over ATM
- ATM network design (access network, core network)
- Network management and operation

**Schedule** — Submission of extended abstract (5 pages): January 31, 1997; authors notified: March 15, 1997; full paper due (10 pages max): April 15, 1997.

**Submission and information** — Submit by e-mail (postscript), fax or regular mail, your extended abstract to:

Jim Roberts, CNET/PAA/ATR, 38, rue du General-Leclerc, 92131 Issy les Moulineux, FRANCE; E-mail: james.roberts@issy.cnet.fr, Tel: +33 1 4529 5701, Fax: +33 1 4529 6069.

Please include complete information on author(s), affiliation(s), address(es), telephone, fax and e-mail.

For registration and general information, contact:

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## Third ACM/IEEE International Conference on Mobile Computing and Networking 1997 (MobiCom'97)

Sponsored by ACM SIGMOBILE and SIGCOMM,

IEEE Communications Society, and the

Hungarian Academy of Sciences

September 28 to October 1, 1997, Budapest, Hungary

The wireless communication revolution is bringing fundamental changes to telecommunications and computing. Wide-area cellular systems and wireless LANs promise to make integrated networks a reality and provide fully distributed and ubiquitous mobile computing and communications, thus bringing an end to the tyranny of geography. Furthermore, services for the mobile user are maturing and are poised to change the nature and scope of communication. This conference, the third of an annual series, serves as the premier international forum addressing networks, systems, algorithms, and applications that support the symbiosis of portable computers and wireless networks.

**Papers:** Technical papers describing previously unpublished, original, completed research, not currently under review by another conference or journal, are solicited on topics at the link layer and above. Possible topics include, but are not limited to:

- Applications and computing services supporting mobile users
- Network architectures, protocols or service algorithms to cope with mobility, limited bandwidth, or intermittent connectivity
- Design and analysis of algorithms for mobile environments
- Security, scalability and reliability for mobile/wireless systems
- Performance of mobile/wireless networks and systems
- Network management for mobile and wireless networks
- Data management in mobile computing
- Integration and interworking of wired and wireless networks
- Characterization of the influence of lower layers on the design and performance of higher layers
- Mobile network protocols
- Mobile computing
- Mobile agents
- Power management
- Wireless multimedia systems
- Satellite communications
- Location-dependent applications
- Distributed system aspects of mobile systems
- Adaptive applications interfaces suitable for mobile systems
- Architectures of wireless and mobile networks and systems
- Traffic integration for mobile applications

**Important Dates** — Submissions due: April 21, 1997; notification of acceptance: June 30, 1997; camera-ready version due: August 15, 1997.

For more information: Please contact either of the Program Co-Chairs, David Johnson (dbj@cs.cmu.edu) or Christopher Rose (crose@ece.rutgers.edu). This Call for Papers, as well as information about other ACM SIGMOBILE activities, is available on the SIGMOBILE home page at:

<http://www.acm.org/sigmobile/>

## Global Communications Newsletter

<http://www.ieee.org/comsoc/gcn.html>

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Chapters Corner



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