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# Global Communications Newsletter

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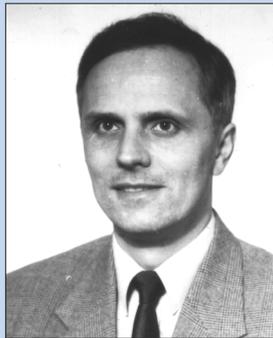
February 1997

## Editor's Message: Farewell

By Andrzej Jajszczyk, Editor

This is my last issue as Editor of the *IEEE Global Communications Newsletter*. When in April 1995 Tom Plevyak, then Director of Publications, on behalf of Roberto de Marca, ComSoc's Vice-President of International Affairs, appointed me as the first Editor of the *Newsletter*, I had only a rough vision of this new publication that was to be created. Now, with this 21st issue, the vision is much clearer, and I believe the *Newsletter* well serves the Communications Society. Originally, our publication was to be named "International Newsletter," but during one of the discussions about its scope and shape at ICC '94 in New Orleans, the final title was suggested by Carol Lof.

I am grateful to many friends and colleagues who have helped in editing and publishing the *Newsletter*. I especially appreciate the work of individuals who have served as Regional Correspondents, supplying us with current information from their regions. I would like to mention here Algirdas Pakstas from Lithuania and Norway, Javan Erfanian from Canada, and Giancarlo Pirani from Italy, who were especially active. An important part of our *Newsletter* was formed by the



Chapters Corner, edited by Tetsuya Miki with the help of Shigeo Shioda. This section has reported local activities of the Communications Society.

Timely publication of the *Global Communications Newsletter* would not be possible without the effort, creativity, and patience of the New York-based production staff: Joe Milizzo, Cathy Kemelmacher, and, earlier, Beth Wilber.

Numerous people have helped me in the editorial process, but I can hardly imagine my work without Agnieszka Glowinkowska, my Publications Assistant. She contacted Regional Correspondents and IEEE production staff,

reminded me about deadlines, corrected, typed, and proof-read texts, and maintained our local database as well. Thank you very much, Agnieszka!

Now, I am passing my responsibilities to Byeong Gi Lee from Seoul National University, Seoul, Korea. Byeong served the Communications Society as a Chapter Chair and Vice Chair of Asia Pacific Committee. I wish him all success as the new Editor of our *Newsletter*.

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## Competition in Paging Services in Lithuania Is Growing

By Algirdas Pakstas

The mobile communications market in Lithuania is going to be a hard nut for newcomers to crack. This is the conclusion the leadership of the firm Nelte UAB reached after just a few months of operation. Nelte UAB is a Lithuanian-Norwegian joint venture which began providing services in March 1996. Telenor of Norway, well known for their activities in Eastern Europe, has established a company to participate in running the national radio paging service in Lithuania. Telenor Invest owns 44 percent of shares in Nelte UAB; 25.5 percent belong to the Lithuanian mobile operator "Comliet" (NMT-450); the rest to other Lithuanian firms.

Nelte UAB had to compete with the Lithuanian firm Skubus pranesimai ("Urgent messages"), which has been operating since 1994 using specially encoded FM radio broadcasts from the Radiocentras station. However, Skubus pranesimai had relatively limited coverage, including only the largest cities. From the beginning Nelte UAB has covered the large cities of Vilnius, Kaunas, and Klaipeda, and hopes to have established coverage of the rest of Lithuania's major cities by the end of 1996. It is planned that until the year 2000, Nelte UAB will cover 99 percent of Lithuania. The initial marketing strategy of Nelte UAB was based on direct undercutting of its rival by offering customers of Skubus pranesimai receiver exchanges and free registration with Nelte UAB.

At first the prices for receivers distributed by "Nelte UAB" were US\$80–277 ("Motorola" and "Philips"). However, as a result of competition, by October 1996 prices had already fallen to 9–10 litas (about US\$2.5). This is a repetition of the subsidizing policy heavily applied by Telenor in Norway when competing for mobile market share with its domestic rival NetCom. This resulted in an increase in the number of Nelte UAB customers from 300 in April to 1700 in October.

Yet another company which entered the Lithuanian paging market in 1996 is the well established GSM operator Omnitel (over 20,000 GSM customers). In November 1996 the Omnitel paging service was used by some 200 customers. Omnitel, like all other paging operators, first began with coverage of 25–35 km regions around the largest cities of Vilnius, Kaunas, and Klaipeda.

Thus, the next move is naturally expected to be made by Bite GSM, the second largest GSM operator in Lithuania with about 13,500 customers. When and if this occurs, all the mobile phone operators in Lithuania will be involved in paging services (Comliet, with its 10,500 NMT-450 mobile phone subscribers, is already involved because of participation in Nelte UAB). Bearing in mind such a trend, the future of the first Lithuanian paging service, provided by Skubus pranesimai, can be expected to be turbulent rather than quiet.

The President of ComSoc, Dr. Steve Weinstein, and other ComSoc Board members all recognize that the activities of each ComSoc Chapter are very important to totally enhancing member vitalization, Society globalization, and so on. We settled on the ComSoc 1997 Operating Plan, which includes two distinct points. First, the ComSoc Chapters Department will provide more funding to Chapters for revitalizing their activities. Second, our ComSoc Board of Governors members will have more face-to-face meetings with Chapters people to find out about the actual situation of Chapters and to exchange information. The Region 8 Chapter Chairs Meeting was held at GLOBECOM '96 in London, and was successfully organized by Jacob Baal-Schem, Region 8 Communications Society Chapters Coordinator. It greatly helped to exchange the information between the parent ComSoc organization and its regional chapters, and to improve communications among Chapters in a Region. Another such Regional Chapter Chairs Meeting in Region 7 will be held in conjunction with ICC '97 in Montreal.

The 1997 Operating Plan for the ComSoc Chapters Department is as follows:

1. Publish Chapters Corner column in the *Global Communications Newsletter*. The column will include Chapters Operating Plans, Local Chapter Reports, and major event reports. Continue to encourage submissions by RCCCs, local Chapter Chairs, and members.

2. Provide free subscription to IEEE ComSoc publications package to Communications Chapters where publications are effectively utilized.

3. Present an award to the selected Chapters of the Year twice a year at ICC '97 and GLOBECOM '97.

4. Promote a visit to a Chapter by BoG members and a meeting with a Chapter. The target number of Chapters to be visited in 1997 is about 30.

5. Hold Chapter Chairs/Regional Chapter Chair Coordinators (RCCCs) meetings twice a year in conjunction with ICC '97 and GLOBECOM '97.

6. Hold a Regional Chapter meeting to improve communications among Chapters in a Region. The Region 7 Chapters Meeting will be held in conjunction with ICC '97 in Montreal.

7. Distinguished speaker tours will be planned. Technical lectures and/or seminars will also be promoted in conjunction with local societies.

8. Provide funding to Chapters for local activities with the request fully justifying the need; especially Chapter Web home pages, ComSoc Chapter membership recruitment, and so on will be encouraged by funding from ComSoc.

9. Promote dissemination of Chapters' information through ComSoc Web pages; encourage all Chapters to provide home pages.

10. Distribute to every Chapter Chair and RCCC the updated list of Distinguished Speakers in the communications field and the updated Directory of ComSoc officers, RCCCs, and Chapter Chairs.

11. Update relevant portions of the Chapters Manual published in 1993, and distribute it to every Chapter Chair and RCCC.

### **IEEE ComSoc Region 1 Activity Report**

The IEEE Communications Society Region 1 with its seven chapters was very active and successful in 1995 and 1996. Its success has been recognized with the 1996 Chapter of Year Award for the North Jersey Chapter. Each chapter organized a minimum of four events a year. Most of these activities were organizing technical conferences and inviting speakers to chapter meetings, and rewarding/recognizing member achieve-

ments. Member participation in these activities has been pretty good, and student member participation has been substantial.

Though topics of conferences and technical talks vary from one chapter to another, wireless and ATM have been dominant. A three-part mini series on design issues of wireless systems organized by the North Jersey Chapter and a talk, "The Integration of ATM Technology," organized by the Mohawk Valley Chapter are just two examples.

The number of activities and member participation in them have been quite significant. The chapters frequently collaborated with each other in organizing these events. The North Jersey Chapter has organized more than 25 events. The New Jersey Coast Chapter hosted many seminars with over 700 attendees. Mohawk Valley Chapter has sponsored a Rome Laboratory Tour for Utica College and Mohawk Community College. The New Jersey Coast Chapter has published a trial joint newsletter with the New York, Long Island, North Jersey, and Princeton/Central Chapters in an effort to increase the value/cost ratio of their newsletters.

The chapters have recognized member achievements. Most recently, the New Jersey Coast Chapter organized its annual awards banquet, with 112 people in attendance. At the banquet, we recognized six of the seven new Fellows in the New Jersey Coast Section, two Region 1 award winners, a scholarship winner, and several local chapter award winners.

Needless to say, many of the volunteers in our region have done a terrific job in 1995 and 1996. I wish to thank Chapter officers in Region 1 for making 1995 and 1996 such a success.

*Dr. Mehmet Toy  
Region 1 RCCC*

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Call for Papers/continued from page 4

### **Schedule**

**Full Manuscript:** February 28, 1997

**Notification of Acceptance mailed:** June 1, 1997

**Camera-Ready Copy:** July 1, 1997

### **Submission Guidelines**

Please submit 5 copies of original papers in English, no more than 3000 words, with name(s), affiliation, and full contact information of the author(s) on the title page. Additionally, the authors are requested to indicate the technical area of their papers by including on the title page any of the topic codes shown in the list of topics, or other key words describing the topic. The submission should be addressed to any of the following PIMRC representatives according to the above schedule.

#### **In Europe**

Technical Program Chair, Prof. Savo Glisic, Telecommunication Laboratory, University of Oulu, P.O. Box 444, FIN-90571 Oulu, Finland; Fax: + 358 8 553 2820, e-mail: savo.glisic@ee.oulu.fi

#### **In Pacific Asia**

Area Coordinator, Dr Shuzo Kato, Pasific, Communications Research Corporation, 2-12-7 Hatchobori, Chuo-ku, Tokyo 104, Japan; Fax: + 81 3 5543 3167; E-mail: skato@po.ijnet.or.jp

#### **In the American Continent**

Area Coordinator, Prof. Kaveh Pahlavan, Dept. of Electrical & Computer Engineering Worcester Polytechnic Institute, Worcester, MA 01609, USA; Fax: + 1 508 831 5491; e-mail: kaveh@cwins.wpi.edu

Web site: <http://www.pimrc.oulu.fi>

**1998 International Zurich Seminar on  
Broadband Communications  
Accessing, Transmission, Networking  
February 17–19, 1998, ETH Zurich, Switzerland**

The 1998 International Zurich Seminar on Broadband Communications continues the well-known series formerly called the International Zurich Seminars on Digital Communications. The modified title indicates the new direction of the seminars. In contrast to the most recent seminar in 1996, emphasis will be placed on the technical aspects of broadband systems. Illustrative topics for technical contributions are the following:

- Accessing
- Access Protocols
- Wireless Access
- Radio Local Loops
- Multiple Access Techniques
- Multi-User Techniques
- Transmission
- Wireless Interconnect/Wireless Backbones
- Radio over Fibre
- HFC
- ADSL, HDSL
- High-Speed Signal Processing
- Broadband Channel Modeling
- Error Control
- Security Aspects
- Networking
- Broadband Cellular
- Wireless ATM
- Wireless LANs
- B-ISDN (SDH, ATM, ...)
- Optical Networks (WDM)
- Satellite Networks

### Organization

The 1998 International Zurich Seminar on Broadband Communications is sponsored by the IEEE Switzerland Chapter on Digital Communication Systems in cooperation with the IEEE Communications Society IEEE Switzerland Section; the Swiss Electrotechnical Association (SEV) Ascom Tech Ltd., Berne; the IBM Research Laboratory, Ruschlikom; and the Swiss Federal Institute of Technology (ETH).

### Organizing Committee

Prof. P. E. Leuthold, President  
Prof. J. L. Massey, Technical Program Chairman  
Dr. A. Wittneben, Organizing Chairman  
Dr. H. Rudin, Publicity Chairman

The Call for Papers was issued in December 1996. Inquiries can be submitted to:

Prof. P. E. Leuthold  
President IZS 98  
Communication Technology Laboratory  
ETH Zentrum  
CH-8092 Zurich/Switzerland  
Phone +41 1 632 2788  
Fax + 41 1 632 1209  
Email: [secretary@nari.ee.ethz.ch](mailto:secretary@nari.ee.ethz.ch)

A Web page dedicated to the 1998 International Zurich Seminar on Broadband Communications can be accessed under the Internet address

<http://www.nari.ee.ethz.ch/>

It is also possible to contact the conference organization via the Web page.

**1997 IEEE International Conference on  
Personal Wireless Communications (ICPWC '97)  
December 17–20, 1997, Mumbai (Bombay), India**

The conference is sponsored by the IEEE AES/COM/LEOS India Council Chapter and the IEEE Bombay Section, in cooperation with the IEEE Region 10 IEEE India Council, IETE (India), and the University of Victoria. The first such conference was held in Bangalore (August 18–19, 1994); the second was held in New Delhi (February 19–21, 1996).

The scope of ICPWC '97 encompasses but is not limited to:

- Narrow-/Broadband Mobile Radio
- Wireless Local Loop
- Personal Communications Systems
- CDMA and Related Techniques
- Mobile Data and Specific Techniques
- Fixed and Mobile Convergence
- RF and Spectrum Issues
- Coding, Modulation, and Equalization
- Wireless Multimedia
- Adaptive and Intelligent Antennas
- Operational Experiences with GSM, IS-95, and Other Second-Generation Systems

In addition to technical presentations, panel discussions and pre-conference short courses by leading authorities in the field are planned. Please submit a 400–500-word summary by June 15, 1997 to the Technical Program Chairpersons.

### Outside India:

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Notification of acceptance/rejection will be sent by July 31, 1997. Accepted papers will be published by the IEEE in the Conference Proceedings. A camera-ready version of the paper must be received by September 30, 1997.

Corporations desiring to sponsor conference exhibitions, please read the ICPWC '97 Patron Program on the World Wide Web or contact Dr. Vijay K. Bhargava.

Further information on the conference may be found on the Web at:

<http://www.citr.ece.uvic.ca/icpwc97>

**IEEE Malaysia International Conference on  
Communication (MICC '97) and  
IEEE International Workshop on Intelligent Signal  
Processing and Communication Systems (ISPACS 97)  
Renaissance Kuala Lumpur Hotel, Malaysia**

**18-20 Nov. 1997**

**The Enabling Technology for the  
Multimedia Superhighway**

The Third IEEE Malaysia International Conference on Communications (MICC '97) and the 5th. International Workshop on Intelligent Signal Processing and Communication Systems (ISPACS '97) will be held jointly in Kuala Lumpur, Malaysia, November 18–20, 1997.

The areas of interest include, but are not limited to, the following topics:

**MICC '97**

- Switching, Transmission, and Signalling,
- Lightwave Network and Optical Systems
- Optical Fibers and Cables
- Gigabit Network
- Network Protocols and Architectures
- Personal Communications Networks and Systems
- Wireless Data Communication
- Antennas and Microwave Systems
- Satellite and Mobile Communications
- Network Management and Standards
- ATM Network and Services
- Routing and Control in Communication Networks

## Global Communications Newsletter

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

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CARLOS HIRSCH, Mexico • JUAN CARLOS MIGUEZ, Uruguay  
HEINZ OCHSNER, Switzerland • ALGIRDAS PAKSTAS, Lithuania and Norway  
BJORN PEHRSON, Sweden • GIANCARLO PIRANI, Italy  
RAMJEE PRASAD, The Netherlands • N. RAVI, India  
PETER SMYTH, United Kingdom • NIKOLAI SOKOLOV, Russia  
K. R. SUBRAMANIAN, Singapore • KLAUS VERNIE, Germany  
Pierre Vincent, France

**TETSUYA MIKI**  
Chapters Corner



A publication of the  
IEEE Communications Society

- Intelligent Network and Operation
- Testbeds and Trials for Network Services
- Innovative Telecommunications Applications

**ISPACS 97**

- Neural and Fuzzy Logic Processing
- Radio Propagation and Channel Modelling
- Digital Signal Processing
- Adaptive and Nonlinear Processing Video, Audio, and Coding
- Image and Video Standards
- Video Compression and Transmission
- Multidimensional Signal Processing
- Optical Signal Processing
- Signaling Transmission
- Signal Processing in Mobile and Personal Communications
- Signal Propagation in Radar and Antennas
- Intelligent Signal Processing
- Security Signal Processing

Prospective authors should send 4 copies of a 600–800-word abstract in English to the conference secretariat. The title page must include the author's name, complete return address, e-mail, address, telephone and fax numbers. Please type MICC '97 or ISPACS '97 on the right top corner of the title page and the category of papers in your abstract. Submission Address:

MICC 97/ISPACS 97 Secretariat

C/O: BATC, Universiti Teknologi Malaysia Jalan Semarak,,  
54100 Kuala Lumpur

Att: Liza Abd Latif (Ms)

Fax: + 603-291-1294

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**Important Deadlines**

**Submission of Abstract:** 30 April 97

**Notification of Acceptance:** 30 June 97

**Camera Ready Manuscripts:** 31 August 97

**PIMRC '97: The 8th IEEE International Symposium on  
Personal, Indoor and Mobile Radio Communications  
September 1-4, 1997. Marina Congress Center  
Helsinki, Finland**

General Chair: Sari Baldauf, Nokia Telecommunications

Organizing Chair: Pentti Leppanem, University of Oulu

Technical Program Chairs: Savo Glisic, University of Oulu  
Juha Rapeli, Philips Consumer Communications

**Program**

The technical program will consist of invited lectures, tutorials, panel discussions, and presentations covering all important topics in the field.

**Topics**

Papers are welcomed in all areas of wireless personal communication systems and networks. Potential topics include, but are not limited to:

- Channel Measurement and Modeling
- Transmission Techniques
- Networking Technologies
- Deployment of Systems and Networks
- Implementation Technologies
- Regulations, Standards, Spectrum Allocation, and Global Issues

Call for Papers/continued on page 2