



Volume 2 of 2

ICCT 2003

2003 International Conference on Communication Technology PROCEEDINGS

April 9-11, 2003, Beijing, CHINA

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Greetings from the ICCT2003 General Chairman

Welcome to ICCT2003 in Beijing!



Dr. Lin Jintong
President
*Beijing University of Posts and
Telecommunications*

On this special occasion of ICCT2003, I would like to thank all the experts who share with us their research findings in the field of communications. It is their original work that has made ICCT2003 a stimulating and intellectually highly charged event.

Initially we had strong reservations on whether the ICCT2003 would generate enough interest among experts in the field of communications internationally, since the worldwide IT market has experienced severe down turns in the past two years, after a fantastic spurt in the late 20th century. However, when the technical committee of ICCT2003 started to review papers submitted, they found that they had to work with more than 800 papers from over 20 different countries. That was beyond all expectations. The only explanation is that technology would not slow its pace of development no matter what happens to the market. On the contrary, technology is what market can trust to inspire, to activate, and to promote its vitality. And I'm sure our discussion on communication technology at this conference will have a positive effect on the prosperity of tomorrow's world market.

China probably is the right venue for such a conference, because China's IT sector has been less severely affected as compared with the international market. As a matter of fact, the telecommunications industry in China continues to develop at a fast speed

because of the large demand in the domestic market. The annual growth rate of China's IT market in the year 2001 and 2002 was stabilized at 30 ~ 40%. It is expected that by the year 2005, the contribution of China's information and telecommunications industry to the gross domestic production (GDP) will be as high as 4.7%. So we can see that information and communication technologies will have a bright future in China.

The success of the preparatory work of this conference owes much to the direct support from quite a few of our distinguished guests. I would like to take this opportunity to acknowledge the timely support and invaluable advices provided by the Consulting Committee members, especially Mr. XU Guanhua (Minister of Ministry of Science and Technology), Mr. ZHANG Chunjiang (Vice-minister of Ministry of Information Industry). I would also like to acknowledge the technical support from IEEE Communications Society (ComSoc), who has granted us the catalogue number for the proceedings. Among the list of our acknowledgement are academicians of Chinese Academy of Sciences, Prof. YE Peida, Prof. BAO Zheng and Prof. ZHOU Bingkun, Mr. ZHANG Ligui, President of China Mobile, Mr. YANG Xianzu, CEO of China Unicom, Mr. ZHOU Deqiang, CEO of China Telecom, Mr. XI Guohua, CEO of China Netcom, Mr. WU Hequan, President of Research Institution of Posts and Telecommunications.

I wish ICCT2003 a great success.

Greetings from Technical Program Chairman

On behalf of the Technical Committee, I extend our warm welcome to the professionals in the field of communications from all over the world present at this grand meeting which is held every two years in Beijing, namely International Conference of Communication Technology. This ICCT has altogether received about 800 papers from over 20 countries. After the careful reviewing work by the experts both home and abroad, 400 of them are accepted. This totally accounts for less than 50 percent, which marks the best of ever whether the number of papers submitted or the number of papers accepted are taken into consideration.

These papers will be presented in 9 sessions covering the following scopes of research:

- Infrastructure for Next Generation Networks
- Next Generation Internet
- Switching & Routing
- Optical Communications
- Wireless & Mobile Communications
- Communication Theory

- Communication Software
- Network Application & Services
- Digital Signal Processing for Communications

Besides, we consider it our great honor to have invited the keynote speeches and invited talks from our distinguished guests: Mr. XI Guohua, Prof. Ian F. Akyildiz, Mr. Dennis Roberson, Mr. Werner Mohr, Mr. Lee Yong Kyung, Prof. Ramjee Prasad, Dr. Junao Xue, Mr. Othmar Kyas, Dr. Hisashi Tada, Prof. Koichi Asatani, Mr. Philip J. Lin, Mr. Ding Zhemin and Mr. Mounir Hamdi.

Though the global IT industry, including the industry of communications, is still shrouded in the atmosphere of winter, Beijing is luxuriously enjoying its spring season. May science and technology in the industry of communications, to which we dedicated ourselves so wholeheartedly, proclaim an early flourishing and prosperous spring.

I wish you a good time in Beijing.



Prof. Chen Junliang
*Chairman of Technical
Program Committee,
ICCT2003*

Greetings from Organization Committee Chairman



Prof. Liu Cai
*Chairman of Organizing
Committee, ICCT2003*

On behalf of the ICCT2003 Organizing Committee, I am very pleased to welcome all the experts, from home and abroad, attending the 2003 International Conference on Communication

Technology-ICCT2003, in Beijing, China. ICCT is a series of international academic event in the Communications field, which is every two years in China co-sponsored by the China Institute of Communications (CIC) and the Chinese Institute of Electronics (CIE).

ICCT2003, the 8th of the series conferences, is organized by the CIC and Beijing University of Posts and Telecommunications (BUPT). The organizers would like to express sincere thanks to all the persons who help to make this great event

become true. As we all known, the world Telecommunication industry, in general, is now making their great efforts in getting out the difficult situation, which has last for more than 2 years, and the Chinese telecom industry is now making their efforts in keeping sustainable growth. We hope that the ICCT2003, convened in this special time, could in some way contribute to the common efforts and perspective of the telecom industry.

Have a pleasant stay in Beijing!

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10: 00—10: 30	Coffee Breaks			
10: 30—12: 00 Parallel Session	Registration	10: 30—12: 30 Keynote Speech	Parallel Session WMC-02 WMC-06 WMC-10 NGI-02 INGN-02 NAS-02 OC-02 WMC-16 WMC-18	Parallel Session WMC-20 OC-04 NGI-06 SR-03 CS-02 OC-06 CT-04 DSPC-05
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WEDNESDAY 9 April 14:00 – 17:30 P.M.	Plenary Session Beyond 3G									
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15:30 – 17:00 P.M.	WMC-19		OC-03	NGI-05	SR-02	CS-01	OC-05	CT-03	DSPC-03	
	WMC-20		OC-04	NGI-06	SR-03	CS-02	OC-06	CT-04	DSPC-05	
	WMC-21			NGI-07	SR-04	CS-03	OC-07	CT-05	DSPC-04	
	Panel Discussion I Beyond 3G & Closing Ceremony									
	Panel Discussion II NGN and NGI & Closing Ceremony									

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 ↗ Sequence Number
 ↗ Session Number
 → Technical Area

A. Infrastructure for Next Generation Networks (INGN)

B. Next Generation Internet (NGI)

C. Switching & Routing (SR)

D. Optical Communications (OC)

E. Wireless & Mobile Communications (WMC)

F. Communication Theory (CT)

G. Communication Software (CS)

H. Network Application & Services (NAS)

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