MOBILE AND WIRELESS COMMUNICATIONS

IFIP - The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- open conferences;
- working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

MOBILE AND WIRELESS COMMUNICATIONS

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Preface

The Personal Wireless Communications (PWC) 2002 Conference was held in the beautiful garden city, Singapore. PWC has established itself as one of the IFIP TC6 conferences in the Mobile and Wireless Communications field. This year we received over 60 submissions, for a single-track conference with a keynote and three invited speeches.

Mobile communications and the Internet have created a major breakthrough in new telecom services around the world. It is expected that the number of global mobile connections will exceed the number of fixed connections in certain countries. The data service breakthrough enabled by the Internet will create new possibilities for mobile and wireless services.

We are living in a world of creation. Voice over cellular and data over Internet was created. When demand arose for mobility, we added data capability to handsets and voice to Internet. However, not all creations are useful; only a handful of people will use them.

In the area of telecommunications, we created Wide, Metropolitan, Local, Home, Vehicular and Desktop areas. The transport systems use wire-lines and wireless media. In the past, we created satellites and have done little with deep space beyond our reach. We are creative and we will create.

In all, the Personal Wireless Communications 2002 conference is what it is all about, to report on our findings and discuss our experiences and lessons learned from one another.

The PWC'2002 conference is a forum for tutorials, discussions and presentations of the new developments in mobile and wireless research and industry. The conference is arranged with one day for tutorials and two days for presentation. Topics presented in PWC 2002 are in the areas of Ad-Hoc Networking, Power Control, Personal Communications, Satellite, QoS,

UMTS and Wireless LANs, Handoffs, Security and Mobility, CDMA and Physical Layer including modulation, coding and methods of communication functions including multiple access, error control, flow control and routing.

The Personal Wireless Communications PWC'2002 conference belongs to an IFIP workshop and conference series arranged by IFIP TC6 Working Group 6.8. Previous PWC events were held in Prague, Tokyo, Frankfurt, Copenhagen, Gdansk, and Lappeenranta in Finland. The PWC'2002 event was held in Singapore from October 23 to 25, 2002.

We did our best to bring you an outstanding PWC'2002 Technical Program and hope you will enjoy it.

Professor Kin Mun Lye
Conference Chair

Dr. Guy Omidyar
Technical Program Chair

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