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International Federation for Information Processing
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IFIP Congress '96 Held in Canberra

Small Attendance Is a Disappointment

IFIP President Bauknecht

Congress Chairman Goldsworthy

IFIP Congress '96, the 14th World Computer Congress began on 2 September in Canberra, Australia, on a lovely "note," with several musical selections by the young, talented Canberra School of Music Wind Quintet. **Prof. Ashley Goldsworthy** (AUS), chairman of the Congress Organizing Committee, opened the proceedings by pointing out that delegates from 40 nations were in attendance. He then introduced the Governor General of Australia, Sir **William Deane,** who officially opened the Congress and applauded the fact that social issues were a significant component of the Congress discussions. (Australia's Prime Minister had also been scheduled to speak; however, he was called away to a South Pacific Leaders Forum at the time of the opening.) **Prof. Kurt Bauknecht** (CH), president of **IFIP,** who was recovering from a broken leg, left his crutches behind in order to welcome the delegates. He stressed the goal that **IFIP** be continually involved in new activities. **Dr. Prem Gupta** (IND), chairman of the International Program Committee, spoke briefly. (His co-chair, **Prof. Egon Hörbst** (A), was not able to attend the opening session.)

Goldsworthy to Lead Task Force

The next speaker, **The Hon. John Moore,** Australian Minister for Industry, Science and Tourism, pointed out the importance of information industries in Australia. He said that Australia's per capita use of PCs was second only to that of the U.S. He announced the appointment of an Information Industries Taskforce to review the Australian information industries strategy, with **Prof. Goldsworthy,** an **IFIP** vice-president, as chairman. **Mr. Tom Worthington,** president of the Australian Computer Society, which hosted the Con-

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GREETINGS

At this time of holidays and the new year, we send greetings to all our **IFIP** friends and wish all of **you** joyful holidays and a year of peace, health, and happiness.

Editor

Forthcoming Conference on Electronic Publishing

IFIP has a major interest in electronic publication — both because **IFIP** is a publisher of scientific information and because the technology upon which such publication depends is in **IFIP's** area of concern. (See the article on **IFIP** publications on page 11.) In an attempt to gain expertise in this field, **IFIP** and the ICCC (International Computer Communications Council, an Affiliate Member of **IFIP)** are organizing a conference, Electronic Publishing — New Models and Opportunities, 14-16 April at Canterbury, U.K. There will be two parallel streams — one on technical issues and one on socio-economic issues. The technical stream includes new developments in networking, possibilities of new technology, author/reader requirements, and the need for standardization. The socio-economic stream includes the changing roles of

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The Secretariat can also answer inquiries about IFIP.

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Kindly submit material for the *Newsletter* three months before the publication date.

Please send announcements of conferences, workshops, and other meetings directly to the Secretariat, which prepares the Calendar of Events. Calls for papers should be sent to both the Secretariat and the *Newsletter* editor.

IFIP on the Internet

IFIP information (including this *Newsletter)* is available through the Internet as follows:

anonymous ftp:
ftp.ifip.or.at
WWW:
http: //www.i fip .or. at

Workshop on Personal Wireless Communications to be held in Frankfurt in December

Personal wireless communications are gaining importance around the world. The deregulation of telecommunication enterprises as well as the increasing need for multi-service telecommunications in areas with insufficient infrastructure have precipitated the demand for standardized technology to enhance connectivity and competition through wireless local loops (connections between subscriber and telephone company). Wireless data communication is also vital for mobile computing. Systems based on existing standards are designed to interoperate with certain high-capacity services or with cellular mobile systems and can provide a variety of communication services in a flexible and economical way.

In order to promote the evolution of wireless local access internationally, the **IFIP** Task Group on Wireless Communications of the Technical Committee on Communication Systems (TC6) is sponsoring the second international workshop on Personal Wireless Communications, to be held 10-12 December in Frankfurt am Main, Germany. The workshop will focus on technical aspects of various applications in telecommunication networks, such as residential cordless telephony, cordless PBXs, public access telepoints, and the wireless local loop. Original papers on the following topics will be presented:

- standards and their evolution
- mobility management
- network architectures, planning, and simulation
- services and applications
- wireless local loop technology

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New Officers

The following officers were elected by the September General Assembly in Canberra:

Treasurer: **Dr. Dipak Khakhar** (S)
Secretary: **Mr. Graham Morris** (GB)
Vice-President:
Mr. Geoff Fairall (ZW)
Trustee: **Prof. Ricardo Reis (BR)**
Prof. Xiaolang Yan (PRC)
Mr. Jose Granado (P)
(for a one-year term)

Mr. Morris's term as Individual Member was also extended for another three years.

Also, these changes **in** chairs were made by IFIP's president, **Prof. Kurt Bauknecht** (CH):

Technical Assembly:
Prof. Wilfried Brauer (D)
Strategic Planning Committee:
Prof. Ashley Goldsworthy (AUS)
Finance Committee:
Mr. Jose Granado (P)
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Mr. Chris Guy (ZA)
Admissions Committee:
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Nominations for Officers:
Mr. Graham Morris (GB)
Nominations for Trustees:
Prof. Ricardo Reis (BR) ■

National Abbreviations Used in Newsletter

A Austria
AUS Australia
B Belgium
BG Bulgaria
BR Brazil
CDN Canada
CH Switzerland
CZ The Czech Republic
D Germany
DK Denmark
E Spain
F France
GB or UK United Kingdom
GR Greece
H Hungary
I Italy
IL Israel
IND India
J Japan
N Norway
NL The Netherlands
P Portugal
PRC China
ROK Republic of Korea
S Sweden
SF or FIN Finland
SK Slovakia
USA U.S.A.
ZA South Africa
ZW Zimbabw e

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gress, thanked all who worked for the Congress and welcomed all the delegates.

Two keynote speakers began the technical program. **Mr. Hajime Sasaki** (J) spoke on Trends of Flat Displays in the Multimedia Age. Among his prognostications was that the size of transistors will approach that of smoke particles. The second speaker, **Prof. Luc Steels** (B), spoke on Artificial Life and Real World Computing.

A Union of Conferences

Following the keynotes, the parallel technical sessions began. This was the first **IFIP** Congress organized as a union of individual conferences: Advanced IT Tools, Mobile Communications, and Teleteaching. For the first of these, two parallel streams were held during the four full days of the Congress; for the second, one stream was held; and for Teleteaching, a variety of events took place, but none was in the form of a traditional session, with the presentation of technical papers. Delegates registered for one of the three conferences and received printed proceedings for that conference only, although they could attend whatever sessions they wished. (No proceedings were printed for Teleteaching, whose delegates are receiving a CD-ROM containing excerpts from the conference events.) In addition to these conferences, the Congress Organizing Committee held a conference on IT and Business Practice at the same site for two days, but with a separate registration fee.

The first social event of the week was the welcome reception and exhibition opening, held the first evening. As he cut the ribbon in front of the exhibition area, **Mr. Neville Roach,** chairman of the Australian Information Industry Association, reminded the audience of another Australian ribbon-cutting, in 1932, at the opening of the Sydney Harbor Bridge, when a member of a conservative, paramilitary organization galloped, on horseback, past the Premier of New South Wales and slashed apart the ribbon with his sword. Once the Congress exhibition was open, the delegates could view the displays from 47 corporations and other organizations.

Tuesday saw the first full day of the Congress, highlighted by the keynote speech of **Dr. Wolfgang Wahlster** (D), Towards Speech-to-Speech Translation for Mobile Telecommunications. He described the development by an international consortium of a speech-to-speech translation system. Such a system might operate as follows: A German woman speaks into a telephone. Her speech is recognized and translated into English. Synthetic English speech in a woman's voice is sent over the telephone to a male American listener. The listener responds in English, and the German hears the response in German synthetic speech in a male voice.

The main activity of the Teleteaching conference Tuesday afternoon was a Virtual School Visit. For this program, the participants went to a group of elementary schools in Canberra, in order to hear about the Travel Buddy Project, which involves the students in a class preparing a package of information about themselves, their school, and their country, along with a stuffed animal (a koala). These packages were exchanged with similar packages from other schools around the world. The diaries for the Travel Buddies are being maintained, transmitted by e-mail to those interested, and made available on the WorldWide Web (WWW). Most Buddies have their own home pages.

Pervasive Themes

As the Congress proceeded, one could discern several themes that transcended the specific topics of the individual conferences. It became apparent that many of the talks concerned international projects, in which components were designed and produced in different countries. Going beyond this, some talks described distributed systems in which one part of the information processing is performed by a computing system in one country, after which the results are passed for further processing to a system in another country, and so on. We hope that the international collaboration fostered in **IFIP** has been responsible for some of this activity. Object oriented systems were also discussed to a great extent. Finally, the Internet was mentioned frequently — as a tool for communication among scientists, as a repository of information, and as an object of research and development activity.

Tuesday afternoon, a panel on the Internet attracted considerable attention. Among the issues addressed were the concern that the "voice industry" dominates data transmission, concerns over security of Internet sites and security of data transmissions, and the question of who has legal jurisdiction over the Internet: countries, states, municipalities?

Another special event was the well attended Pioneer Event, at which each of four invited speakers summarized the history of computing during a specified era. In addition, some historical computer equipment was on display. **Prof. J.A.N. Lee** (USA) spoke at the Pioneer Dinner.

One of the most popular spots during the Congress was the Internet Cafe, where delegates had access to terminals for e-mail and other purposes. Two delegates who had been communicating with each other for over two years, but never met face to face, happened to be sitting at adjacent terminals in the Internet Cafe and quite by accident discovered each other's identity.

A Major Hoax

The Congress dinner, held in Parliament House in Canberra, was one of the week's highlights. The speaker, introduced as **Dr. Lawrence Tibbs,** Associate Director for Technology and advisor to the President and Vice-President of the U.S., gave a lively and very humorous talk. He addressed the audience as, "Ladies, gentlemen, and Australians." He stated, "You can tell an American IT expert ... but you can't tell him much." Although most of the attendees were amused, some were upset or surprised at his lack of diplomacy. After his talk, which had some thoughtful moments, he removed his hairpiece and revealed himself as **Mr. Campbell McComas,** a professional comedian, who fooled virtually everyone in the audience.

The keynote speaker on the final morning was **Dr. Dale Spender** (AUS), who delivered a provocative talk, Creativity and the Computer Education Industry. Excerpts from her address will be printed in a future ***IFIP*** *Newsletter.*

Closing Ceremony

The closing ceremony, Friday afternoon, began with a showy videotape with digitally generated animation and digital video that was recorded during the Congress. The main speaker of the afternoon was **Prof. Geoffrey Blainey,** one of Australia's foremost historians, whose topic was Exploding Information and Shrinking Globe: a Forecast. He discussed three major "gateways": the Neolithic revolution, which involved the domestication of animals and the beginning of farming, the industrial revolution, and the information revolution, which will give us improved eyes and ears (perhaps brains and memory) in the same way that the industrial revolution gave us improved arms and legs. He claimed that in the information revolution, the first one to evolve within the lifetime of a single generation, we are laying a chief cornerstone of the world to come. Next, **President Bauknecht** thanked the International Program Committee and all speakers and participants.

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The presentation of the Isaac L. Auerbach Award (see the article on page 3 of the September *Newsletter)* was made by **Mr. Howard Funk** (USA), an **IFIP** vice-president. Because of health problems, the award recipient, **Prof. Dr. Lubomir Iliev** (BG), was unable to attend the Congress. In his stead, **Prof. Kiryl Boyanov** (BG) read his words of thanks to **IFIP,** in which he said,

> The cooperation amongst countries that was done with the help of **IFIP** played a major role not only in the development of Computer Science and Informatics but also in improving the atmosphere and mutual relations between our countries and scientists. I hope that the role and influence of **IFIP** will grow further and further and that the organization will be able to influence the emergence of new achievements for the good of mankind. I would like to express my deepest gratitude, once more, and to assure you, dear friends, that I am with you in my thoughts and I am proud that I was one of you.

This was followed by a video on **IFIP** Congress '98, narrated by the co-chairs of the Organizing Committee, **Dr. Walter Grafendorfer** (A) and **Mrs. Maria Toth** (H). **Prof. Bauknecht** closed by thanking the very friendly Organizing Committee and asking the delegates to "join us in reality" at **IFIP** Congress '98 in Vienna and Budapest.

All in all, the delegates had a very pleasant experience. The National Convention Centre, the locale of the Congress, is a new, modern, comfortable facility and proved to be an excellent site for the Congress and exhibition. The staff members were helpful and friendly. A lively daily newsletter was prepared by the hosts. (Copies, along with photographs, can be found on the WWW at

http ://www. ac s. org. au/president/ 1996/ifip96/dlyexp.htm)

Foreigners were impressed with the honor system in effect: nobody checked badges at the entrance to Congress sessions, and nobody collected tickets to social events. Also, Canberra was beautiful.

Added Information

The two volumes of Congress proceedings, published by Chapman & Hall, are *Advanced IT Tools,* edited by **Dr. Nobuyoshi Terashima** (J) and **Dr. Edward Altman** (J), and *Mobile Communications,* edited by **Prof. Jose Encarnação** (D) and **Prof. Jan Rabaey** (USA).

The Principal Sponsors of the Congress were Apple Computer Australia Pty. Ltd., Australian Department of Industry, Science and Tourism, Hitachi Data System, IBM Australia Ltd., and Wizard Information Services Pty. Ltd. There were also other categories of sponsors.

The following attendance figures have been provided by **Prof. Goldsworthy:** 243 people outside of Australia attended, not all of whom paid the full registration fee, and over 300 Australians registered. The fifteen workshop sessions, in Canberra, Melbourne, and Sydney, attracted 75 participants. The following countries sent the largest numbers of delegates to Australia:

Japan (45) Netherlands (9)
Germany (32) U.K. (9)
Norway (20) China (8)
U.S.A. (18) Korea (8)
Sweden (8)

Only one delegate came from a country of the Former Soviet Union (Ukraine). Few delegates came from major corporations in the information technology sector.

It is believed that just one individual, **Mr. William 011e** (GB), has attended all fourteen **IFIP** Congresses. Will anyone who knows of any other such participant please inform the ***IFIP*** *Newsletter.*

The future of **IFIP** Congresses is discussed in an article on this page. ■

The Future of IFIP Congresses

In his remarks at the closing session of **IFIP** Congress '96 (see the article beginning on page **1), Prof. Kurt Bauknecht** (CH), president of **IFIP,** pointed out that this Congress had the lowest attendance in many years and that the **IFIP** Executive Board was beginning an analysis of why this happened. He asked these questions: Are Congresses still the right thing to do? Is the format appropriate? Since important decisions must soon be made for the Congresses to be held in 1998 and 2000, it is vital that the **IFIP** community be aware of the issues concerning **IFIP** Congress '96 and the future of **IFIP** Congresses.

Very little discussion of the Congress took place at the **IFIP** General Assembly in Canberra, which followed the Congress. Only 20 minutes were allocated for discussion, and no written reports were prepared by the International Program Committee (IPC) or Organizing Committee (OC). No numbers regarding attendance or financial outcome were presented, because the OC wanted more time to analyze the results. Attendance figures that were available subsequently can be found elsewhere on this page. Although only 300 Australians attended this Congress, 1222 Australians attended the 1980 Congress in Melbourne. (That Congress was split between Tokyo and Melbourne.) Also, only 19 of the 35 **IFIP** General Assembly members present in Canberra registered for the Congress.

Considering the vast amounts of volunteer effort expended on the Congress by members of the IPC, OC, and other bodies of **IFIP,** and the large amount of money involved in registration fees and travel and accommodation expenses, and donations from sponsors, some feel that that it is unreasonable to hold such Congresses for such a small number of participants.

Some Minuses

The positive aspects of the Congress were presented in the article beginning on page 1. Unfortunately, there were some minuses. With only three or four parallel streams at a time, this Congress did not offer the breadth provided by previous **IFIP** Congresses and was not of significant interest to anyone not specializing in the topics covered by the three component conferences. None of the keynote speakers or invited speakers had the renown of such speakers at prior Congresses, who were known well beyond their fields of specialty. Some delegates found the Teleteaching program weak.

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In behalf of Prof. Prof. Boyanov (left) received the Auerbach Award from Mr. Funk.

The registration fee ($950 Australian, or over 950 Swiss francs, for registration at the Congress site) was much higher than is customary for conferences similar to the three held under the **IFIP** Congress '96 umbrella. Additional fees were charged for many activities that have been included in the registration fee in the past.

Other complaints heard from delegates included the following. There was a geographic imbalance of authors: for example, over one third of the papers in the Mobile Communications conference were from Germany, and very few papers were presented from the U.S. Several speakers did not attend. (No figures are available on the number of "no-shows.") Also, some papers in the proceedings were in the form of extended abstracts.

Did Something Go Wrong?

It behooves us to determine why the Congress was not the success we would have liked it to be. Certainly, hard work went into it. The OC mailed almost a quarter of a million pieces of promotional material. The IPCs of the individual conferences were large and should have been able to draw many attendees: 29 members on the committee for Advanced IT Tools, for which 61 papers were presented, 27 members on the Mobile Communications committee, with 33 papers, and 21 on the Teleteaching committee.

These issues were raised at a meeting of the **IFIP** Executive Board with chairs of Congress committees, past, present, and future, held the Wednesday afternoon of the Congress. Unfortunately, there was little agreement. One participant suggested soliciting many more invited papers and paying expenses for some of the speakers, while another expressed the opinion that there should be more opportunity for young Ph.D.s to present papers. Perhaps the problem was with the venue. Canberra is not considered a major Australian tourist site, and the beginning of September is a chilly time there. The time of year may also be wrong for Europeans. An explanation of the very small attendance from developing countries is that no support for delegates from these countries was received from UNESCO this year. An **IFIP** officer said that the name "**IFIP** Congress" is tarnished and that a new name is needed. Someone called for the formation of a Congress steering committee that would be responsible for all Congresses, have control of the IPCs and OCs, and manage the funds. Perhaps **IFIP** Technical Committees and Working Groups should be offered incentives to organize parts of the Congresss. Maybe people cannot afford any longer to take off an entire week from work. The chair of one of the conferences said, "If you have a good product, people will come." One concern, not mentioned at the meeting, is that **IFIP** receives an average of 50 000 Swiss francs annually from Congress organizers, money that it uses to support its technical activities. **Dr. Bruce Shriver,** chairman of the board of the U.S. Member society of **IFIP** and newly appointed vice-chair of the IPC of Congress '98, called attention to the Supercomputing series of conferences, which have an international attendance in the thousands, charge low registration fees, and are profitable.

What to Do?

The discussion group was reminded that the new format of this Congress (as an umbrella for a number of individual conferences) was an experiment, to see whether this was the direction that future Congresses should take. The experiment was obviously not successful, yet the 1998 Congress is also planned to be an umbrella of individual conferences. Perhaps the General Assembly should set some reasonable number of paying delegates as a target for that Congress. If that number is not reached, despite everyone's best efforts, the GA should decide that **IFIP** Congresses are relics of the past and should be abandoned. (Of course, **IFIP** must honor any commitments already made to the host societies for future Congresses.)

Without the Congresses, **IFIP** would still be a vital federation, responsible for a large number of technical conferences and publications annually. And **IFIP** does this very well. Discontinuing the Congresses might allow **IFIP** to focus more on these activities and serve to revitalize the organization.

Membership Matters Discussed in Canberra

More than One Member per Country Is a Possibility

Two aspects of **IFIP** membership arose during discussions at the **IFIP** General Assembly (GA) in Canberra in September: the possibility of multiple members from one country and the present stagnant membership.

The first of these topics, discussed at a number of meetings in Canberra, was whether **IFIP** should change its statutes in order to permit more than one organization in a country to join **IFIP.** At present, the Full Members represented in **IFIP** include the unique computer societies of countries, the national academies of science, confederations of computer societies, and organizations formed solely to provide representation in **IFIP** (e.g., Focus in the U.S.).

At present, only one organization per country is permitted to join **IFIP,** generally the first one to apply for membership. Once that organization has been admitted, it cannot be replaced — even if another organization later becomes the predominant information processing society in the country. This may result in a situation that is bad for the country and bad for **IFIP.** In order to eliminate such problems, it has been proposed that more than one Full Member per country be admitted. Many practical questions arise, such as

- How many votes per country should be allowed?
- Should there be a limit to the number of Full Members per country?
- Will the **IFIP** Technical Committees be enlarged to accommodate the additional members?
- Might there be competition among the Members from a country to sponsor an event held in their country?
- How would the dues be adjusted?
- Should a Member society be permitted to veto the admission of another society from its country?

It was pointed out that because of the expenses entailed in dues and sending representatives to GA and TCs, there would probably be very few countries from which additional membership applications would be coming. It was also suggested that **IFIP** continually evaluate the contributions of its Members and attempt to weed out those not substantially furthering the Federation's activities.

IFIP's president, **Prof. Kurt Bauknecht** (CH), has sent a letter to all Members, in order to solicit their advice on this subject, in preparation for bringing the matter to a vote in the 1997 GA (in Gramado, Brazil).

Static Membership

It was observed that the **IFIP** membership has been stagnant for a few years, as illustrated by the secretary's report to the GA. The report stated that the Brazilian Computer Society has now fulfilled the requirements for Membership in **IFIP** and is a Full Member. Unfortunately, Belarus, admitted at the same time as Brazil, has not been able to pay the prescribed dues and has been forced to withdraw. Similarly, since no representative from Armenia has attended a GA meeting,

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IFIP General Assembly Meets in Australia

The **IFIP** General Assembly (GA) met in Canberra, Australia, 8-10 September, preceded by **IFIP** Congress '96 and various committee meetings. There was good news and bad news. The good news concerned the present financial situation and the thriving technical activity; the bad news concerned the just-completed Congress and the stagnant membership. Processes of developing a long-term strategy for **IFIP** and restructuring the Technical Assembly (TA) were begun (see the article on page 7). A new initiative was undertaken with respect to electronic publishing and publishing low-volume proceedings (see page 11). Four new Working Groups (WGs) were formed. New officers were elected (page 2), and **IFIP** said farewell to several long-time officers (page 8). It was a busy GA.

Mr. Worthington

The GA was welcomed by **Mr. Tom Worthington,** president of the Australian Computer Society (ACS), who urged **IFIP** to provide more on-line information. His message to the GA can be found on the ACS WorldWide Web page at http://www. acslink.net.au/_tomw/ifipad1.htm Among his on-line exploits was taking digital photographs of Canberra from a hot-air balloon, in order to promote **IFIP** Congress '96.

In reporting on the GA, we start with the good news: **Mr. Aage Melbye** (DK), then the **IFIP** treasurer, estimated a surplus of 200K-250K CHF (thousands of Swiss Francs) for 1996. The net assets at the end of 1995 were 1460K CHF. The anticipated 1996 income includes 100K CHF due from the Australian Computer Society, for the Congress. Additional explanations for the surplus are satisfactory income from **IFIP** events and from royalties, and efficient operation of the **IFIP** Secretariat. The prediction that the move of the Secretariat from Switzerland to Austria would save significant funds for **IFIP** has been justified. However, **Mr. Melbye** cautioned the GA not to be overconfident of the continued financial well-being of **IFIP** and noted that the previous three years have seen small losses. He urged the GA to be very careful in initiating any significant, continuing fixed expenses. A disturbing aspect of his report was the description of the difficult relationship with the new accounting firm and the unexpectedly large fees charged. The budget that the GA approved for 1997 is quite similar to that for 1996, calling for a deficit of approximately 20K CHF, essentially a balanced budget. An additional expense item is approximately 30K CHF added to the President's Reserve, which is to be used for unanticipated Secretariat expenses, the possible hiring of a marketing consultant, and funds required to put into place the strategic plans for **IFIP** that are discussed in the article on page 7. A disappointment was that certain budgeted funds were not spent. In particular, when the Developing Countries Support Committee does not spend moneys available to it, **IFIP** fails to fulfill its responsibility to support developing countries.

Technical Activity

One proof of the technical vitality of **IFIP** is the creation of four new WGs: Information Technology in Educational Management (WG3.7), Intelligent Networks (WG6.7), Wireless Communication (WG6.8), and Informatics in International Business Enterprises (WG8.7). Their Aims and Scopes will be printed in a future ***IFIP*** *Newsletter.* The merging of WG12.1 on Knowledge Representation and WG12.3 on Reasoning Techniques was also announced.

Members of the Technical Committee on Education (TC3) were heavily involved in running the UNESCO Congress on Education and Informatics held in Moscow, Russia, in July. The president of **IFIP, Prof. Kurt Bauknecht** (CH), spoke in the opening session, and many **IFIP** people gave presentations during the week. Two workshops, The UNESCO **/IFIP** Curricula and Educational Policies in Information Technologies, were prepared and conducted by **IFIP** people. The recommendations from this Congress included the following: a) "UNESCO should encourage the organization of workshops (seminars) in developing countries based on the UNESCO/IFIP curriculum on *Informatics for Secondary Education,"* b) "UNESCO is urged to consider co-operating with concerned nongovernmental organizations and professional associations such as **IFIP** in order to stimulate research on the improvement of computer interfaces for learning...," and c) "It is recommended that UNESCO considers commissioning **IFIP ...** to prepare a report on 'National Policies on Information and Communication Technologies in Education.' Although the report should cover the widest spectrum of policies, it should also specifically address the needs of developing countries."

The GA approved the transformation of the Specialist Group (SG) on Foundations of Computer Science (SG 14) into TC1, thus recognizing the solid basis of its activity. This was an appropriate recognition of **Prof. Jozef Gruska** (SK), through whose efforts this SG was founded seven years ago. (The original TC1, on Terminology, was dissolved in 1974. It seems quite appropriate, because of the significance of theoretical computer science to **IFIP,** that the new TC have number 1.) The membership of the TC must now be adjusted to conform to the rule that each **IFIP** Member society may have only one representative on a TC.

The GA discussed the increase in the number of events held jointly with other organizations (especially the U.S. ACM and the Computer Society of the Institute of Electrical and Electronics Engineers [IEEE]). Holding joint events is viewed as positive by some, since collaboration is frequently beneficial and gives greater visibility to **IFIP.** Others are concerned about competition and feel that **IFIP** should sponsor only its own events. **Prof. Egon Hörbst** (A), chairman of TC10, pointed out the global nature of **IFIP** with an analogy to global corporations, which are worldwide and are based in no specific country. Local companies, on the other hand, do business only locally, and international companies do business worldwide but have a base in one country.

TC reports to the GA varied in length from a four-line report from TC10 (Computer Systems Technology) to quite extensive, informative reports from other TCs. Among the technical activities that were reported are the following:

• The SG on Smart Cards (SG16) is considering the production of a book on that topic. It would be a tutorial, primarily a guide for designing new applications. No such book presently exists. It is expected

that the SG will soon be transformed into a WG. TC8 on Information Systems will consider whether it can provide an appropriate home.

• The World Conferences on Computers in Education (WCCEs), sponsored by TC3, are by far the largest **IFIP** events now held. Two thousand participants are expected for WCCE '01. (It should be recalled that although an attendance of over 2000 was predicted for WCCE '95, only 1500 delegates attended. The proceeds to **IFIP** from that WCCE, not yet determined, are likely to be small because TC3 does not plan to pay **IFIP** the established sponsorship fee.)

• For **IFIP** Congress '98, liaison committees will provide technical and social links between the International Program Committees of the different component conferences. One of these committees, for young people (ages 15-25), will organize special events in each conference and common sessions, panels, and other sessions. Another committee will be responsible for tutorials.

• The Organizing Committee for Congress '00 solicits suggestions for themes and topics. Please send any suggestions to

Mr. Mengqi Zhou or Ms. MM Fang
P.O. Box 165
Puhuinanli Building No.13
Beijing 100036, China
e-mail: shaz@sun.ihep.ac.cn
fax: 86-10-68283458

• Several Member societies of **IFIP** report that they have adopted codes of ethics as a result of the work **IFIP** has done in this area (see the article on page 8 of the September 1996 ***IFIP*** *Newsletter).* Only seven Members, however, have nominated contact persons to the Special Interest Group on Framework on Ethics (SIG9.2.2). All Members interested in the issues surrounding ethics are urged to do so.

• The committee on the Harmonization of IT Professional Standards presented a timetable for its work. A letter will be sent to the International Standards Organization and the World Trade Organization to offer IFIP's assistance in developing a harmonized set of standards for IT professionals and practitioners.

• A plan by WG6.5 to hold a "virtual conference" (see the article on page 1 of the June 1996 *Newsletter)* was not carried out. We hope to have further information in a future *Newsletter.*

• TC12 on Artificial Intelligence is planning to change its focus — to concentrate on integrating AI technology into the rest of the information technology field. The TC is holding a conference on Information Technology and Knowledge Systems as part of **IFIP** Congress '98.

• TC2 on Software: Theory and Practice is working to narrow the gap between theory and practice.

• TC5 on Computer Applications in Technology is also undergoing a restructuring, in order to respond to new industrial and academic needs.

Other Items

Recognizing the excellent work of **Mr. Plamen Nedkov** (BG), the Executive Board conferred the title Executive Director on him.

The book *Thirty-Six Years of* ***IFIP*** by **Prof. Heinz Zemanek** (A) has been completed (see page 9).

A new version of the ***IFIP*** *Information Bulletin* was printed in November. This abbreviated version is supplemented by additional on-line data, which can be found at the addresses given in the masthead on page 2.

No progress was reported in the effort to have **IFIP** admitted to membership in ICSU, the International Council of Scientific Unions (see the article on page 10 of the December 1995 *Newsletter).* Some GA members felt that **IFIP** should attempt to persuade ICSU that **IFIP** is the proper organization to represent theoretical computer science within ICSU. Others expressed the opinion that **IFIP** should support the formation of the proposed International Union of Computing Science and Informatics and cooperate with it, since **IFIP's** aims and those of the Union would be complementary and not competing. **President Bauknecht** will attend the next ICSU General Assembly to discuss this matter.

Other significant actions include the following:

• Outstanding Service Awards were granted (see the article on page 8).

• The Marketing Committee did not meet, and its plan to hire a consultant to aid it in achieving its mission (see the article on page 8 of the June 1996 *Newsletter)* was postponed.

• Site selection for **IFIP** Congress '02 was postponed from 1997 to 1998, in order to allow time for the GA to decide whether to return to the triennial Congress cycle.

• Event organizers were warned to use **"IFIP"** in the title of their events, in order to avoid situations like those that have occurred before, in which other organizations have appropriated the name of the event.

• The Statutes and Bylaws were amended, most significantly by a) providing for the positions of Secretary-Elect and Treasurer-Elect, and b) abolishing the position of Cognizant Officer.

New Committee for Strategic Planning

Future Form of the Technical Assembly Is Not Clear

An effort to restructure the **IFIP** Technical Assembly (TA) has resulted in the creation of a Strategic Planning Committee but no change, so far, in the organization of the TA. The process began because complaints were voiced in 1995 that there was too much duplication in the reports by the Technical Committee (TC) chairmen in the TA and Council or General Assembly (GA) meetings. (When we mention TCs here, we also include Specialist Groups.) This resulted in the creation, at the 1995 GA in Calgary, Canada, of a task force to study this matter.

The TA was originally created to formulate long-term plans for **IFIP's** technical activities and to facilitate and promote cooperation among **IFIP's** TCs and Affiliate Members (AMs). It was also envisioned that the TA would be the means by which **IFIP** might serve as an "umbrella" organization for all societies related to information processing. As the TA has evolved, since its first meeting in 1988, more and more topics have been discussed there. Two or three years ago, it was suggested that all GA members attend the TA meetings (which have typically been held the day before the GA), in order that they understand the issues discussed in the TA and that the TC chairs need not repeat these discussions during the GA. Nonetheless, some believe that there is still too much overlap.

continued on page 8

The GA was not without its light moments. Commenting on the formation of a committee, **Mr. Martin Jones** (AUS), representative of Affiliate Member FACE (International Federation of Associations of Computer Users in Engineering, Architecture and Related Fields), said, "A committee is a group that keeps minutes but wastes hours." At another point in the meeting, a GA member's notebook computer began playing music and couldn't be turned off.

The GA was adjourned, with many thanks to the Australian hosts. The excellent facilities provided, in the National Convention Center, were among the best the GA has ever had, and the Australian friendliness was greatly appreciated. ▬

*Long-Time Officers Leave **IFIP***

With sadness, the General Assembly said farewell to four long-time officers who are resigning from their positions in **IFIP.**

Mr. Aage Melbye served as Danish representative for 19 years, on the Council for 16 years, on the Executive Board for 10 years, and as treasurer for 6 years. He brought order out of the chaos that previously existed in the **IFIP** accounting system. **Mr. Melbye** was one of the few people still active in **IFIP** who had attended the first **IFIP** Congress (in Paris in 1959).

Mr. Masanori Ozeki was Japanese representative for 9 years, trustee for 8 years, and most recently chairman of the Admissions Committee.

Prof. Martti Tienari served as Finnish representative for 9 years, as trustee for 7 years, and most recently as chair of the Technical Assembly.

Prof. Jozef Gruska (SK) initiated the formation of the Specialist Group on Foundations of Computer Science (now Technical Committee 1) in 1989 and has been its chair since then.

These four have served **IFIP** with great devotion and will be sorely missed for their contributions to **IFIP** as well as for their comradeship.

Outstanding Service Awards

In September, the **IFIP** General Assembly (GA) voted the Outstanding Service Award to the following **IFIP** workers:

TC10/WG10.5:
Prof. Carlos Delgado-Kloos (E)
TC10: **Dr.ir. Erik Dirkx** (B)
Prof. Claude Girault (F)
WG10.5: **Dr. Takayuki Yanagawa** (J)
WG14.3: **Prof. Hans-Jorg Kreowski** (D)

Outstanding Service Awards are granted for services rendered to **IFIP** by Technical Committee (TC) and Working Group (WG) members, on recommendation of TC chairmen and approval by the Internal Awards Committee. Eligible for nomination are TC and WG members not normally eligible for the Silver Core Award.

STRATEGIC PLANNING cont. from p. 7

The major recommendations of the task force, chaired by **Prof. Martti Tienari** (SF), then TA chairman, are as follows:

General:
• The technical/scientific activities are the raison d'être of **IFIP.** These matters should not be discussed solely in the TA, away from the national representatives.
• The agenda of TA meetings should be shortened, and new items of strategic significance should be included.
• The TA should take up ideas and proposals from **IFIP** Member societies, TCs and other committees, in order to discuss and develop strategic issues and plans for presentation to the GA.

Scope of agenda:
• The TA should not discuss routine matters. It should concentrate on broad, significant, strategic issues.
• TC reviews, changes in TC/WG (Working Group) structure and changes in TC/WG aims-and-scope statements should be handled only at the TA. Normally, every TC chair would give his/her report at the GA/Council meeting but not necessarily at the TA. A TC chair could raise issues at TA whenever he/she wanted to discuss some strategic issues, problems, perspectives, or proposals of general interest for **IFIP** and other TCs.
• **IFIP** Congress programs and publication, marketing, finance, and activity-management matters should be handled only at GA/Council meetings.
• Affiliate Members should report only in GA/Council, not in the TA.

Composition:
• A smaller body is proposed, in order to improve the intensity and range of discussions. The task force proposes the following new composition:

5 members of the Executive Board (treasurer and secretary excluded)
chair of the Activity Management Board
all the TC chairs *who have been in their office at least two years*
3-6 additional members, by invitation of the **IFIP** president or TA chair, for specific issues

Difficulties of this proposal include the following. It would not provide new TC chairs any forum in which to ask advice, discuss problems, air concerns, and become familiar with **IFIP.** TC chairs and AM representatives would have no opportunity to discuss matters that they would be reluctant to discuss before the entire GA. It would not provide AM representatives the opportunity to participate in discussions that would be of value to them.

After a great deal of debate, the September GA in Canberra resolved 1) to establish a Strategic Planning Committee, for making recommendations to the GA on issues concerning the future strategic directions of **IFIP,** and 2) to invite the TC chairs to propose an appropriate revision of the TA. IFIP's president, **Prof. Kurt Bauknecht** (CH), named **Prof. Ashley Goldsworthy** (AUS), a vice-president, to chair the Strategic Planning Committee, which is to be a small body. At the close of the GA, no proposals had been received for a revision of the form of the TA. **President Bauknecht** appointed **Prof. Wilfried Brauer** (D), a vice-president, to chair the TA, which will meet again at the March Council meeting in Bratislava, Slovakia.

In order to move forward in the direction of strategic planning, a "brainstorming" session was held in the GA the afternoon of 9 September. First, a long list of visions of the future of **IFIP** was compiled by those present, from realistic (such as "the world's conscience on the use of information technology [IT]") to hopeful (e.g., "the leading international publisher of IT") to humorous ("a social club for retired IT practitioners"). The GA then chose five of the visions to analyze:

IFIP is the most desirable international body, to which all computer societies desire to belong.
IFIP has the most desirable structure for international IT working groups.
IFIP is the leading international IT conference organizer.
IFIP is the international bridge between science and business.
IFIP is recognized as the peak international umbrella body for IT issues.

The GA then formed five groups, each of which derived a set of "objectives" (conditions to be met before the vision is realized) and "goals" (steps to be taken in order to achieve the vision). These were then reported to the following plenary session of the GA. The Strategic Planning Committee will take these reports into account during its future deliberations.

TECHNICAL COMMITTEE CHAIRMEN

TC1:	J. Gruska	SK 89-96
TC2:	R. Kurki-Suonio	SF 95-97
TC3:	P. Bollerslev	DK 91-96
TC5:	G. Doumeingts	F 96-99
TC6:	0. Spaniol	D 92-97
TC7:	P. Kall	CH 95-98
TC8:	B. Glasson	AUS 96-98
TC9:	P. Jaervinen	SF 96-98
TC10:	E. Hörbst	A 93-96
TC11:	B. von Solms	ZA 94-98
TC12:	L. Carlucci-Aiello	I 96-98
TC13:	J. Hammond	AUS 95-98

36—Year Book Now Complete

Zemanek Thanked

The completion of the book *36 Years of **IFIP*** by **Prof. Heinz Zemanek** (A), a former president and Honorary Member of **IFIP,** was announced to the September General Assembly in Canberra. Copies of this major undertaking, summarizing all facets of **IFIP** and containing contributions from many members of the **IFIP** community, have been sent to all Member societies and GA representatives. The GA expressed its gratitude to **Prof. Zemanek** for a job well done. Although the book will not be for sale, plans are afoot to make it available on the WorldWide Web. ■

Autonomous Decentralized Systems

Driven by the increasing power, intelligence, reliability, and openness of computer, communication, and control technologies, a new generation of distributed systems is emerging, which will be able to support distributed business and control applications with extreme efficiency, reliability, and security. Such systems are expected to consist of mostly autonomous, decentralized, and geographically dispersed components interacting via communication networks.

After the successful first and second International Symposia on Autonomous Decentralized Systems (ISADS), held in 1993 in Japan and in 1995 in the U.S.A., the third ISADS will be held in Berlin, Germany, 9-11 April 1997. ISADS 97 is sponsored by the Computer Society of the Institute of Electrical and Electronics Engineers (U.S.A.), the Information Processing Society of Japan, and the Society of Instrument and Control Engineers of Japan, in cooperation with **IFIP's** Technical Committee on Communication Systems (TC6) and others. It will focus primarily on advancements and innovations in autonomous decentralized systems (ADS) platforms and applications. Integration of telecommunication and computing into a uniform concept for providing an open distributed processing environment is a key issue.

The general chair of the symposium is **Prof. Radu Popescu-Zeletin** (D), and the chair of the International Program Committee is **Prof. Juergen Nehmer** (D). For further information, please contact

ISADS 97
GMD-FOKUS
Hardenbergplatz 2
D-10623 Berlin, Germany
tel: +49-30-25499-309/200, fax: +49-30-25499-202
e-mail: isads97@fokus.gmd.de
WWW: http://www.fokus.gmd.de/ws/isads97/ ■

Conference on Culture and Democracy Revisited in the Global Information Society

How can we cope with the sustainability of society if we are unable to understand and anticipate its cultural, social, political, economic, and technological developments? What happens to jobs and work-related skills when we face the rapid integration of information and communication technology unaccompanied by vocational retraining? What is the value of technological developments that do not meet the human needs of society? Are there not threats to civil rights from particular technologies and especially from the integration of what were formerly separate technologies? These are the questions and anxieties that may arise when we reflect on the trends emerging from uncertain and complex developments of today's technology.

In order to further explore these issues, the **IFIP** Working Group on Social Accountability (WG9.2), with the support of WG9.5 (Social Implications of Digital Media and Virtual Worlds), is organizing a working conference in Corfu, Greece, 8-10 May 1997. Corfu is the place where the European Council accepted the "Bangemann Report," its official statement on the future of the global information society, in 1994. Since that time, the preceding questions have emerged.

The Corfu Conference on Culture and Democracy Revisited in the Global Information Society will be a true working conference. Papers will present insights and will outline issues, from which participants will derive options, alternatives, solutions, and actions. The outcome of the Conference will be recommendations for decision makers, computer scientists and professionals, consumers' and users' associations, and others. These recommendations will be included by the editors in the Conference proceedings.

The chairman of the International Program Committee is **Prof. Jacques Berleur** (B), and **Mr. Vassilios Laopodis** (GR) is chair of the Organizing Committee.

To submit a paper, please contact **Prof. Berleur:**
jberleur@info.fundp.ac.be
For further information, please contact

IFIP WG9.2 Working Conference Secretariat
Greek Computer Society
Mavromihali 16
GR-10680 Athens, Greece
tel: +30-1-36.45.274, fax: +30-1-36.45.154
e-mail: corfu@ru.aegean.gr ■

Conference on IT Security in Research and Business

Within the last five to ten years, information technology (IT) has entered all important areas in society, from food production to waging war. Our mere being and survival as social and biological beings as well as civilizations depend strongly on well functioning, safe, and secure IT. We must learn how to develop, operate, and manage IT structures so that individuals, companies, and societies can continue to live in a changing but reliable, safe, and secure world. In order to address these issues, the **IFIP** Technical Committee on Security and Protection in Information Processing Systems (TC11) is organizing the 13th International Conference on Information Security, IFIP/SEC'97. This conference, entitled IT Security in Research and Business — Maturing Towards the Future, will be held 14-16 May 1997 in Copenhagen, Denmark. It will comprise invited lectures, refereed papers, student research papers, panel discussions, and workshops.

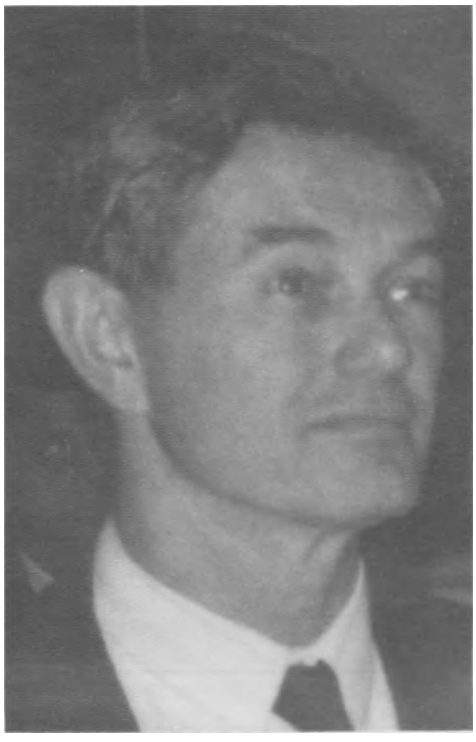
The conference general chair is **Mr. Jan Carlsen** (DK), and **Prof. Louise Yngström** (S) is chair of the International Program Committee. For further information, please contact

International Conference Services A/S
P.O. Box 41
Strandvej en 171
DK-2900 Hellerup, Copenhagen, Denmark
tel: +45 39 46 05 00, fax: +45 39 46 05 15
e-mail: ifip97@ics.dk

or

Danish Data Association
tel: +45 33 11 15 60, fax: +45 33 93 15 80
e-mail: ddf@sek.ddf.dk
WWW: http://www.datasik.dk/SEC97/index.html ■

Who's Who in IFIP: Mr. Geoff Fairall



Mr. Geoff Fairall, the **IFIP** representative of Zimbabwe and an **IFIP** vice-president, was born in England but re-located at an early age to Southern Africa, where he received his education — in South Africa and Rhodesia (now Zimbabwe).

He was one of Zimbabwe's first programmers, starting work on the government treasury computer, the first machine in the country and approximately the fifth on the African continent. This was from 1960 to 1964, after which he joined NCR to manage the first service bureau, holding various senior posts with that company and its South African counterpart for eleven years. Because of the trade sanctions then in force, this was a particularly challenging period. In 1975, he moved to the Zimbabwe Banking Corporation, where he also spent eleven years, overseeing the development and operation of their computer systems throughout the country, eventually serving as a General Manager. From there, he joined the Central Africa Building Society in a similar role. In 1989, he formed his own information technology (IT) consultancy company, G. R. Fairall (Pvt.) Ltd., which currently has five full-time consultants specializing in electronic funds transfer and banking, but also assisting the medical and business sectors. The company was responsible for the recent establishment of an inter-bank automatic teller machine switch in Zimbabwe and has been commended by the International Monetary Fund for its work in managing the project to re-computerize the Reserve Bank of Zimbabwe.

Mr. Fairall is a founding member, past-president, and Fellow of the Computer Society of Zimbabwe (CSZ) and is also a Member of the British Computer Society and the Computer Society of South Africa. Currently, he is the Secretary and general factotum of CSZ. He received the CSZ President's award in 1995. He has also written and presented numerous papers and articles.

He was introduced to **IFIP** in Dublin in 1986, where he attended the General Assembly (GA) as an observer. Since the admission of CSZ to **IFIP,** the following year, he has attended all but one of the GAs. In 1991, he organized the GA in Harare, Zimbabwe. He was elected an **IFIP** trustee at that time and reelected in 1994. He chaired the Developing Countries Support Committee from 1992 to 1995, served as cognizant officer for Technical Committees, and organised a TC6 meeting at Victoria Falls in 1987. In 1995, he was elected an **IFIP** vice-president and reelected in 1996. He is currently the Organizing Committee chair for the CCDC/AFRICOM'96 conference being hosted in Harare in October by CSZ, TC6, and the International Council for Computer Communications (ICCC).

Mr. Fairall has lived in Zimbabwe since his early school days. He and his wife, Connie, have three grown children, one of whom is in the IT industry. Visiting the wilder parts of Zimbabwe and observing the country's animal and bird population is his chief form of relaxation. ■

International Symposium on Integrated Network Management to Be Held in San Diego Next May

The Fifth International Symposium on Integrated Network Management, IM '97, will be held 12-16 May 1997 in San Diego, CA, U.S.A. The symposium is sponsored by the **IFIP** Working Group on Network Management for Communication Networks (WG6.6) and by the U.S. IEEE Communications Society Technical Committee on Network Operations and Management (CNOM).

Since 1989, IM has provided a central technical exchange forum for the many communities interested in network management. With the global information infrastructure growing at an exponential rate, IM '97 promises to build on the successes of previous symposia and provide a unique opportunity for exploring integrated management solutions with a diverse international community.

The theme, Integrated Management in a Virtual World, challenges participants to contribute real and virtual management solutions in a world filled with virtual corporations, virtual LANs (local area networks), inter-enterprise inter-networking, real and virtual service management, outsourcing, and electronic commerce. The speakers are expected to bring the buzz words down to earth and present world-class solutions to the integrated management puzzle.

In addition to over 55 technical papers, the symposium will include 3 keynotes, 6 panels, 16 tutorials, birds-of-a-feather sessions, and vendor demonstrations. The chair of the Organizing Committee is **Dan Stokesberry** (USA), and the program co-chairs are **Aurel A. Lazar** (USA) and **Roberto Saracco** (I). For further information, please contact

Anne-Marie Lambert
tel: +I 617 873 3819, fax: +1 617 873 3776
e-mail: isinm97@bbn.com •

Publications Were a Major Topic at General Assembly

Plans Are Put Forward for Publishing Low-Volume Proceedings and for Electronic Publication

IFIP publications were a major topic of discussion at the September **IFIP** General Assembly. During 1996, 36 **IFIP** books are being produced by Chapman & Hall (C&H), our publisher. Sales are close to the expected levels. Some books, in fact, have exceeded projected sales to such an extent that they are being reprinted.

Mr. Mark Hammond, representative of C&H, reported that the publisher is contacting abstracting services in order to have abstracts of the papers from **IFIP** proceedings included in their databases. He informed the Publications Committee (PC) that the new journal of the TC on Education (TC3), *Education and Information Technologies,* is behind schedule, in need of manuscripts, and far from meeting the projected number of subscriptions. We plan to include an article about this journal in a future issue of the ***IFIP*** *Newsletter.*

Low-Volume Proceedings

Publication of conference proceedings that are deemed by the publisher to have sales insufficient to cover the costs of marketing was a major topic of discussion at the PC meeting. Publication of these low-volume proceedings is highly desirable, in order to provide the authors with a publication vehicle and to promulgate the work of **IFIP.** The PC arrived at the following plan.

- **IFIP** will publish these low-volume proceedings, using a name such as ***IFIP*** *Press,* and retain the copyrights.

- For each such proceedings, the International Program Committee (IPC) of the conference will generate the camera-ready copy as usual. The organizers will print enough copies for the conference attendees. If they wish, the organizers may retain extra copies for subsequent sale. (It was originally proposed that these be sold by the **IFIP** Secretariat; however, this would be too great a burden on the Secretariat. It was also proposed that the Secretariat sell paper copies of individual papers. C&H will investigate the possibility for an agent to arrange for this.)

- In order that these books be recognized as officially published, **IFIP** will acquire International Standard Book Numbers (ISBNs) for them. The International Program Committees (IPCs) of the conferences will furnish copies of the proceedings to the **IFIP** Secretariat, which will assign the ISBNs.

- An effort will be made to find an organization (e.g., a university library) to store the archival copies.

- The conference IPC will place the table of contents of the proceedings and perhaps the abstracts or even the full text of the papers on the conference WorldWide Web pages. The Secretariat will maintain a WWW page or pages with pointers to these conference pages. Soon, C&H will also include pointers to these pages on one of its pages.

There was a discussion concerning how to ensure that these low-volume proceedings be of high technical quality, maintaining IFIP standards. It was noted that only the proceedings editor monitors the process after the papers have been reviewed and selected for presentation. Neither the publisher, the TC chair, nor the International Program Committee is involved. In many cases, however, the editor merely collects the papers and forwards them to the publisher.

Electronic Publication

Electronic publication was another topic of importance. The 1995 **IFIP** Technical Assembly commissioned a task force to create a plan for action regarding electronic publication (see the article on page 7 of the December 1995 ***IFIP*** *Newsletter).* Although no further action has been taken within **IFIP,** C&H is considering electronic publication. Following are excerpts from **Mr. Hammond's** proposal to the PC.

> Chapman & Hall's journal publishing division is planning to launch 3 wholly electronic journals in 1997. Printed versions of the journals are made available at the end of each year, i.e., a complete volume. This ensures that these journals are viewed as archival publications. Authors will submit papers as PostScript files. After refereeing, revision, and acceptance, the papers are converted into a usable format for the Internet....
>
> With the help of the Publications Committee and TC Chairs, I would like to identify one or two pilot projects for on-line publication. It may be that a print version will be published alongside the electronic version. The aim, at this stage, is to address production issues associated with on-line publication. Issues of pricing, sales and marketing can be dealt with in due course.
>
> There is cost involved in converting the PostScript files. ... Consequently, the pilot projects must have some market potential. In the long-run, it may be possible to capture electronically the output of **IFIP** events. This information could be repackaged into new products, subject to demand, or made available on a subscription basis.
>
> I recommend that we identify one or two events taking place in the first half of 1997 that are suitable for on-line publication and develop and publish at least one wholly on-line publication in 1997.

The PC, while recognizing potential difficulties for authors in providing their manuscripts in satisfactory electronic format, endorsed this proposal and encouraged C&H to complete the pilot project as soon as possible.

During the discussion of electronic publishing, it was pointed out that in some cases, making complete books available on-line has boosted the sale of the printed versions, when the prices were low enough. In a related activity, TC6, together with the International Council for Computer Communication, is planning a Conference on Electronic Publishing (see the article on page 1). It is hoped that this conference will generate a body of **IFIP** expertise and experience.

MEMBERSHIP MATTERS continued from page 5

Armenia is not able to assume Membership. Greece has been suspended for failure to pay dues. Voting rights have been suspended for four other countries. At present, there are only 38 Full Members with a vote in the GA. Furthermore, some major countries have not sent representatives to the GA in years.

This disappointing situation is in contrast to the optimism felt at the time of the dissolution of the Soviet Union, when it was anticipated that several states from the former Soviet Union would be applying for membership. Although the **IFIP** dues are affordable for most countries, taking advantage of membership entails sending representatives to the GA and the Technical Committees. The required travel expenses are often significantly greater than the dues.

CALLS FOR PAPERS

Conf. on **Management and Control of Production and Logistics — MCPL'97**
31 Aug – 3 Sep 97, Campinas, SP, Brazil
papers due: 15 Jan 97
contact: Mr. Roberto de Oliveira
Fundação Centro Tecnológico para Informática
CTI–Rodovia D. Pedro I (SP-65) km 143,6
Caixa Postal 6162
13081-970 Campinas, SP, Brazil
tel: +55 19 240 10 11, fax: +55 19 240 20 29
e-mail: MCPL97@ia.cti.br

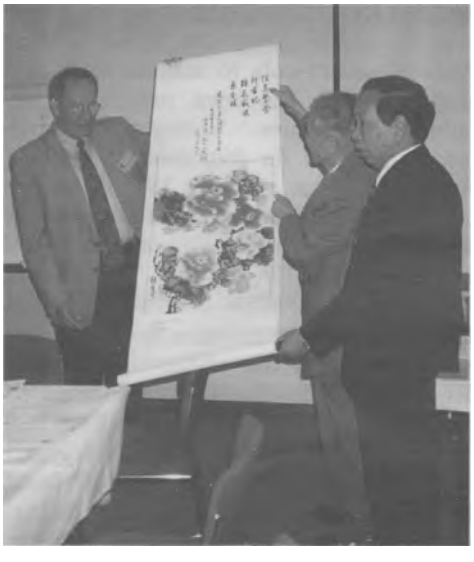
IFIP WG9.5 Intl. Conf. on **Virtual Worlds and Social Implications**
Aug 97, Santa Catarina, Brazil
papers due: 15 Feb 97
contact: Guenther Cyranek
CTAI/SENAI
Rodovia SC-401, 3730 Saco Grande
88032-000 Florianopolis–Santa Catarina, Brazil
tel & fax: +55 -48-238 51 77
e-mail: cyranek@ctai.rct-sc.br

Ninth **IFIP** TC10 Intl. Conf. **VLSI'97**
26-29 Aug 97, Gramado, Brazil
papers due: 20 Feb 97
contact: Luc Claesen/VLSI'97
IMEC/Katholieke Universiteit Leuven
Kapeldreef 79
B-3001 Leuven, Belgium
tel: +32-16-281203, fax: +32-16-281501
e-mail: Claesen@imec.be

IFIP WG6.3/WG7.3 Intl. Conf. on **Performance and Management of Complex Communication Networks**
17-21 Nov 97, Tsukuba, Japan
papers due: 28 Feb 97
contact: Prof. Yutaka Takahashi
Graduate School of Information Science
Nara Institute of Science and Technology
8916-5 Takayama, Ikoma
Nara 630-01, Japan
tel: +81-7437-2-5350, fax: +81-7437-2-5359
e-mail:yutaka@is.aist-nara.ac.jp

15th **IFIP World Computer Congress**
31 Aug – 4 Sep 98, Vienna, Austria,
and Budapest, Hungary
papers due: 16 Jan 98
contact: http://www.ocg.or.at/ifip98

Will event organizers please send calls for papers to both the **IFIP** Secretariat and the *Newsletter* editor. Note that calls cannot be listed in this column until the events have been approved by **IFIP.** ■



President Bauknecht (left) receives scroll from Dr. Junren Sun (center) and Dr. Mengqi Zhou, representatives of the Organizing Committee for **IFIP** Congress '00 (Beijing, China).

FUTURE IFIP MEETINGS

GENERAL ASSEMBLY AND COUNCIL (and related meetings)

Council	2-6 Mar 97 (Sun.–Thurs.)	Bratislava, Slovakia
GA	31 Aug – 4 Sep 97 (Sun.–Thurs.)	Gramado (Porto Alegre), Brazil
Council	1-5 Mar 98 (Sun.–Thurs.)	Manchester, U.K.
GA	5-8 Sep 98 (Sat.–Tues.)	Budapest, Hungary
GA	(contiguous to **IFIP** Congress '00)	Beijing, China

TECHNICAL COMMITTEE AND WORKING GROUP MEETINGS

WG1.3	Jun 97	Rome, Italy
TC2	30-31 May 97	Konstanz, Germany
WG2.1	17-22 Feb 97	Bischenberg, Alsace, France
WG2.2	97	Graz, Austria
WG2.3	27-30 Jan 97	Napa Valley, CA, U.S.A.
	22-26 Sep 97	Alsace, France
WG2.4	22-26 Sep 97	Estes Park, CO, U.S.A.
	Jun 98	Berlin, Germany
WG2.5	Oct 97	New Mexico, U.S.A.
WG2.6	28-30 May 97	Konstanz, Germany
	7-10 Oct 97	Leysin, Switzerland
	May 98	L' Aquila, Italy
	15-18 Dec 98	New Zealand
WG2.7/WG13.4	19-21 Mar 97	Atlanta, GA, U.S.A.
WG2.8	23-27 Sep 97	New Paltz, NY, U.S.A.
WG2.9	May 97	Haifa, Israel
	Jan 98	West Indies
	Jan 99	Dublin, Ireland
TC3	23-24 Aug 97	Harare, Zimbabwe
	Sep 98	Vienna, Austria
	99	Copenhagen, Denmark
TC5	8 Nov 97	Detroit, MI, U.S.A.
TC6	2-3 May 97	White Plains, NY, U.S.A.
	3-4 Apr 98	Stuttgart, Germany
TC7	22 Jul 97	Detroit, MI, U.S.A.
	Jul 99	Cambridge, U.K.
WG7.3	Jun 97	Seattle, WA, U.S.A.
WG7.4	Jul 97	Detroit, MI, U.S.A.
TC8	27-29 Jun 97	Ambleside, U.K.
WG8.1	5-7 Nov 97 (with QSSE)	India
	15-17 Jul 98	Beijing, China
WG8.2	Jun 97	Philadelphia, PA, U.S.A.
	Dec 97 (with ICIS)	Atlanta, GA, U.S.A.
	Dec 98	Helsinki, Finland
	Jun 99	St. Louis, MO, U.S.A.
WG8.4	Oct 97	Perth, Australia, Tucson, AZ, U.S.A., and Delft, the Netherlands
WG8.6	Jun 97	Ambleside, U.K.
	Dec 98	Helsinki, Finland
WG8.7	11 Jan 97	Maui, HI, U.S.A.
TC9	11-12 May 97	Corfu, Greece
WG9.2	17-19 Jan 97	Namur, Belgium
WG9.5	97	Brazil
TC10	Sep 97	Gramado, Brazil
	Sep 98	Vienna, Austria, or Budapest, Hungary
	Sep 99	Toulouse, France
TC11	May 97	Copenhagen, Denmark
	Sept 98	Austria or Hungary
TC13	Jul 97	Sydney, Australia
WG13.4/WG2.7	19-21 Mar 97	Atlanta. GA, U.S.A.

ELECTRONIC PUB. cont. from page 1

publishers, subscription agents, librarians, and others involved in information dissemination; author/reader requirements; and economic/financial questions. There will also be plenary sessions that cover the whole of electronic publishing.

A major underlying theme of the conference is the promotion of an "exchange of experience" between the participants — especially between academics performing research in the area and publishers and others with practical experience.

Prof. Jack Meadows (GB), Chairman of the International Program Committee, said, "We intend that this conference be a stimulating experience, with a great deal of cross-fertilization of ideas. The combination of practical experience and the latest discoveries of academic research will undoubtedly lead to new models of academic and other publication in the near future."

One can obtain further information from the World Wide Web at http://www.lboro.ac.uk/library/ICCC/index.htm

or by contacting

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Loughborough, Leicestershire LE11 3TU, U.K.
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Education and Information Technologies

Official Journal of the IFIP Technical Committee on Education

Editors: **Brian Samways, UK.** E-mail: bsamways@lea.birmingham.gov.uk
Holly Jobe, USA. E-mail: hjobe@mciunix.mciu.kiz.pa.us
Deryn Watson, UK. E-mail: deryn.watson@kcl.ac.uk

ISSN: 1360-2357, Volume 2 (1997), 4 *issues per* year

New technologies have the ability to liberate the learner and the teacher, enabling their time to be used more efficiently. The need for a publication to address the issues which have arisen as a result of this has lead to the timely creation of **Education and Information Technologies.** In addition to more efficient learning, information systems can improve and extend channels of communication making dialogue within the community easier. **Education and Information Technologies** will be an essential refereed resource providing you with a vibrant forum for shared ideas and international insight and analysis of policy and practices in this area.

Education and Information Technologies, the official journal of the IFIP Technical Committee on Education (TC3), is a refereed quarterly journal, publishing papers from all sectors of education on all aspects of information technology and information systems. Subjects which are indicative of the changes in the methods of teaching and learning will be addressed by this journal, as well as examples of good practice and innovative ideas.

Education and Information Technologies is also available via the Internet. For more information, visit our World Wide Web site at:

http://www.thomson.com/itpjournals.html

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SUBSCRIPTION INFORMATION*

Volume 2 (1997)	Print + Electronic	Print Only	Personal Rate
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The Place of Information Technology in Management and Business Education

Edited by **Ben Zion Barta**, Ministry of Education, Culture and Sport, Haifa, Israel,
Arthur Tatnall, Victoria University of Technology, Melbourne, Australia
and **Peter Juliff**, Deakin University, Burwood, Australia

The education of managers at undergraduate, postgraduate and professional levels must make recognition of their need to understand the impact of information technology on the practice of their profession. Computer-based management information systems provide not merely a passive means of retrieving and presenting information but rather an active enabling technology which redefines the role of the manager. A question emerges in the potential role of a specialist information manager. Should information be owned and controlled by its users or should it be regarded as a corporate resource under the management of an information systems professional?

The Place of Information Technology in Management and Business Education examines the relationship between management, business and information technology and, in particular, the impact of that relationship on those responsible for the design, and delivery of education programmes at all levels. It contains the selected proceedings of the International Conference on the Place of Information Technology in Management and Business Education, sponsored by the International Federation for Information Processing and held in Melbourne, Australia in July 1996.

This book is essential reading for lecturers in management and computing, training managers and course developers in government departments and in business, and trainee managers.

Contents: Involving managers with information technology - bridging the culture gap - *G.L. Altmann.* Broadening software engineering courses to include organisational and behavioural factors - *G. Beckworth.* Management's knowledge of information technology - *S.K. Th Boersma and R.A. Stegwee.* Linking management and information systems through case analysis of international business operations - *M. Broadbent.* Information technology for managers: Australian generic MBA programs - *S. Burgess and A. Tatnall.* Contracts in the IT education of managers - *W. Davey.* Information technology in China - *Feng Shan, Cai Jun and Li Tong.* Training educational managers to use information systems: a three-phase approach - *C.F. Fulmer and F.P. Frank.* Educating to bridge the knowledge gap: hybrid management undergraduate education 1985-1995 - *A. Gillies and A. Greenwood.* Course management for novice IT professionals - *C. Hashimoto, Y. Murakami and T. Kado.* The whys and whats of an IT specialisation within a general management tertiary education - *W.G. Hewett.* MIS in the MBA is broken! Do we want to fix it or ditch it? - *E. Jordan.* The nexus between management and information technology - attitudes and influence of the professional bodies - *P. Juliff.* Information technology curriculum for engineering management qualification - *F. Kamijo.* Not economic informatics but informatic economics - the development of the subject Economic Informatics in the commercial colleges in North-Rhine Westphalia, Germany - *G. Kuhlmann.* Business users and the information systems development process: a need to know basis - *D.R. Lawrence, H.U. Shah and P.A. Golder.* Business simulations: dynamic, computer based case studies for management development - *P.J. Lawrence.* IT curriculum in business education content and market analysis - *K.D. Levin and M. Telem.* Realising information technology benefits in the health sector - the management education agenda - *E.A. More and D.G. More.* Information technology studies in higher business and management education in Finland - *T. Paturi.* How teaching through IT modifies the teaching curriculum - *G. Rawlings.* Chief Information Officers - new roles and emerging duties - *M.J. Ruohonen.* Building executive information systems - visual basic for management students - *A. Tatnall.* IT education for hospitality managers - *B. Tatnall.* Managerial skills in technical professionals - an exploration of IT project leadership - *M.R. Thite.* The hybrid manager: achievement within a world wide dimension - *J.B. Thompson and H.M. Edwards.* Critical systems development - ramifications for management - *A. Underwood.* Discussion group: the changing role of management - *M. Ruohonen and R.A. Stegwee.* Discussion group: teaching and language using the WWW - *E. Jordan and W.G. Hewett.*

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Calendar of Events (continued from page 16)

Event	Date	Location	Sponsored by	Org. Contact
Symposium on Transportation Systems	16-18.6.1997	Chania, GR	IFAC, IFIP TC5	tasos(Ohra.ergasya.tuc.gr Fax: +30 821 69410
6111 IFIP Conference on Human-Computer Interaction	14-18.7.1997	Sydney, AUS	IFIP TC 13	judydsocs.uts.edu.au Fax: +61 2 330 1807
Conference on System Modeling and /ptimization	22-25.7.1997	Detroit MI. USA	IFIP TC7 Oakland IIniv. & Wayne State Univ.	polis(dvela.acs.oakland.edu Fax: +1 810 370 4261
Informatics (Computer Science) as a discipline, and in other disciplines: What is in common ?	10-15.8.1997	Enschede, NE	IFIP WG3.2	vdhoeven@cs.utwente.nl
llth Working Conf on Database Security	11-13.8.1997	Lake Tahoe, CA., USA	IFIP WG11.3	spoonerd@cs.rpi.edu Fax: +1 518 276 4033
8th Intl. Conference on Production Engineering - Rapid Product Development	18-20.8.1997	Sapporo, J	JSPE CIRP IFIP WG5.2 and 5.3	isn00003(cenittyserve.onjp Fax: +81 3 3367 0994
Work. Conf. on Designing Interactive Systems	18-20.8.1997	Amsterdam, NL	ACM, SIG, CHI	1.mcclelland(ddesign.corp. philips.com
Capacity Building for Information Technologies in Education in Developing Countries	25-29.8.1997	Harare, ZW	IFIP TC3, Comp.Soc.Zimbabwe	cszOharare.iafrica.com Fax: +263 4 708861
Intl.Conf on Very Large Scale Integration	26-29.8.1997	Gramado, BR	IFIP TC10	reis@infuligs.br
Intl. Conference on Management & Control of Production & Logistics	31.8.-3.9.1997	Campinas, BR	IFAC, IFIP TC5	aguileratOia.cti.br Fax: +55 1924020 23
10th Intl. Workshop on Testing of Communicating Systems	1-3.9.1997	Seoul, ROK	IFIP TC6/WG6.1	mckim(a) sava.kotel.co.kr Fax: + 82 2526 5567
Symposium on Robot Control	3-5.9.1997	Nantes, F	IFAC, IEEE Robotics & Automation, IMACS, IFIP TC12	khalilglan.ec nantes.fr Fax: +33 40747406
2"" Workshop on ATM	24-26.9.1997	Canada	IFIP TC6	andre(d, inrs-telecom.uquebec.ca
3rd Intl. Conference on Communications *Be* Multimedia Security	25-26.9.1997	Athens, GR	IFIP TC11 & TC6	dgrit(Oaegean gr Fax: +30 1 3645154
Work. Conference on Intelligent Networks	Sep 1997	Versailles. F	IFIP TC6. Telecom. TG IN, Univ. Versailles	guy.pujolle@prism.uvsy.fr
7th Conf on Performance of DCS	Sep 1997	Lund, S	IFIP WG6.3/7.3	ultk@tts.lth.se
Intl. ContCrence on Computer Applications in Shipbuilding	13-17.10.1997	Yokohama, J	The Society of Naval Architects, Jap. IFIP TC5	koyama@nakl.t.u-tokyo.ac.jp Fax: +81 3 56847746
Secondary School Mathematics in the World of Communication Technology: Learning, Teaching and the Curriculum	26-31.10.1997	Grenoble, F	IFIP WG3.1	comuggrenet.fr Fax: +33 76871947
Conf. AFRICOM 97	Oct 1997	Tunisia	IFIP TC6, ICCC	fkamounttitensi.mrtin
Intl. Conf on Computer Application in Production Engineering	5-7.11.1997	Detroit, MI, USA	IFIP TC5, SME	Fax: +815 987 6725
I st IFIP TC11 WG11.5 Working Conference on Integrity and Internal Control	4-5.12.1997	Zurich, CH	IFIP TC11/WG11.5	strousAiaehy.n1 Fax: +31 492 548636
19th IFIP Conference on System Modeling & Optimization	12-16.7.1999	Cambridge, UK	IFIP TC7, DAMTP, University of Cambridge	m.j.d.powelEri/ clamtp.cam.ac.uk Fax: +44 1223 337918

A schedule of IFIP administrative meetings can be found elsewhere in this *Newsletter.*

Calendar of Events

Event	Date	Location	Sponsored by	Org. Contact
2nd Workshop on Personal Wireless Communications (Wireless Local Access)	10-12.12.1996	FranktUrt, D	IFIP TC6, Taskgroup Wireless Communications J.W. Goethe-Univ. Frankfurt GI, ITG	drobnikotm.intimnat i k uni-frankfurt.de Fax: +49 69 79823340
Open Conference on Information Technology for Competitiveness - Experiences & Demands for Education & Vocational Training	3-5.2.1997	Florianopolis, BR	IFIP UNESCO DSE (Gemi.Foundf Intl.Dev.) & SBC (Soc. Bras.de Comp.)	cyranek(tilctaisct-sc.br
2nd Intl. Symp.on Mathematical Modeling	5-7.2.1997	Vienna, A	IMACS, TU Vienna	itroch(a)email.tuwien.ac.at
Work Conf. on Algorithmic Languages & Calculi	17-21.2.1997	Nancy, F	IFIP TC2	smithOkestrel.edu
IFIP WG7.2 Conference on Optimal control; theory: algorithms and applications	27.2.-1.3.1997	Gainesville, FL, USA	IFIP WG7.2 NSF Center for Dynamical Systems. Univ.of Florida	il2v@virginia.edu Fax: +1 804 982 4555
Sixth IFIP Intl.Working Conference on Dependable Computing for Critical Applications	5-7.3.1997	Garmisch-Partenkirchen, D	IFIP WG 10.4 IFIP TC11, IEEE-CS TC-FTC, EWICS	dalcimainformatik.uni-erlangen.de Fax: +49 9131 857239
5th Intl. Workshop on Hardware/Software Co-Design	24-27.3.1997	Braunschweig. D	IFIP10.5, IEEE CAS. ACM SIGSOFT, ACM SIGDA	emstvi:ida.ing.tu-bs.de Fax: +49 5313914587
Conf. On Electronic Publishing	14-16.4.1997	Canterbury. Kent. U.K.	IFIP TC6, ICCC	m.r.millentitiblip.boat.bt.com
XIII IFIP WG10.5 Conference on Computer Hardware Description Languages and Their Applications	20-25.4.1997	Toledo, E	IFIP WG10.5	cdk(ciit.uc3m.es Fax: +34 1 624 9430
Th Conti On High Performance Network	28.4.-1.5.1997	Thomwood, NY, USA	IFIP WG6.4	tantawi(awalson.ibm.com
Second Intl. Symposium on Environmental Software Systems	28.4.-2.5.1997	Whistler, CDN	IFIP TC5, Germ.Comp.Soc., Aus.Res.Ctr. Seibersdorf Univ. of Guelph	denzenahtw.uni-sb.de Fax: +49 681 586712
5" Intl. Symp. on Network Management	12-17.5.1997	San Diego, CA, USA	IFIP WU6.6, IEEE	aureWctr.columbia.edu
Intl. Conference on Integrated & Sustainable Industrial Production Systems	14-16.5.1997	Lisbon. P	Ordem dos Engenheiros. IFIP WG5.3. IEEE SMC	Fax: +351 1 352 4632
IFIP TC 11 Conference on Information Security: Research and Business	14-16.5.1997	Copenhagen, DK	IFIP IC II DANFIP DD	coopjackciinet.uni-c.dk Fax: +45 3927 3322
Conference of Industrial Systems	20-22.5.1997	Bellbrt, F	IFAC, IFIP TC5, IMACS	ifitc.cis97(glImp.enibe.ti
6th IFIP Intl. Conference on Women, Work and Computerization	24-27.5.1997	Bonn. D	IFIP WG9.1 Computer and Work. GeslInfonnatik (GI) SIG8.1Women's Work & Inform., GMD	up-vision(all-online.de Fax: +49 56911068
Joint Intl. Conference on Open Distributed Processing and Distributed Platforms	27-30.5.1997	Toronto, CDN	IFIP TC6 IBM Canada, Hewlett Packard Canada	lunachoney(docri.ca Fax: +1 613 592 8163
IFIP WG3.3 Working Conference "HCI and Educational Tools"	27-28.5.1997	Sofia, BG	IFIP WG3.3. Instit. Techn.. Bulg. Acad. of Science	darinad(a)fini.uni-sofia.bg Fax: +359 2 656157
3rd Intl. Conference on Reliability, Quality and Safety of Software-Intensive Systems	29-30.5.1997	Athens. GR	ENCRESS, IFIP WG5.4	Fax: +30 1 3645154
IFIP WG8.2 Working Conference: Information Systems and Qualitative Research"	31.5.-3.6.1997	Philadelphia, PA. USA	IFIP WG8.2	rbask(dbingsuns.cc.binghamton.educon.cbs.dk Fax: +1 607 777 4422
14th IMEKO World Congress'97	2-6.6.1997	Tampere/Helsinki, FIN	IMEKO	Fax: +358 31 3162171

(continued on page 15)

IFIP Congress '98 - 15" World Computer Congress	29.8-6.9.1998	Vienna, A and Budapest, H	IFIP
IFIP Congress 2000 - 16th World Computer Congress	Sep 2000	Beijing, PRC	IFIP

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