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International Federation for Information Processing
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WORLD CONFERENCE ON COMPUTERS IN EDUCATION HELD IN BIRMINGHAM

*by Mr. Brian Samways (GB) **

The Sixth World Conference on Computers in Education took place in Birmingham, England 23-28 July 1995, twenty-five years after the first WCCE, held in Amsterdam in 1970. It was organized under the chairmanship of **Mr. Brian Samways,** the U.K. representative to the **IFIP** Technical Committee on Education (TC3). The event, which was hosted by Aston University, attracted over 1500 participants from 65 different countries. Although this is a significant number (by comparison. **IFIP** Congress '94 in Hamburg had 1150 participants), it is far less than the 2500 that attended the prior WCCE in Sydney, Australia, in 1990. Quite surprising was the delegation of over 20 from Iceland and the large numbers from Southeast Asia, especially Australia, New Zealand, and Malaysia.

There were over 400 different presentations, including lectures, posters, demonstrations, and panels. The Call for Papers attracted over 600 submissions, each of which was reviewed by three independent reviewers in different countries. A cross-section of 100 papers was published in the Conference proceedings.

" secretary of TC3

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

In addition to the presentations, the International Programme Committee provided opportunities for delegates to discuss, to talk, to exchange ideas — in other words, for this to be an active conference. Two aspects that worked well were the Theme Breakfasts, at which delegates created their own groups, and the Barge Breakfasts, where delegates signed up with an expert and traveled along the canals of Birmingham in the early morning.

Introductory Tours and Professional Groups

One new feature was the "Introductory Guided Tour," designed for the first-time WCCE delegate. With the help of an **IFIP** expert, each group of nine delegates met at the opening reception and planned its attendance at the various parallel sessions on the first morning, discussed the program over lunch, and continued as a group during the rest of the day. About 150 people participated. This activity was a major success — in fact, many of the groups continued together throughout the week.

Another innovation was the creation of **IFIP** Professional Groups. These 16 small groups of delegates, set up under the six TC3 Working Groups (WGs), met throughout the week and, in addition to reporting back to the conference on the last day, contributed to a "Post–Conference Report." The ideas may well help set future plans for TC3 and its WGs, and may lead to the creation of new WGs. Some of these groups were so successful that delegates devoted all their time to them and didn't attend the other Con-

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CONFERENCE ON INFORMATION SECURITY HELD IN SOUTH AFRICA

*by Prof. Basie von So1ms (ZA)***

IFIP/Sec 95, organized by the **IFIP** Technical Committee on Security and Protection in Information Processing (TC11), took place 8-12 May 1995 in Cape Town, South Africa, and was attended by more than 250 delegates. About 120 delegates, representing 22 different countries, came from outside South Africa.

IFIP/Sec 95 was preceded by a day of workshops and tutorials organized by four Working Groups (WGs) of TC11. The conference itself, which started 9 May, consisted of morning and afternoon plenary sessions each day, in which two invited speakers gave presentations, followed by 2 tracks of refereed papers. In total, 40 refereed papers were scheduled,

" chairman of TC11

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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 the following **IFIP** information directly to the Secretariat: announcements of conferences, workshops, and other meetings; calls for papers; appointments to committees and other positions; and changes of address. The Secretariat is the clearinghouse for all such information, which it will forward to the *Newsletter.*

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.ifip.or.at

IFIP HONORS ITS VOLUNTEERS

Outstanding Service and Silver Core Awards Bestowed

In September, the **IFIP** General Assembly (GA) voted the Outstanding Service and Silver Core Awards to 62 **IFIP** volunteers.

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. The following were so recognized:

TC8:	**H.Klein**
	E. Mumford
TC9:	**M. Korpela**
	M. Odedra-Straub
TC11:	**P. Hoving**
TC13:	**S. Arnesen**
SG14:	**I. Simon**
	J. Traub

The Silver Core Award may be conferred on those who have served **IFIP** as GA members, committee officers, members of Congress program committees, and editors of proceedings of major **IFIP** conferences. The required length of service varies with the role. The president of **IFIP** may also propose others who have given exceptional service to **IFIP.** A pin and certificate are sent to the recipients. The following were recognized in September:

F. van Assche	**L.J. Bass**
K. Bjerg	**O.J. Boxma**
K. Brunnstein	**L. Claesen**
M. Cosnard	**J. Dolezal**
K. Duncan	**G.R. Fairall**
H.L. Funk	**Z.. Galil**
M. Gottlieb	**W. Grafendorfer**
G. Grinstein	**J. Gruska**
M.Z. Hanani	**J.M. Hee**
R.J. Hughes	**P. Jaervinen**
C.B. Jones	**K. Kaiser**
K. Kendall	**F. Kimura**
K. Krueger	**R. Lawson**
C. Lee	**K. Lyytinen**
J. F. Meyer	**P. Nedkov**
M. Novak	**A. Olive**
J.T. Pedersen	**B. Pehrson**
P.C. Poole	**G. Pujolle**
G. Quirchmayr	**E. Raubold**
F. van Rijn	**V. Risak**
N. Rozsenich	**B. Samways**
A. Sassano	**G. Saucier**
R. Scholten	**L. Tarouco**
V. A. Tipnis	**R. Traunmüller**
C. Unger	**W.H. Ware**
G. Widmeyer	**J. H. Williams**
S. Wills	**M. Wozny**

It was noted during the GA that TC chairmen must serve six years before being eligible for the Silver Core. Considering the immense job of TC chairs, the GA may consider reducing the specified time. ■

*NEW **IFIP** SUPPORTERS*

We gratefully acknowledge the generous financial support of the following corporations toward SEC'95, the eleventh **IFIP** International Open Conference on Computer Security, held in May in South Africa:

IBM South Africa

Deloitte Touche Tohmatsu International

They are now added to the list of **IFIP** Supporters. ■

WCCE *continued from page 1*

ference activities. The groups met in the mornings, during the days, and in the evenings.

Of course, no conference on education would be complete without the learner. Classrooms with real teachers and learners were observed and discussed by delegates. Some delegates had been contacted prior to the conference, through the Internet, by school children in the classroom program, and were able to discuss at first-hand the differences and similarities between countries. The contacts made during the week will surely continue for many years to come, and studies will no doubt appear at many future **IFIP** conferences.

The exhibition, held within the conference centre, was well attended and provided a venue for meeting fellow delegates over coffee.

The early-bird fee for this six-day conference, including the welcome reception, a symphony hall concert, coffees throughout, and entrance to the exhibition, was just £150. This low fee was possible only with the sizable financial contributions made by the five major sponsors: Apple U.K., British Telecom, Intel, Microsoft, and Research Machines.

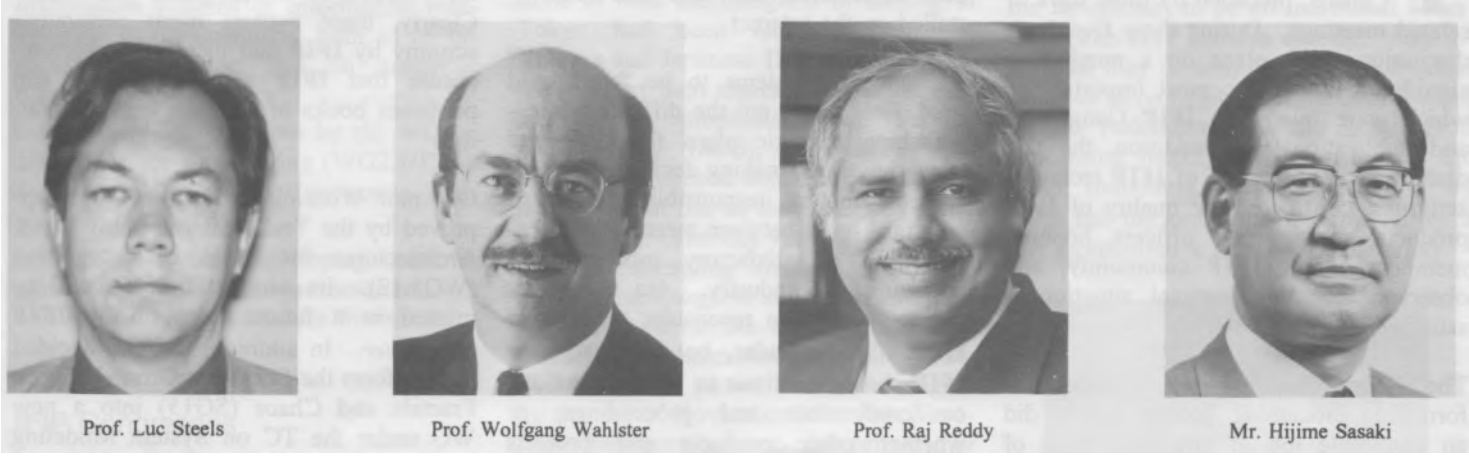
For further information or to order copies of the publications (proceedings [1100 pages], compete abstracts of all papers [430 pages], post-conference reports and keynote speeches [--t 200 pages]) or conference videos, please write to

WCCE95
Margaret Street
Birmingham, B3 3BW, U.K.

Note that the next WCCE will be held in Copenhagen, Denmark, in 2001. ■

*KEYNOTE SPEAKERS ARE ANNOUNCED FOR **IFIP** CONGRESS '96*

Tutorial Program Is Also Described



Prof. Luc Steels | Prof. Wolfgang Wahlster | Prof. Raj Reddy | Mr. Hijime Sasaki

Prof. Egon Hörbst (A), co-chairman of the International Program Committee for **IFIP** Congress '96, recently announced the four Congress keynote speakers.

Prof. Luc Steels (B) will speak on Artificial Life and Real-World Computing. He is director of the Al laboratory of the Free University of Brussels and past-chairman of the University's Computer Science Department. The AI lab is well known in Europe, the U.S., and Japan for its pioneering work on tools for knowledge representation, and, more recently, for its work on robot societies and artificial life. **Prof. Steels** is involved in numerous projects with industry and ESPRIT, the European Union's R&D program. Since 1986, he has been working on the application of complex dynamics to the construction of intelligent autonomous agents. He has published ten books, including textbooks on LISP and knowledge systems.

The address by **Prof. Wolfgang Wahlster (D)** will be Speech Recognition and Translation — Towards Speech-to-Speech Translation for Mobile Telecommunication. **Prof. Wahlster** is Professor of Computer Science at the University of Saarbruecken, Germany, and a Scientific Director of the German Research Center for Artificial Intelligence, a European center of excellence for innovative information technology solutions. Since 1993, he has led the VERBMOBIL project, the largest consortium for speech translation worldwide. **Prof. Wahlster** has published more than 150 technical papers on human language technology and intelligent user interfaces. His current research includes intelligent multimedia interfaces, user modeling, intelligent help systems, and plan recognition.

Prof. Raj Reddy (USA) will discuss Grand Challenges in Artificial Intelligence. He is Dean of the School of Computer Science at Carnegie Mellon University and the Herbert A. Simon University Professor of Computer Science and Robotics. **Prof. Reddy** joined Carnegie Mellon's Department of Computer Science in 1969 and served as Director of the Robotics Institute from 1979 to 1992. His research interests include the study of human-computer interaction and artificial intelligence. His current research projects include speech recognition and understanding systems; collaborative writing, design, and planning; JIT learning technologies; and the Automated Machine Shop project. His professional honors include the Turing Award this year and the French Legion of Honor, presented by President Mitterrand in 1984.

The fourth keynote speaker, **Mr. Hajime Sasaki (J),** will talk on Trends of Flat Panel Displays in the Multimedia Age. **Mr. Sasaki** is Executive Vice-President of NEC Corporation, responsible for the entire operation of electronic devices, including microelectronics and flat panel displays. He has been involved in the research and development of VLSI systems and the management of the microelectronics business of NEC. He has published numerous papers in the scientific media and participated in the organization of international conferences, such as the ISSCC and VLSI symposia. He served as Organizing Chairman of the **IFIP** VLSI Conference in Tokyo in 1985.

Tutorials

The Congress will also have an exciting tutorial program. **Prof. Robert Meersman (NL),** chairman of the Tutorial Committee, announced that there will be eight tutorials, each a half day long. They will take place 30 and 31 August, the Friday and Saturday preceding the Congress. Each will be held both in Sydney and Melbourne, Australia (the Congress itself will take place in Canberra).

The speakers and their topics are as follows:

Dr. John Zeleznikow (AUS): Computer Tools for Legal and Management Professionals
Mr. Jim Melton (USA): SQL3: An Update on the Emerging Standard
Prof. Luc Steels (B) (also a keynote speaker): Software Agents and Electronic Commerce
Prof. Brian Shackel (GB) (former chair of **IFIP's** Technical Committee 13): The Business Benefits of Information Technology Usability: "The Business Case" of Human Factors in IT

The remaining tutorials will be announced in the near future.

The Congress, which will take place 2-6 September 1996 in Canberra, will consist of three individual conferences, as described in the ***IFIP** Newsletter* in June (page 1) and September (page 4). Information about submitting papers can be found on page 12 of this issue. For additional information, please communicate with the organizers:

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http://acslink.net.au/-tomw/ifip96br.html

GENERAL ASSEMBLY MEETS IN CALGARY

The **IFIP** General Assembly (GA) met 9-10 September in Calgary, Canada, preceded by three days of related meetings. During these five days, discussions took place on a number of significant issues, the most important of which were related to **IFIP** Congresses and publications. In addition, the GA discussed the multitude of **IFIP** technical activities, considered the quality of **IFIP** products, selected new officers, honored members of the **IFIP** community, and observed that the financial situation is satisfactory.

The Alberta chapter of the Canadian Information Processing Society (CIPS) did an admirable job of arranging tours of universities and industrial facilities before the meetings; unfortunately, few participants were able to take advantage of the opportunities. Those able to attend were given excellent presentations on research and development in wireless communication, software engineering, seismic analysis for geological exploration, course preparation for computer-aided instruction, "middleware," and other work that is taking place in Alberta.

Opening Session

Mr. Denis Herard, a member of the Alberta government, welcomed the GA on behalf of the province of Alberta and told how Alberta is positioning itself for the 21st century in the "knowledge industry." He cautioned the assemblage about "information silos," which isolate one group from another. **IFIP** was also greeted by **Mr. Kevin Brown,** the national president of CIPS.

Prof. Asbjorn Rolstadås (N), IFIP's outgoing president, presented his final report to the GA, summarizing his three years in office. Unlike politicians, he reminded the GA of his "campaign promises" and discussed the progress that had been made in achieving his goals. In pursuing the first goal, to serve Member societies, he had visited a dozen of them and discussed **IFIP** with their officers. Although much has been achieved, **Prof. Rolstadås** felt that continual effort is needed. He pointed out that improved relationships with UNESCO and the European Commission had been achieved over the past year. He noted that the strength of Technical Committees (TCs) in **IFIP** has been increased, but that much more needs to be done to bring Working Groups (WGs) closer to the center of **IFIP.** During his tenure, the Secretariat had been moved from Geneva, Switzerland, to Laxenburg, Austria; a contract with a new **IFIP** publisher had been established; and **IFIP** had been installed on the Internet.

Among the problems to be faced, said **Prof. Rolstadås ,** are the difficulty in establishing strategic plans for **IFIP** and executing them, making decisions rapidly, and distributing responsibility; lack of continual work between meetings; and establishing a satisfactory mix between academia and industry. He closed by urging the GA to reconsider the role of **IFIP.** In particular, he asked whether **IFIP** should continue to focus its efforts on conferences and proceedings, or whether other products and projects should be considered.

General Assembly meeting in a conference room inside the football stadium of the Calgary Stampeders. (The stands can be seen through the windows.)

Technical Activities

Among the recent **IFIP** conferences discussed at the GA was the World Conference on Computers in Education (see the article on page 1), one of the major conferences sponsored by **IFIP.** This and several other recent **IFIP** conferences had lower attendance than expected. (We note here that MEDINFO '95, the biennial conference of the International Medical Informatics Association, formerly an **IFIP** TC, had an attendance of over 3000.) Despite the contention that all the events were successful from a scientific point of view and that disappointing attendance and low book sales were due to external factors (e.g., poor choice of venue or dates), the results prompted a discussion of the quality of **IFIP** products. **Prof. Martti Tienari (SF),** then chairman of the Activity Management Board, presented a discussion paper that mentioned possible measures of the quality of an event (attendance, number of copies of the proceedings sold, satisfaction of the participants, etc.). A related concern was the apparent decrease in the number of events being planned. Possible explanations are the disruption of record-keeping associated with the recent move of the Secretariat, the decision of some TCs not to sponsor events if **IFIP** does not control the contents of the program, and others. Clearly, these matters merit continuing scrutiny by **IFIP** and increased efforts to ensure that **IFIP** sponsors events and publishes books of only the highest quality.

One new Working Group (WG) was approved by the Technical Assembly (TA): Architectures for Enterprise Integration (WG5.12). Its Aims and Scope will be printed in a future issue of the ***IFIP*** *Newsletter.* In addition, the GA decided to transform the Specialist Group (SG) on Fractals and Chaos (SG15) into a new WG under the TC on System Modeling and Optimization (TC7). Although the TA wants the SG on Foundations of Computer Science (SG14) to be transformed into a TC, that action was deferred by the GA until the membership of the SG conforms to that required of a TC, i.e., not more than one representative for each **IFIP** Member society. Finally, the recommendation of the TA that the task force on Smart Cards be transformed into a SG was accepted.

Mr. Graham Morris (GB), the **IFIP** secretary, reminded the GA that the Austrian government had offered to fund a project in telecommunications (for up to 72 000 Swiss francs) and invited **IFIP** to identify significant problems this project might undertake. Our incoming president, **Prof. Kurt Bauknecht (CH),** is chairing the project steering committee and appointing its members, and **Mr. Plamen Nedkov,** the **IFIP** Administration Manager, will be project manager.

The following topics were also discussed:

- **Prof. Klaus Brunnstein (D),** chairman of the TC on the Relationship between Computers and Society (TC9), suggested that **IFIP** establish an activity concerning the relationship between electronic publishing and intellectual property rights. He is serving as chairman of a panel of experts considering this topic, organized by the United Nations Industrial Development Organization (UNIDO). He also proposed activities involving lawyers and information technology, in such areas as copyrights and computer crime.
- **Prof. Jozef Gruska (SK),** chairman of SG14, urged that theory sessions be included in all **IFIP** Congresses. In addition, he requested that **IFIP** establish an award for theoretical results that have found significant applications.

• **Prof. Gordon Davis (USA),** chairman of the TC on Information Systems (TC8), announced that work has begun on a monograph, *Information Management as Organization Function and Academic Discipline,* which will define the field of information systems or information management in organizations, both as an organization function and an academic discipline.

• A book is being written by the WG on User Interface Engineering (WG2.7/13.4): *Design Principles for Interactive Software.*

• A project to help developing countries gain access to e-mail was described. It will be discussed in a future *Newsletter.*

IFIP Congresses

Four **IFIP** Congresses were touched upon in Calgary. **Prof. Wilfried Brauer (D),** then an **IFIP** trustee, reported on behalf of the Congress '94 (Hamburg) Organizing Committee that it anticipated paying soon the amount it owed **IFIP.** He estimated that the expense for each delegate had amounted to approximately 1000 German marks (about 1300 Swiss francs). It was also announced that the anticipated white papers elaborating on the "Congress Message" produced for Congress '94 (see articles on page 7 of the December 1994 *Newsletter* and page 8 of the March 1995 *Newsletter)* would not be published, because most of the "Issue Champions" had been unable to create them.

A discussion of Congress '96, to be held in September in Canberra, Australia, is on page 3.

Prof. Egon Hörbst (A), co-chairman of the International Program Committee (IPC) for Congress '96, was appointed by President-elect **Bauknecht,** as chairman of the IPC for Congress '98 (to be held in August in Vienna and Budapest). **Prof. Hörbst** announced that the format of the Congress would be similar to that of Congress '96: namely, the Congress will comprise several simultaneous world conferences, each arranged by a separate IPC. Tentative topics are security, computers for people with special needs, knowledge rights, telecommunications, teleteaching, and collaborative work. The difficulties of organizing a Congress with two venues, like Congress '80 in Tokyo and Melbourne, were discussed, and it was decided to increase the planned length of Congress '98 from three to four days. **Dr. Roger Johnson,** the representative of CEPIS (Council of European Professional Informatics Societies), as well as the representative of the U.K., announced that CEPIS was interested in cooperating with **IFIP** to encourage good attendance by Europeans at the Congress.

Finally, the GA deferred decision on selecting the site of Congress 2000. Invitations to hold the Congress in Beijing or Tokyo had been received from the Chinese and Japanese **IFIP** Member societies. After their representatives had presented the proposals, **Prof. Ashley Goldsworthy (AUS),** an **IFIP** vice-president, proposed that the Congress be held partly in one of the cities and partly in the other. The GA voted to encourage the two contending Member societies to plan a joint Congress and to present their joint proposal to the March 1996 **IFIP** Council in Johannesburg, South Africa. Should the two parties be unable to agree by the end of November (after this *Newsletter* has been sent to the printer), or should Council find the joint proposal unacceptable, Council was empowered to select one of the original proposals; however, the GA indicated that it would prefer that a mail ballot of Members be conducted to select the site.

Finances

Because the present financial status of **IFIP** is relatively healthy, the discussion of finances occupied less time than usual. **Mr. Aage Melbye (DK), IFIP's** treasurer, presented his usual careful report. The main points are the following:

• A slight deficit (25 000 Swiss francs [25K CHF]) is budgeted for 1996. Before the GA, a small surplus was anticipated; however, last-minute requests for change resulted in the planned deficit.

• A surplus of 50-100K CHF is anticipated for 1995. This compares with a budgeted deficit of 100K CHF.

• In June, **IFIP's** assets were approximately 1300K CHF.

• In June, The TCs with the largest TC Fund balances were TC 10, TC6, and TC8. These funds make up 24% of the general fund.

• It appears that expenses for running the Laxenburg Secretariat will be lower than those to run the Geneva Secretariat, as was anticipated.

• The official currency of **IFIP** will remain the Swiss franc, and the official seat will remain in Switzerland.

New Officers and New Members

The following GA representatives were elected vice-presidents: **Prof. Brauer** and **Prof. Goldsworthy** for three-year terms, and **Mr. Geoff Fairall (ZW)** for a one-year term. The following were elected trustees: **Mr. Moshe Gotlieb (IL), Dr. Walter Grafendorfer (A), and Dr. Johnson** for three-year terms, and **Mr. Christopher Guy (ZA)** for a two-year term.

Also, the GA unanimously elected **Dr. Jack Rosenfeld (USA),** who is editor of the *Newsletter,* to be an Individual Member. (The **IFIP** statutes specify, "Any individual may be admitted as an Individual Member in recognition of his contribution to the Federation and the Information Processing field.") **Dr. Rosenfeld** is the ninth Individual Member admitted by **IFIP** but the only one not previously a GA representative of a Member society.

Dr. Jack Rosenfeld, new Individual Member

Mr. Melbye announced his intention not to seek reelection as treasurer at the 1996 GA. Because of the difficulty in transferring the management of the databases of **IFIP** events and financial information from Geneva to Laxenburg, the Executive Board decided to extend his contract as a consultant to the end of 1995. The Executive Board is especially concerned with the succession of **IFIP** treasurers and secretaries. Since these officers have extensive knowledge and skills, the sudden loss of which could be damaging to **IFIP,** the Executive Board is studying plans for ensuring that there are always individuals who could serve as interim treasurer or secretary should the need arise.

The three nations admitted to membership by the 1994 GA are still not formally members of **IFIP,** since they have not paid their dues. The GA agreed to allow them one more year to officially join **IFIP** (the dues must be paid, and a representative must attend the GA). No new applications for membership have been received, despite the interest expressed by several Eastern European delegates to **IFIP** Congress '94.

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Other Matters

Mr. Nedkov reported on the move of the Secretariat to Laxenburg. Although he had to work single-handedly for several months after his assistant quit in April, he was optimistic about the future. He pointed out that facilities exist in Laxenburg for small meetings of TCs and other **IFIP** groups (up to 14 people). He also demonstrated to the TA the new **IFIP** WorldWide Web home page, which he had organized. The address is now http://www.ifip.or.at. **Mr. Nedkov** urged all TCs, Member societies, and other bodies related to **IFIP** that have home pages to inform him, in order that he can create links in the **IFIP** pages to the others. He also pleaded that all concerned send him address changes. The information in the ***IFIP** Bulletin* is in electronic form and should be available to the **IFIP** community from the **IFIP** database server once the legal (privacy) aspects have been investigated and resolved. In addition, the Marketing Committee requested that the Secretariat continually place changes in addresses, new appointments, and similar material on-line, and that the Secretariat send e-mail messages quarterly to the **IFIP** community, listing those whose addresses and other information have changed during the quarter. Because of this, there will no longer be a "Changes in **IFIP"** column in the *Newsletter.* Problems still remain to be solved regarding the databases of **IFIP** events and financial information, which have yet to be installed in Laxenburg.

The GA revisited the issue of an **IFIP** press officer, an effort that has failed twice in the past few years. Because **IFIP** is the only truly international body in the information processing field, its work and announcements should be broadly disseminated. The GA encouraged frequent issuing of press releases, with timely, significant statements. Member societies are urged to come forward with suggestions, which should be distributed to GA representatives well in advance of the meetings (in order that the representatives have an opportunity to consult their national societies, TCs, or other constituencies). President-elect **Bauknecht** announced that he would appoint a press officer.

A significant discussion concerning the **role** of the TA began, in part, because of complaints of too much repetition in the GA of material already presented in the TA. The TA was originally intended to be a body in which TC chairs could discuss mutual problems and strategic issues related to the technical activity of **IFIP.** As the TA has evolved, more and more is discussed there, including publications, finances, and marketing. Recently, it was recommended that all GA members attend the TA meeting, in order that TC chairs not need to repeat anything during the GA. Nonetheless, some believe there is still too much overlap. A variety of suggestions were voiced, including abolishing the TA and discussing all the TA issues in the GA, restricting attendance at the TA to TC chairs and very few other individuals, abolishing TC reports to the GA, maintaining the TA as the forum of the TCs and keeping the GA as the forum of the Member societies, and requiring all reports to be distributed to the GA well in advance. **Prof. Bauknecht** appointed a task force to study this issue.

Mr. Nedkov, in his role as IFIP—UNESCO Liaison Officer, noted that increased support had recently been received from UNESCO. He reported that a dossier on **IFIP** had been prepared for UNESCO's upcoming evaluation of NGOs with official status. In addition, Bulgaria had prepared a resolution and submitted it to UNESCO to encourage changing **IFIP's** status from "B" to "A" and providing a grant of $50 000 (U.S.) to ensure a stronger participation from developing and Eastern European countries in **IFIP** Congress '96. Also, UNIDO has granted **IFIP** a consultative status.

Additional matters discussed include these:

• A proposal by the International Council of Scientific Unions (ICSU) to form an International Union of Computing Science and Informatics was discussed (see the article on page 10).

• Silver Core and Outstanding Service Awards were bestowed (see the article on page 2).

• The **IFIP** statutes and bylaws were revised according to proposals made previously: TC membership is now open to specialists not serving as national representatives; all SGs are now provisional; Special Interest Groups may be formed (now officially); the procedure for modifying bylaws is now easier; and the voting rights in the GA of ex-officio members are now more clearly explained.

• It was noted that new chairs for eight of the thirteen TCs and SGs will have been named during 1995. This tremendous change in one year is a cause for concern.

• It was also noted that several major **IFIP** Member nations were not represented at the GA.

• The luncheon for the presidents of Member societies, previously held during **IFIP** Congresses '92 and '94, in Madrid and Hamburg, respectively, will be an annual event.

At the close of the GA, President-elect **Bauknecht** presented President with a gift from **IFIP** (a painting) to thank him for the leadership he had shown during his term in office and to recognize the progress **IFIP** had undergone during those three years.

Finally, President **Rolstadås** thanked CIPS, the Canadian host society — especially **Mr. Ken Chapman,** who was responsible for the arrangements — for the flawless organization of the meetings and the lavish hospitality shown. (Although the social program far exceeded the **IFIP** guidelines, none of the participants was heard to complain!)

Professors Rolstadås (left) and Bauknecht

GENERAL ASSEMBLY CONSIDERS PUBLICATIONS MATTERS

Electronic Publication Is Essential

The future of **IFIP** publications was again a major topic considered by the **IFIP** General Assembly (GA), at its September meeting in Calgary (see the article on page 4). Publications are always a key topic in **IFIP** because of their importance to **IFIP's** mission of disseminating information as well as the income **IFIP** receives from royalties; therefore, the status of publications was discussed in the Publications Committee (PC), the Marketing Committee, the Technical Assembly, and the GA itself.

Prof. Wilfried Brauer (D), then chairman of the PC, reported that 35 **IFIP** books will be published in 1995 by Chapman & Hall (C&H), the primary **IFIP** publisher, in the first year of its contract with **IFIP.** The royalty income for the books in 1995 is expected to exceed the minimum royalty income guaranteed by C&H. Future royalties are difficult to predict. **Prof. Brauer** also reported that it has been very difficult to implement the recommendation of the 1993 GA that **IFIP** initiate several new journals. As reported previously, beginning in 1996, a new journal, *Education and Information Technologies,* will be published in both print and electronic forms by the **IFIP** Technical Committee on Education (TC3). On the other hand, the journal of the TC on Computer Applications in Technology (TC5), has been discontinued.

The Publisher's Problems

Mr. Mark Hammond, the representative of C&H, reported that the sales of some **IFIP** books had not met the publisher's expectations; however, overall revenue is satisfactory because of the large number of titles published. He indicated that C&H was disappointed by the poor response from Member societies to the C&H request for help in promoting **IFIP** books (In many cases, there was no reply to C&H mail.) Neither has the response from TC chairmen been helpful. Means of reducing expenses were suggested by **Mr. Hammond,** such as decreasing the number of complimentary copies that the contract with **IFIP** specifies that C&H furnish, reducing royalties to **IFIP,** not publishing all possible **IFIP** books, printing smaller books, and moving rapidly toward electronic publication. Since no data were furnished by C&H to substantiate the claim of hardship and the need to modify its contract with **IFIP,** C&H was requested to provide such data in the future. Nevertheless, **IFIP** made concessions, as described below.

Some participants in the meetings encouraged more aggressive marketing of **IFIP** books, and one TC chair suggested an improved returns policy (allowing organizers of conferences to return unsold books to C&H).

Fewer and Smaller Books?

Perhaps books that are likely to have a small number of sales should not be printed, suggested **Mr. Hammond.** The contract between C&H and **IFIP** permits C&H to refuse publication of books it deems likely to have few sales. Although the publisher has not exercised this clause of its contract, **Mr. Hammond** suggested that C&H might do so should costs not be reduced and sales improved. Another means of helping C&H would be for TCs to subsidize the cost of unprofitable books that they deem to have merit. **Mr. Hammond** pointed out that the partnership between C&H and **IFIP** should be based upon mutual accommodation. What is good for one party is ultimately good for both. He also noted that C&H has been obliging, providing services for **IFIP** that were not required by the contract, e.g., editing a book and mailing the ***IFIP*** *Newsletter* at the cost to C&H.

Mr. Hammond also proposed the publication of selected papers from conferences rather than all the papers presented. The latter is the practice with most of IFIP's conferences; however, some international program committees (IPCs) select a subset of the papers presented for publication in the conference proceedings, thus improving the overall quality of the books and reducing their cost. This occasionally dissuades some potential participants from submitting papers.

Electronic Publishing

A major component of the discussions centered around electronic publishing (dissemination of information through computer networks — gratis or for a fee), which might solve several problems but perhaps generate others. Publication on CD–ROMs was also deliberated. Promulgation of information can be done more economically by electronic than by paper publication. Also, documents can be created more rapidly in electronic form than in print form. Electronic publication could be used for **IFIP** books that are not likely to be economically feasible to print; for supplements to proceedings, containing papers that were not selected for the printed version; for individual papers or monographs chosen for publication by this medium; and for other purposes. Among the problems associated with electronic publishing are the following:

- Selecting which documents to publish is difficult.
- The issues associated with charging fees for electronic publications and preventing copying of the documents have not been resolved yet.
- Academic circles do not yet generally accept publication in an electronic document as being equivalent to publication in a recognized, archival journal; therefore, some authors may be reluctant to submit papers to electronic publications, and others may hesitate to edit such publications.
- Means must be devised to make archival electronic documents static rather than changeable.

In addition, **IFIP** has no expertise in electronic publishing at present, despite the topic having been discussed in **IFIP** for over two years. The GA strongly encouraged the PC to acquire relevant knowledge, at least by having one or more members familiar with the technology and the issues. It was again suggested that **IFIP** hold a conference on electronic publishing (a previous suggestion to this effect was made at the March 1994 **IFIP** Council). **Dr. Ronald Uhlig (USA),** president of the International Council for Computer Communication (ICCC), reported to the GA that his organization is planning an Electronic Publishing Conference in 1997 and that ICCC would consider **IFIP** co-sponsorship of this conference.

Mr. Hammond presented a proposal to the PC and other **IFIP** bodies for an electronic **"IFIP** Resource Centre," which would maintain **IFIP** information on the Internet — both documents about **IFIP,** available free of charge, and scientific information (journals, books, abstracts, software, and other products), available for a fee. The general consensus reached at the meetings was that the proposal had a great deal of merit, but that it would be preferable for **IFIP** to control the contents of the database.

continued on page 9

TC8 HAS PRODUCED VIDEO TAPES ON INFORMATION SYSTEMS

*A Collaboration of **IFIP,** Curtin Business School, and ACS*

Two video tapes have been produced as the result of a three-way collaboration of the **IFIP** Technical Committee on Information Systems (TC8), the Curtin Business School of the Curtin University of Technology in Perth, Australia, and the Australian Computer Society. The two tapes, significantly different in approach and intended audience, were organized and planned by **Dr. Bernard Glasson,** chairman of TC8 (effective 1 January 1996) and Associate Professor of Information Systems with the Curtin Business School, who introduces both tapes.

The first tape, State of the Art in Information Systems (IS), is for use in upper-level university courses and in-house staff seminars in industrial establishments and similar locations. It presents five perspectives on IS from around the world and was filmed in five different locations in Europe and the U.S. The presenters, chosen by the five Working Groups of TC8, and their topics are

- **Prof. Mats Lundeberg (S):** IS Methodology
- **Prof. Niels Bjørn-Andersen (DK):** Organizational Impact Issues
- **Prof. Ralph Sprague (USA):** Decision Support Systems
- **Prof. Doug Vogel (USA):** Office Systems Applications
- **Prof. John King (USA):** Public Sector Applications

The tape was first presented at an Australian Computer Society national seminar, at which "local commentators" were chosen and asked to give their views of the contents of the five segments. These discussions were subsequently analyzed and summarized in the form of lists of "opportunities and challenges." In the final version of the tape, a summary of the local commentators' consensus is presented by **Dr. Glasson** following each of the segments. In addition, transcripts of the video tape sound track and audio tapes of the local commentators were made. The data from these tapes is being analyzed by **Dr. Glasson** and should be available soon as working papers.

The collaborators are in the process of producing the next edition of a State of the Art in Information Systems video, which uses the same format but focuses on five new topics:

- **Prof. Michael Earl (GB):** Information Systems Planning
- **Prof. Tom Davenport (USA):** Business Process Re-engineering
- **Prof. Rudy Hirschheim (USA):** Outsourcing
- **Prof. Haruhisa Ishida (J):** Client Server
- **Dr. Ivar Jacobson (S):** Object-oriented Development

Business Process Re-engineering

The second tape, International Perspectives on Business Process Re-engineering (BPR), was filmed primarily at the May 1994 TC8 International Conference on BPR in Australia. It is intended as an executive summary. The contents consist of the answers to a set of questions on BPR by eleven of the participants in the conference, including **Prof. Gordon Davis (USA), Prof. Ashley Goldsworthy (AUS), Prof. Rudy Hirschheim (USA), Prof. Mats Lundeberg (S),** and **Dr. William 011e (GB),** who are **IFIP** leaders. The following questions were asked:

- What is BPR? Is BPR mainly hype, or is there substance to it? Is BPR here to stay?
- Who is driving BPR — Information Technology (IT) managers and Chief Information Officers (CIOs), CEOs, or consultants?
- What are the business reasons driving BPR? What's in it for the CEO?
- What are the systems and technology drivers of BPR?
- What's in it for the IT manager or the CIO?
- What are the technology enablers and inhibitors of BPR?
- Does IT help or hinder BPR?
- Some see BPR as a new concept; others regard it as a collection of old concepts under a new name — what is your view?
- How will BPR change the role of the IT professional, if at all?
- What are the one or two essential ingredients for a successful BPR project?
- What advice would you give to anyone considering adopting BPR?

Each of the responders answered all the questions; however, the producers of the tape selected three representative answers for each question to include in the tape. Following the three answers, **Dr. Glasson** summarizes the major issues raised by all the responders. For the final question, the answers of all responders are shown.

A consensus answer, derived by content analysis, to the first question (What is BPR?) is presented by **Dr. Glasson:** An integrated approach to dealing with business problems and opportunities, through a fundamental rethinking of the key processes of the business, in order to achieve sustainable effects and major business improvements through radical change and the effective alignment of information systems and technology to the goals of the business. The answer to the question "Is BPR mainly hype, or is there substance to it?" proved to be quite interesting: Some 46% of the responders said it is primarily hype, 43% said it is mainly substance, and 11% indicated that it is a mixture of both.

Among the conclusions presented are these: a) Do not automate what exists now in a business, but what should exist. b) BPR is primarily a business concept — not an IT concept. c) BPR is a high-risk activity with potentially high rewards.

Accompanying both tapes are pages of summary information and bibliographies, which the viewers are urged to consult. The brochure *What is **IFIP?*** is also included with the second tape.

To obtain a copy of either tape, please send a note by e-mail to

ISVIDEOS@BAl.curtin.edu.au

The preparation of video tapes for state-of-the-art presentations is an activity that could be undertaken by many groups within **IFIP.** Such tapes can provide valuable information to students and workers around the world, in developed as well as developing countries, about new disciplines. They do not require the speakers to be in the same location at the same time, nor do they require the extensive, detailed preparation on the part of the speakers that is required to create class notes for a state-of-the-art seminar. On the other hand, the value of any presentation is likely to be proportional to the amount of preparation, and capturing the extemporaneous opinions of experts on videotape may result in little more than a collection of banalities, with no substance.

TC8 is to be congratulated on this innovative project. ■

EUROPEAN UNION AND UNESCO ASSISTED EASTERN EUROPEAN SCIENTISTS TO ATTEND INTERACT'95

*by Prof. Brian Shackel (GB)**

The theme we set for INTERACT'95, **IFIP's** Fifth International Conference on Human—Computer Interaction (HCI) was "Bringing People Together." As well as bringing together the usual participants, we fulfilled this theme with especial success by being able to offer **IFIP** Awards to bring 18 scientists from the former Soviet Union and other Eastern European countries to Lillehammer, Norway, to INTERACT.

Well before the Conference, the **IFIP** Technical Committee on HCI (TC 13) decided that attempts should be made to encourage Eastern HCI scientists to go West. Consequently, as the TC13 chairman, I agreed to approach the **IFIP** Developing Countries Support Committee (DCSC) for a starting grant, and also, from my institution's experience of the European Union (Eu), I thought there could be some hope for an EU grant.

The approach to the DCSC was successful; that initiative also revealed that the **IFIP** Contracts Officer, **Mr. Plamen Nedkov (BG),** had assisted the German Gesellschaft für Informatik to obtain grants from both UNESCO and the EU for the same purpose for **IFIP** Congress '94. **Nedkov** suggested that the same UNESCO and EU contacts could perhaps be used. I readily agreed and wrote the proposals, which **Nedkov** submitted to UNESCO and to two sections of the EU, in a developing process over two months.

The decision from UNESCO came quite soon, with a grant of U.S.$3,000, which enabled us to offer three awards of **IFIP** Fellow (although at a minimum cash level, because of the recent large drop in the U.S. dollar exchange rate). Because of changes of Commission staff at the EU, there were delays in responding to our proposal to establish an ongoing project (INTERACT—EAST, with this year's proposal being for Project I'95EAST). Finally, 10 days before the start of the conference and after helpful verbal assurances in advance, the EU grant of 22,750 ECU was confirmed. This EU grant enabled the proposed **IFIP** Projectee awards to be offered, and also enabled a supplement to the **IFIP** Fellow awards, so that they could provide more help with travel as well as costs at the conference in Lillehammer.

About 6 months before the EU grant was decided, a general announcement was made via e-mail and through various contacts in the East. From the applications submitted, a small sub-committee of TC 13 with the INTERACT'95 programme committee chairman selected, with almost unanimous ratings, the three **IFIP** Fellows. Others were informed of the possibility of an award if the EU grant were received.

Finally, 22 Eastern European scientists were informed that an award had been made in their favour. Unfortunately, the EU grant and this announcement arrived too late for four of them to get visas or make their travel arrangements. We were able, however, to welcome 18 scientists from Eastern Europe to INTERACT'95.

Their attendance at INTERACT'95 was an undoubted success. Many letters and e-mail messages of thanks, and hopes to continue and develop further the contacts made, have been received. Any reader who wishes to contact any of these Eastern European scientists may contact me for an e-mail or fax number, at the address below.

IFIP, and especially TC 13, thank UNESCO and the EU for these grants. Naturally, both **IFIP** and TC 13 hope that this success in achieving the first direct grant to **IFIP** from the EU will set a precedent and make it easier for **IFIP** to obtain similar awards in the future.

For further information about this work, please contact

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* past TC 13 chairman

The "Changes in **IFIP"** column has been discontinued because the Secretariat will be providing that information on-line on a regular basis.

PUBLICATIONS continued from page 7

IFIP Policies to Help Publisher

In order to consider all these issues more thoroughly, the Technical Assembly commissioned a task force, chaired by **Dr. Roger Johnson (GB),** which met one evening to discuss the problems and create a plan for action. The task force concluded that electronic publication (except for CD—ROMs) is not likely to be practical for **IFIP** within the next five years, although some doubt it will take that long. The task force recommended the following:

- If possible, conference proceedings should be available and distributed at the time of the conference. (This is a reiteration of an existing policy.) The cost (purchase from C&H at a reduced price) should be borne by the conference organizers.
- In order to reduce C&H expenses, the cost of copies of the proceedings for contributors, previously furnished free by C&H, should henceforth be borne by the event organizers and included in their budgets.
- To assist C&H, an attempt should be made early in the publication process to evaluate the market potential of the proceedings. (The task force did not indicate who would make this evaluation or how.)

No recommendations were made concerning electronic publication five years hence.

Mr. Hammond warned the GA that a delay in the approval of these recommendations might jeopardize the publication of some marginally profitable books. The GA approved the recommendations. The PC, now chaired by **Dr. Johnson,** will take up the work of the task force. ■

The new addresses for accessing the **IFIP** database can be found in the masthead on page 2.

ICSU HOSTS MEETING TO FORM INTERNATIONAL UNION OF COMPUTING SCIENCE AND INFORMATICS

In May, the International Council of Scientific Unions (ICSU) hosted a meeting in Paris to discuss the merits of forming an International Union of Computing Science and Informatics (IUCSI).

ICSU is "an international non-governmental scientific organization, established in 1931 to promote international co-operation in science for the benefit of humankind." At present, **IFIP** is an International Scientific Associate of ICSU, which has been determining whether to admit any organization from the information processing field as a member on an equal footing with its approximately 20 members representing mathematics, physics, chemistry, and other sciences. If ICSU does accept information processing, it will decide what organization best represents the field internationally.

IFIP officers have engaged in discussions with ICSU officers, and in September 1994, a task force was appointed by **Prof. Asbjorn Rolstadås (N),** then president of **IFIP,** to take necessary measures to have **IFIP** represented in ICSU. In March 1995, the **IFIP** Executive Board discussed the matter further and decided to move slowly in that direction, perhaps first co-operating with ICSU on joint projects.

Sixteen prominent computer scientists attended the May meeting convened by ICSU and voiced strong support for the creation of **an** IUCSI, intended to become a member of ICSU. That meeting was not known to **IFIP** until September, when it was reported to the General Assembly.

Goals of New Organization

We quote here a few sections from the proposal drafted at the meeting:

> The primary goal of IUCSI would be to host an International Congress approximately once every four years. Presentations at this Congress would be by invitation of the society, and speakers would be drawn from all active areas of Computing Science and Informatics (CSI). This is not to say that the Congress would attempt to cover all aspects of Computing. For example, the more commercially-related developments in Computing are very well represented elsewhere. Our intent is to focus on the scientific aspects of the field, and to convey some of the intellectual excitement of the discipline....
>
> A second goal of IUCSI will be to promote education in the scientific aspects of CSI....
>
> A third goal will be to promote the internationalization of the scientific study of computing, particularly among developing nations. The primary means by which this can be accomplished is through the sponsorship of more frequent international and regional conferences, and support of the travel costs of young scientists....

Comparison with **IFIP**

> International contact and collaboration in computing has been well served by existing structures. The **IFIP,** in particular, has undertaken responsibility for promotion of quality and range in education, for advancement of the subject in underdeveloped countries, and for establishment of technical committees and working groups engaged in coordination of standards and preparatory research leading to consensus. Their regular (two-yearly) Congress brings together contributions from all engaged in development, promotion and exploitation, of computers, and its success reflects widespread realisation of the immense economic, commercial, industrial, financial, and social implications of computing technology.
>
> However, there is a possibility that, among all these vital pursuits, the unifying role of the underlying basic science may be obscured. We intend therefore to complement many of the activities of these existing organisations, but focusing on the scientific aspects of the field. Links to application will be maintained and welcomed as a source of challenges and new directions, and a trigger to advances in the basic science.
>
> Many national computing societies, such as the IEEE, ACM, and CRA, also take serious responsibility for the international dimension, and we would expect to work closely together with such societies, either informally or as associated or adhering bodies....
>
> To carry out the scientific role outlined above, the proposed Union must be led by prominent scientists and supported by a simple, efficient organization. In particular, we envision a structure that is similar to other unions within ICSU such as the International Mathematics Union (IMU).
>
> The IMU has 52 member countries, each of which pays an annual fee of between 1200 and 12,000 Swiss Francs, depending on the level of activity in that country....There is a minimal level of administrative support for the officers of the union and no permanent staff. The Executive Committee appoints two committees, one to organize the International Congress and one to select Fields Medal winners. It also allocates funds for all IMU activities, including the support of other international meetings.
>
> By design, the proposed CSI Union would fit well within the framework of ICSU. ICSU itself has expressed a strong interest in the creation of this union within the ICSU family.

A task force led by **IFIP's** president, **Prof. Kurt Bauknecht (CH),** will soon contact ICSU.

NEW **IFIP** COMMITTEE CHAIR APPOINTMENTS

The following appointments as committee chairs were made by **Prof. Kurt Bauknecht (CH),** the new **IFIP** president, following the September General Assembly in Calgary:

Technical Assembly:
Prof. Martti Tienari (SF)
Activity Management Board:
Dr. Walter Grafendorfer (A)
Admissions Committee:
Mr. Masanori Ozeki (J)
Congress Committee:
Mr. Chris Guy (ZA)
Developing Countries Support Committee:
Mr. Moshe Gottlieb (IL)
Finance Committee:
Dr. Dipak Khakhar (S)
Marketing Committee:
Mrs. Patricia Glenn (CDN)
Publications Committee:
Dr. Roger Johnson (GB)
Statutes and Bylaws Committee:
Prof. Pierre Bobillier (CH)
Internal Awards Committee:
Mr. Graham Morris (GB)
Nomination Committee for Officers:
Mr. Aage Melbye (DK)
Nominations Committee for Trustees:
Mr. Dudley Dolan (IRL)

The Technical Committee and Specialist Group chairmen are listed in a box on page 15.

IFAC '96 ON CD-ROM

*by Prof Janos Gertler (USA) **

[We include here a major portion of an article from the newsletter of the International Federation of Automatic Control (IFAC), a sister federation of **IFIP,** also located in Laxenburg. The topic may be of interest to the **IFIP** community. — Editor]

The idea of putting the material of IFAC Congresses and Symposia on CD—ROMs, instead of paper, first came up in 1991. Subsequently, the National Organizing Committee of the 1996 San Francisco IFAC Congress gave the matter some serious consideration — and concluded that, by then, the time might be ripe for this innovation....

Our friends at Elsevier [the IFAC publisher] were kept informed during the whole process and were invited at an early stage to participate. After some initial hesitation, they became enthusiastic supporters of the idea, and are now ready to actually prepare and market the CD—ROMs.

As a result of all these discussions, the following arrangements are now in place for the 1996 Congress. The full material of the Congress, estimated at about 9600 pages, will be placed on CD—ROMs. The disks will be prepared from the usual camera-ready manuscripts by optical scanning. They will contain the table of contents, authors' index, and subject (keyword) index and will be readable under DOS and UNIX operating systems. Each participant of the Congress will receive a copy as part of the registration package. Copies provided to the Congress participants will carry single-user licenses. The same CD—ROMs will be marketed by Elsevier after the Congress and carry library (multiple-user) licenses.

The full material will also be printed in the usual way from camera-ready manuscripts. The printed papers will be arranged in about 17 "subject volumes," each volume containing a thematically-coherent part of the material. Congress participants will receive, as part of their registration package, two volumes of their choice, and may purchase additional volumes for extra payment. Volume choices made at preregistration will be guaranteed, while on-the-spot selections will be satisfied as long as the stocks permit. In addition to the subject volumes, every participant will receive a Plenary and Index volume, which will also contain instructions concerning the use of the compact disks.

The organizers and the publisher do hope that the significant extra effort needed to implement this scheme will pay off, in terms of the satisfaction of the Congress participants and of the entire control-engineering community. They also trust that what is an experiment today will prove to be the wave of the future. ■

* Publications Manager, IFAC '96

SEC 95 continued from page 1

the majority of which were very well received. The good balance between commercial and academic papers was especially noted by the delegates. (Unfortunately, 3 papers had to be canceled because the authors did not attend.)

The six invited speakers were **Mr. Bill Murray (USA), Mr. Don Parker (USA), Prof. Sead Muftic (S), Prof. Kurt Bauknecht (CH), Prof. Lance Hoffman (USA),** and **Dr. Fred Cohen (USA).** The invited talks were very well received, providing real food for thought. **Mr. Murray,** for example, indicated that engineers build bridges and buildings only after they clearly understand their technologies and materials, and are sure that their construction will last. The question was whether the IT (information technology) discipline, especially the information security discipline, is always as sure about the systems it is constructing. **Dr. Cohen** reiterated this question by referring to the dependence of large power-generating plants and other infrastructure systems on IT. **Mr. Parker,** in his talk about ways to avoid information anarchy, also touched on this issue. Another issue was security in open systems, and the talk by **Prof. Muftic** clearly illustrated the potential problems, but also provided some solutions. Cryptographic policy issues were addressed by **Prof. Hoffman.** TC11 established a task force to compile a list of encryption policies in different countries.

Some other issues were also prevalent at the conference. One was the aspect of internal controls in IT systems, and their relation to information security. A task force was set up by TC11 to report on this matter. TC11 also established a task force to report on standardization issues.

A first for this conference was the Swedish track. On the Thursday of the conference, a separate, dedicated, parallel track was scheduled, consisting only of papers by Swedish authors, providing a comprehensive overview of the research and development in Sweden in the area of information security.

In general, the technical part of IFIP/Sec 95 was very successful, providing a real state of the art presentation and evaluation of information security on the international scene. **Prof. Basle von Solms (ZA)** was General Chair of the conference, and **Prof. Jan Eloff (ZA)** was Chair of the International Program Committee. These two were also joint Chairs of the Organizing Committee. The full proceedings of the conference are now available from the **IFIP** publisher, Chapman & Hall.

During the official conference banquet, with a true African theme and live African music, the **Kristian Beckman** Award, in memory of **the first** chairman of TC11, was awarded to **Mr. Per Roving (S).** This Award is made annually by TC11 to a person who has made an international contribution to information security.

For all those who could have attended **IFIP/Sec** 95, and who did not: You missed a great conference!!! Do not make the same mistake next year. IFIP/Sec 96 takes place 21-24 May 1996 on the Greek Island of Samos. For more information, please contact the **IFIP/Sec** 96 Secretariat:

fax: +30 1 364 5154
e-mail: sec96@aegean.ariadne-t.gr.

IFIP/Sec 97 is scheduled for Denmark, and IFIP/Sec 98 for Austria/Hungary.

TC11 also held its annual meeting just before the conference. The meeting was attended by delegates from 22 countries — the most in a long time. A strategic policy-direction document for TC 11 was accepted at the meeting, and a number of task forces were established to investigate and report on various issues. Working Groups also submitted their future plans. At the meeting, **Prof. von Solms** was elected Chairman of TC11 until 1998, and **Prof. Reinhard Posch (A)** was elected Vice-Chairman for the same term.

For more information about TC11 and its Working Groups, please **contact** the Secretary, **Dave Batchelor,** at

e-mail: 72607.744@compuserve.com ■

FUTURE IFIP MEETINGS

GENERAL ASSEMBLY AND COUNCIL (and related meetings)

Council	3-7 Mar 96 (Sun.–Thurs.)	Sandton (near Johannesburg), South Africa
GA	5-10 Sep 96 (Thurs.–Tues.)	Canberra, Australia
Council	Mar 97	Slovakia (Bratislava or elsewhere)
GA	(contiguous to **IFIP** Congress '98)	Vienna, Austria, or Budapest, Hungary

TECHNICAL COMMITTEE AND WORKING GROUP MEETINGS

TC2	13-14 Jul 96	Oxford, U.K.
WG2.1	Jun 96	Western U.S.A.
WG2.2	Sep/Oct 96	Macao
	97	Graz, Austria
WG2.3	15-19 Apr 96	Han-Sur-Lesse, Belgium
	Jan 97	California, U.S.A.
WG2.4	3-7 Jun 96	Ameland, The Netherlands
	Jun 97	Berlin, Germany
	98	Colorado, U.S.A.
WG2.7/13.4	15-18 Apr 96	Vancouver, BC, Canada
WG2.9	second quarter 96	Northwestern U.S.A.
TC3	1-2 Sep 96	Wollongong, Australia
	97	Ghent, Belgium, or The Netherlands
TC5	Jan 96	e-mail conf. of WG chairs
	10 May 96	Trondheim, Norway
WG5.7	3 Nov 96	Kyoto, Japan
TC6	26-27 Apr 96	Montreal, Canada
	6-7 Sep 96	Australia
	or mid Oct 96	Zimbabwe
	Mar/Apr 97	Cambridge, U.K.
	Sep/Oct 97	Beijing, P.R.C., or Tunisia
	Apr/May 98	Bulgaria or Denmark
TC7	17-20 Jun 96	Munich, Germany
	Jul 97	Detroit, MI, U.S.A.
	Jul 99	Cambridge, U.K.
TC8	12-13 Apr 96	Tucson, AZ, U.S.A.
WG8.1	7 May 96	Geneva, Switzerland
WG8.2	7 Dec 95	Cambridge, U.K.
	Dec 96 (with ICIS)	Cleveland, OH, U.S.A.
	Dec 97 (with ICIS)	Atlanta, GA, U.S.A.
TC9	16-17 Mar 96	Tel Aviv, Israel
WG9.2	12-14 Jan 96	Namur, Belgium
WG9.5	7 Jul 96	Brighton, U.K.
WG9.6	9-10 Mar 96	Hamburg, Germany
TC10	Sep 96	Canberra, Australia
WG10.4	23-27 Jan 96	Martinique, French West Indies
	27 Jun – 2 Jul 96	Marioka, Japan
TC1 I	May 96	Samos, Greece
	97	Denmark
WG11.1, 2, 5, 8:		
	22 May 96	Samos, Greece
WG11.3	22-24 Jul 96	Como, Italy
WG12.2	3-6 Jul 96 (with ICML96)	Bari, Italy
TC13	14 Apr 96	Vancouver, BC, Canada
WG13.1	16 Apr 96	Vancouver, BC, Canada
WG13.2	13 May 96 (during working conf.)	Geneva, Switzerland
WG13.4/2.7	15-18 Apr 96	Vancouver, BC, Canada
SG14	96	U.S.A.

This information is furnished to the *Newsletter* by the Secretariat. Will TC and WG chairmen kindly keep the Secretariat advised of the dates and locations of their future administrative meetings and also send a copy of the minutes to the Secretariat. Some meetings are scheduled in conjunction with working conferences, for which the conference dates are listed.

National Abbreviations Used in Newsletter

A	Austria	DK	Denmark	NL	The Netherlands
AUS	Australia	GB	United Kingdom	S	Sweden
B	Belgium		Italy	SF	Finland
BG	Bulgaria	IL	Israel	SK	Slovakia
CDN	Canada	IRL	Ireland	USA	U.S.A.
CH	Switzerland		Japan	ZA	South Africa
CZ	The Czech Republic	N	Norway	ZW	Zimbabwe
D	Germany				

CALLS FOR PAPERS

IFIP Congress '96
2-6 Sep 96, Canberra, Australia
The three conferences that make up the Congress are as follows:

Advanced IT Tools
papers due: 31 Jan 96
contact: Dr. Nobuyoshi Terashima
do ATR Communications Systems Research Laboratories
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Mobile Communications
papers due: 31 Jan 96
contact:
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Teleteaching 96
suggestions for interactive events due: 31 Jan 96
contact: Sandra Wills
Director, Educational Media Services
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fax: +61 42 258 312
e-mail: s.wills@uow.edu.au

Fifth Intl. Conf. on **Computers Helping People with Special Needs — ICCHP'96**
17-19 Jul 96, Linz, Austria
papers due: 1 Feb 96
contact: Joachim Klaus
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tel: +49-721-608-2760, fax: +49-721-69 73 77
e-mail: joachim_klaus@ira.uka.de

IFIP TC6/WG6.1 Joint Intl. Conf. on **Formal Description Techniques for Distributed Systems and Communication Protocols, and Protocol Specification, Testing, and Verification — FORTE/PSTV'96**
8-11 Oct 96, Kaiserslautern, Germany
papers due: 19 Apr 96
contact:
FORTE/PSTV'96 Organization Committee
Univ. of Kaiserslautern
P.O. Box 3049
D-67653 Kaiserslautern, Germany
tel: +49 631 205-3426 or -3287
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Education and Information Technologies

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Work. Conf. on *Implementation of Decision Support Systems*	22-25 Jul 96	London, U.K.	**IFIP** WG8.3 London Sch. of Ec.
Second Work. Conf. on *Information Technology in Educational Management*	22-26 Jul 96	Hong Kong	**IFIP** TC3, HKBU
South—East Asia Communication Conference — SEACOMM 96	27-29 Aug 96	Kuala Lumpur, Malaysia	MNCC, **IFIP** TC6
Workshop *Teleteaching '96*	2-5 Sep 96	Vienna, Austria, and Prague, Czech Rep.	**IFIP** TC3/WG3.6
IFIP Congress '96 — Fourteenth World Computer Congress	**2–6 Sep 96**	**Canberra, Australia**	**IFIP**
Intl. Symp. on *Operations Research — SOR'96*	4-6 Sep 96	Braunschweig, Germany	DGOR, GMOEOR **IFIP** WG7.4
Ninth Intl. Workshop on *Testing Communication Systems — IWTCS*	9-11 Sep 96	Darmstadt, Germany	**IFIP** TC6 WG6.1 GMD
Work Conf. *Intelligent Networks 96*	11-12 Sep 96	Dallas, TX, U.S.A.	**IFIP** TC6, IEEE CS
Intl. Work. Conf. on *Communication and Multimedia Security*	23-24 Sep 96	Essen, Germany	**IFIP** TC6, TCIl
Intl. Workshop on *Personal Wireless Communications*	end Sep 96	Chania, Greece	**IFIP** TC6 TG Wireless Netw.
Open Conf. on *Formal Description Techniques and Protocol Specification, Testing, and Verification — FORTE/PSTV'96*	8-11 Oct 96	Kaiserslautern, Germany	**IFIP** WG6.1
Intl. Conf. *CCDC 96 and AFRICOM 96*	15-17 Oct 96	Harare, Zimbabwe	**ICCC, IFIP** TC6
Fifth Intl. Workshop on *Protocols for High-Speed Networks '96*	28-30 Oct 96	Sophia Antipolis. France	**IFIP** TC6/WG6.I
Intl. Workshop on *Distributed Systems Operation and Management*	Oct 96	Rome, Italy	**IFIP** WG6.6 SSGRR
Work. Conf. on *Mathematical and Scientific Computing.' Quality of Numerical Software*	96	Oxford, U.K.	**IFIP** WG2.5
Second Intl. Symp. on *Mathematical Modelling*	5-7 Feb 97	Vienna, Austria	IMACS, TU Vienna, IFAC, **IFIP**
Intl. Conf. *on Open Distributed Processing — ICODP 97*	May 97	Toronto, On., Canada	**IFIP** TC6, IBM
Fourteenth *IMEKO World Congress*	2-6 Jun 97	Tempaere/Helsinki, Fin.	IMEKO
INTERACT 97	14-18 Jul 97	Sydney, Australia	**IFIP** TC13
Eighteenth Conf. on *System Modelling and Optimization*	21-24 Jul 97	Detroit, MI, U.S.A.	**IFIP** TC7, Wayne Univ.
IFIP Congress '98 — Fifteenth World Computer Congress	**23-29 Aug 98**	**Vienna, Austria, and Budapest, Hungary**	**IFIP**

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Work. Conf. on *Information Technology and Changes in Organizational Work*	7-9 Dec 95	Cambridge, U.K.	**IFIP** WG8.2
Intl. Conf. *NETWORKS 96*	3-5 Jan 96	Bombay, India	CS1 **IFIP** TC6
Intl. Workshop on *Stochastic Optimization*	8-12 Jan 96	Tucson, AZ, U.S.A.	**IFIP** WG7.7 US–NSF
Third Intl. Conf. on *Achieving Quality in Software — AQuIS'96*	24-26 Jan 96	Florence, Italy	**IFIP** WG5.4
Intl. Workshop on *Information Technology in the Public and Private Sector: Policy, Strategy and Application*	25-26 Jan 96	Delft, Netherlands	**IFIP** WG8.3, 8.5
Work. Conf. on *New Directions in Modelling and Simulation Technology*	5-9 Feb 96	California, U.S.A.	**IFIP** WG7.1 UCLA
Workshop on *Numerical Optimization*	7-9 Feb 96	Gainesville, GA, U.S.A.	**IFIP** WG7.2
Intl. Conf. on *Distributed Platforms — ICDP '96*	27 Feb – I Mar 96	Dresden, Germany	**IFIP** WG6.1 RWTH Aachen et al.
Workshop on *Formal Methods for Open Object-Based Distributed Systems*	4-6 Mar 96	Paris, France	**IFIP** WG6.1
Symp. on *Industrial Benefits and Advances in Formal Methods — FME'96*	17-22 Mar 96	Oxford, U.K.	Comm. of European Comm., **IFIP** WG14.3
Work. Conf. on *Impact of Information Technology from Practice to Curriculum*	18-21 Mar 96	Neve-Ilan, Israel	**IFIP** TC3, TC9/WG9.5
First Intl. Workshop on *Software Engineering for Parallel and Distributed Systems*	25-26 Mar 96	Berlin, Germany	ICSE **IFIP** TC10
Work. Conf. on *Software Engineering and CASE Tools for Control Technology of Manufacturing Systems*	28-29 Mar 96	Stuttgart, Germany	**IFIP** WG5.3
Seventh Work. Conf. on *Reliability and Optimization of Structural Systems*	2-4 Apr 96	Boulder, CO, U.S.A.	**IFIP** WG7.5, Univ. of Col., Tech. Univ. of Munich
Work. Conf. on *International Office of the Future: Design Options and Solution Strategies*	9-11 Apr 96	Tucson, AZ, U.S.A.	**IFIP** WG8.4 U. of Arizona
Intl. Symp. on *Network Operation and Management '96*	16-19 Apr 96	Kyoto, Japan	IEEE CS **IFIP** WG6.6
Intl. Conf. on *Compiler Construction*	22-26 Apr 96	Linkoeping, Sweden	**IFIP** WG2.4
Work. Conf. on *Broadband Communications '96 — BB '96*	23-25 Apr 96	Montreal, Qu., Canada	**IFIP** WG 6.2 IEEE–CS
Work. Conf. on *Domain Knowledge for Interactive Systems Design*	8-10 May 96	Geneva, Switzerland	**IFIP** WG8.1, WG13.2
Intl. Conf. on *Nonlinear Problems in Aviation and Aerospace*	9-11 May 96	Daytona Beach, FL, U.S.A.	Intl. Fed. of Non-Linear Analyst: **IFIP** WG7.2
Work. Conf. on *Domain Analysis and Modelling for Interactive Systems*	9-12 May 96	Geneva, Switzerland	**IFIP** WG13.2 WG8.I
Twelfth Intl. Open Conf. on *Information Systems Security: Facing the Information Society of the 21st Century — IFIP/SEC'96*	21-24 May 96	Island of Samos, Greece	**IFIP** TC11 Greek Comp. Soc. Cyprus Comp. Soc.
Work. Conf. on *Optimization-Based Computer-Aided Modelling and Design*	28-30 May 96	Noisy-Le-Grand, France	**IFIP** WG7.6
Workshop on *MIS Research*	2-4 Jun 96	Philadelphia, PA, U.S.A.	**IFIP** WG9.2
Sixth Conf. on *Information Network and Data Communication — INDC 96*	17-19 Jun 96	Trondheim, Norway	**IFIP** TC6, ICCC
Intl. Conf. on *Architectures and Design Methods for Balanced Automation Systems — BASYS '96*	17-19 Jun 96	Lisbon, Portugal	EC, **IFIP** WG5.3, IEEE CS
Intl. Workshop on *Performance of Communication Systems*	Jun 96	Budapest, Hungary	**IFIP** WG6.3 IEEE CS
Work. Conf. on *Information and Communication Technology: Supporting Change in Teachers Education*	30 Jun – 5 July 96	Kfar Blum, Israel	**IFIP** TC3, WG3.1 & 5
Thirteenth ***IFAC*** *World Congress '96*	30 Jun – 5 Jul 96	San Francisco, CA, U.S.A.	IFAC
Work. Conf. on *Education and Informatics*	1-5 Jul 96	Moscow, Russia	**IFIP** TC3/WG3.3 UNESCO
Work. Conf. on *Place of Information Technology in Management Education*	8-12 Jul 96	Melbourne, Australia	**IFIP** WG3.4 Deakin U.
Fourteenth ***IFORS*** *World Congress*	8-12 Jul 96	Vancouver, B.C., Canada	IFORS
Work. Conf. on *Numerical Software: Assessment and Enhancement*	8-12 Jul 96	Oxford, U.K.	**IFIP** WG2.5

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IFIP Congress '96 — 14th World Computer Congress	2-6 Sep 96	Canberra, Australia	**IFIP**
IFIP Congress '98 — 15th World Computer Congress	23-29 Aug 98	Vienna, Austria, and Budapest, Hungary	**IFIP**

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