Phoebe's Twitter

As we started to gear-up with the preparations for this issue of the Newsletter we received the sad news of the passing of **Prof. Heinz Zemanek** on 16 July.

Heinz was a leading Austrian computer pioneer, President of the International Federation for Information Processing (IFIP) 1971 – 1974 and a long-standing IFIP Historian.

As a tribute to Prof. Zemanek and in recognition of his achievement in the computing field we publish the series of interviews with him and eight other IFIP Presidents, which we did in 2002. The issues that are raised in these interviews remain fresh and tangible today, and we thought Heinz would have preferred this homage instead of a standard obituary. Moreover, the interviews are a concise and authentic record of international developments in the ICT field, as seen by the nine Presidents, which we thought would contribute to the debate of the forth-coming **8ᵗʰ IT STAR WS on History of Computing** on 19 September 2014 in Szeged (HU) – *www.starbus.org/ws8*.

The Newsletter also follows up on an IPTS article on Europe's Top ICT Hubs (Vol. 12, no.2. Summer 2014 Newsletter) with an invited piece on Dublin, Ireland as one of the top performing European hubs, the experience of which could serve for inspiration to regions in Central and Eastern Europe and elsewhere.

Take the Journey,

The Editor

IT STAR representatives

Austria/OCG-E. Mühlvenzl, **Bulgaria**/BAS-K. Boyanov, **Croatia**/CITA-M. Frkovic, **Cyprus**/CCS-P. Masouras, **Czech Rep.**/CSKI-J. Stuller, **Greece**/GCS-S. Katsikas, **Hungary**/NJSZT-B. Domolki, **Italy**/AICA-G. Occhini, **Lithuania**/LIKS-E. Telešius, **Macedonia**/MASIT-P. Indovski, **Poland**/PIPS-M. Holynski, **Romania**/ATIC-V. Baltac, **Serbia**/JISA-D. Dukic, **Slovakia**/SSCS-I. Privara, **Slovenia**/SSI-N. Schlamberger

Contents

Editor

Partner Publication

http://mondodigitale.aicanet.net/ultimo/index.xml ∎

Phoebe's Twitter

This article, based on a project we did with the IFIP Presidents twelve years ago, was originally published on IFIP's website and in Vol. 19, no. 1-3. September 2002 of IFIP's NL. It is retrospective and insightful - great reading with concrete recommendations from the past.

Minor editing is done to the original text, and the photos are new to tell a colorful story, yet the genie remains, as it was, to be considered and appreciated.

The Editor

The IFIP Presidents
Plamen Nedkov[1]

IFIP, an organization with a dynamic field of activity, needs to be "on the go" in order to remain relevant, proactive and reactive to the external environment and to our Members' expectations. This, however, does not necessitate the reinvention of the wheel, as there are matters for which we can resort to the wisdom and experience of previous **IFIP** officers. **IFIP** is the result of the cumulative efforts of several generations of representatives of various professional and cultural backgrounds, which form the mold and backbone of a truly international organization. For this reason, it is important to look back and learn from our predecessors periodically as we stride forward.

Twelve individuals have provided leadership to **IFIP** during a period of 41 years:

Isaac Auerbach † (US) 1960–1965
Ambros Speiser † (CH) 1965–1968
Anatol Dorodnicyn † (RU) 1968–1971
Heinz Zemanek † (AT) 1971–1974
Richard I. Tanaka (US) 1974–1977
Pierre A. Bobillier (CH) 1977–1983
Kaoru Ando (JP) † 1983–1986
Ashley W. Goldsworthy (AU) 1986–1989
Blagovest Sendov (BG) 1989–1992
Asbjørn Rolstadås (NO) 1992–1995
Kurt Bauknecht (CH) 1995–1998
Peter Bollerslev (DK) 1998–2001

Three of them – **Auerbach**, **Dorodnicyn**, and **Ando** – are no longer among us. For the remaining nine, **IFIP** presents an attraction of varied intensity. Irrespective of that intensity, they are and will remain an intrinsic part of the Federation.

In late January 2002, I was in contact with the nine living former Presidents and invited them to respond to the following four questions:

1. **During your tenure as IFIP president, what, in your opinion, were the most significant IFIP developments and activities?**

---

1 Then IFIP Executive Director

EDITORIAL POLICY

This Newsletter maintains a world-class standard in providing researched material on ICT and Information Society activities from the perspective of Central, Eastern and Southern Europe (CESE) within a global context. It facilitates the information and communication flow within the region and internationally by supporting a recognized platform and networking media and thus enhancing the visibility and activities of the IT STAR Association.

The stakeholders whose interests this newspaper is addressing are

- IT STAR member societies and members
- ICT professionals, practitioners and institutions across the broad range of activities related to ICTs in government, business, academia and the public sector in general
- International organizations

Individual articles from the Newsletter may be reprinted, translated, and reproduced, except for denoted copyright protected material, provided that acknowledgement of the source is made. In all cases, please apply for permission to the Newsletter Editor.

Special arrangements for the production and circulation of the Newsletter could be negotiated.

The newsletter is circulated to leading CESE ICT societies and professionals, as well as to other societies and IT professionals internationally. Everyone interested in CESE developments and working in the ICT field is welcome to contribute with original material. Proposals for articles and material for the Newsletter should be sent two months before the publication date to info@starbus.org.

2. **Are you currently interested in IFIP? If so, are there any developments you like in particular and you feel should be further encouraged?**
3. **Are there any specific issues you find important for IFIP to address?**
4. **Please share with us a few words about yourself at present: professional occupation, personal projects, hobbies, and other activities.**

The presidents were candid and enthusiastic about this project. The interviews were done in February through May and were posted individually at http://www.ifip.org/secretariat/presidentday.htm in the order in which they arrived. Now the project is complete, and we are pleased to offer the full collection.

It was a pleasure to work with former Presidents **Ambros**, **Heinz**, **Dick**, **Pierre**, **Ashley**, **Blagovest**, **Asbjørn**, **Kurt**, and **Peter** on this project and to feel how faithful they continue to be to **IFIP** and its mission.

Ambros Speiser[2] (CH) 1965–1968

Ambros Speiser, *Isaac Auerbach and Anatol Dorodnicyn (1970)*

Swiss exports? Medicine, technology, watches, chocolate ... what about presidents? **Prof. Ambros Speiser** *was the first of the magnificent Swiss trio to lead* **IFIP**. *Ambros was the second* **IFIP** *president, from 1965 to 1968. Before that, he was appointed by the first* **IFIP** *Council meeting in 1960 as* **IFIP** *Secretary–Treasurer. What is* **Speiser's** *story for us? He tells us how* **IFIP** *made bureaucrats in the Soviet Union and IBM–France more considerate and how Germany was united (and then separated) in* **IFIP** *three decades before the Berlin wall collapsed.*

Question 1 (significant **IFIP** *developments):*
In my presidency, important events included the increase in membership (Chile, Hungary and Yugoslavia were admitted). During my term as Secretary–Treasurer and prior to my assuming the Presidency, an important step was a change in the management structure: Previously the Federation was governed by a Council, which was an assembly of all delegates. As the number of participating countries and, accordingly, of the Council members increased, it became necessary to create the General Assembly (GA), consisting of all delegates and meeting once a year, and the Council, a smaller group including the officers and a selection of delegates, meeting twice yearly. In 1966, the Secretariat and

2 † Ambros passed away on 10 May 2003

Treasury became more professional. Previously, my secretary and I had done this work in my office as Director of the IBM Research Laboratory in Zurich. As the workload increased, it was decided to move the Secretariat and Treasury to the British Computer Society in London. After the 1968 Congress in Edinburgh, these operations were transferred to Geneva and later to Laxenburg, Austria, in 1995. Among the many events, there are a few episodes that come to mind – not very important, to be sure, but still worth being remembered. One was the preparation of the Council meeting in Tbilisi (Tiflis) in the Soviet Union in the spring of 1968. At the previous meeting in Mexico City, the Soviet representative, **Anatol Dorodnicyn**, had invited the Council to meet in the Soviet Union. Everyone agreed. When I asked whether a visitor's visa would be provided for all the delegates, the answer was, yes. "Really for everyone, without exception?" "Yes, of course." Two weeks before the meeting, the event that I had feared occurred: **Dov Chevion** called me from Israel, saying that his application for a visa had been rejected.

So I took the telephone and called **Dorodnicyn** in Moscow. I reminded him that he had promised visas for all members without exception, and I told him in no unclear terms that I would cancel the entire meeting if **Chevion** did not have his visa in time. I told him that I had asked my secretary to prepare a telegram for each of the members, calling the meeting off, and that these telegrams would be sent out within a week. At the last moment, **Chevion** called me, saying he had received word that he should travel to the Soviet Embassy in Vienna where his visa would be ready. Finally, after waiting in Vienna for a full day, he was allowed to travel, and the meeting could take place. Later, I learned that **Dorodnicyn**, in his fight with the Soviet bureaucracy, was almost driven mad before he finally was successful.

Another event worth remembering was our visit to the IBM Research Laboratory in La Gaude, France. We had scheduled a GA meeting in Nice, France, in 1965, and IBM had invited us to take half a day off for a visit to their Research Laboratory in nearby La Gaude. To my question whether all participating members would be welcome, the answer was, of course, yes. So when we arrived with our bus, we were cordially greeted and asked into the lobby. There we were politely told that the representative of the Soviet Union could not participate in the tour; he would have to stay in the lobby. My answer was straightforward: In that case nobody will participate. I said that I had instructed the bus driver to wait and that we were ready to go back to Nice and visit a museum. Understandably, this caused the utmost embarrassment to our hosts. Finally, after about a half an hour of waiting – during which time, as I learned later, there were frantic telephones calls going back and forth between Nice and IBM Headquarters in Paris – we were told that everyone, including **Dorodnicyn**, would be welcome. I could ask the bus driver to leave, and there followed a most interesting visit.

Political undertones became visible also on another level. At the time of my presidency, Germany was represented by Deutsche Arbeitsgemeinschaft für Rechenanlagen (DARA),

which insisted that it represented East Germany as well as West Germany. Accordingly, on the meeting table, the delegate's seat was marked "Germany." Then suddenly at one meeting, an overzealous secretary had prepared a sign that read "Federal Republic of Germany." Fortunately, I discovered the mistake before the delegates arrived, and the sign was replaced in time. Otherwise, this would have been taken as an indication that, by reserving the seat for the Federal Republic of Germany, we were prepared to allow another seat for the German Democratic Republic. But the fiction of a unified Germany could not be maintained much longer. In 1968, the West German representation went to "Gesellschaft für Informatik," and a separate representation for East Germany had to be admitted.

Question 4 *(personal activities)*:
I am one of the few **IFIP** Presidents (perhaps the only one?) who left the information processing field after his **IFIP** term. In 1966, I decided to make a complete change in my life and to accept the position of Director of Corporate Research of Brown Boveri, a large international corporation based in Switzerland, active mainly in the electric-power field. Accordingly, steam turbines and electric generators, rather than computers, became the objects of my daily work. The two years of **IFIP** Presidency, while an employee of Brown Boveri, did present some problems. While my company was generous in allowing me time (and also travel expenses) for my **IFIP** work, in my contacts with colleagues and with top management, I met little interest in **IFIP**. Certainly, the company is not to be blamed, as priorities were simply different. Of course, I found new and interesting challenges, not only in my main job, but also in national science policy and in professional societies, culminating in my Presidency of the Swiss National Academy of Engineering from 1987 to 1993.

My hobbies today are writing articles in professional journals and in the daily press, as well as books on scientific subjects for lay readers. Also, I give talks (on the history of computers, among other subjects), now of course with the help of my laptop computer and a beamer. My family, with ten grandchildren, is happy to find that their grandfather now has more time for them.

Heinz Zemanek[3] (AT) 1971–1974

Heinz Zemanek, *Plamen Nedkov & Asbjørn Rolstadås, IFIP Secretariat- Laxenburg (AT-1995)*

***Prof. Dr. Heinz Zemanek** was the fourth **IFIP** president. Heinz is a cultural ambassador of Austria, the region, and the **IFIP** community. There is so much to say about him that anyone who assumes the task to write extensively about him risks missing something substantial. His **IFIP** connections long preceded the day he attended his first **IFIP** meeting. They go back to 1936, when young **Heinz**, as a scout, mastered switch-box communications at a summer camp in Laxenburg. Did he suspect that the switch box he operated would connect him to a worldwide organization for the information age that would come to Laxenburg? Some 66 years after his scout camping experience, **Heinz** believes that tele-operation will trigger a new era. Will **IFIP** be the spearhead? He also gives us his visions and thoughts on women in IT, the **IFIP** Congress, mausoleums and archives.*

Question 1 *(significant **IFIP** developments)*:
The developments during my term (and during my vice-presidency while I was a kind of acting assistant to

3 † Heinz passed away on 16 July 2014

President Dorodnicyn) are described in extenso in *A Quarter Century of IFIP* (ed. Zemanek, North-Holland, Amsterdam, 1986, © **IFIP**). Here is only a list of keywords: Technical Committee (TC) 4 on Health Care and Biomedical Research, TC6 on Communication Systems, TC7 on System Modeling and Optimization, TC9 on Relationship between Computers and Society (and its First Conference on Human Choice and Computers), Congresses '71 and '74, MEDINFO '74, **IFIP** Summaries 1971 and 1974, Congress '80 held on two continents, **IFIP** Technical Day, **IFIP** Silver Core Awards, **IFIP** Annual Report, Five International Associations Coordinating Committee (FIACC), Activity Planning Committee (APC), Cognizant Persons.

*Question 2 (current interest in **IFIP**):*
Yes, I am still interested in **IFIP**, and I keep close relationships to the **IFIP** Executive Director and the Laxenburg office. In my archive, discussed later, I have an unusual collection of **IFIP** documents. It is evident that the transition from the mainframe to the PC and further to a general network of them (the Internet) changed the character of **IFIP's** subject, the nature of information processing. Consequently, the Federation has the duty to adapt to the new situation. Global interconnections increase the importance of global cooperation and so increase the significance and value of **IFIP**. A future additional area of similar importance is tele-operation. He who dials a phone number or selects an Internet address triggers tele-operation: certain switches, real or virtual, establish the interconnection. It is easy to imagine the generalization to other kinds of distant action. It is less easy and will take some time (but it will happen) to standardize the actions and their commands. This will trigger a new era of information technology. TC6 of **IFIP** was instrumental in starting the Internet – **IFIP**, I am sure, will establish a TC to prepare for this new era.

*Question 3 (important issues for **IFIP**):*
The issue I would propose to the heart of **IFIP** is information technology for handicapped people. There are initiatives and some results, in **IFIP** itself and even more in some Member societies, but **IFIP** as a whole has not put enough stress on this subject, which is one of the most worthwhile and human issues that exist in our field. We do not have enough women in our profession, and we need more female spirit. My idea is not to have women imitating men (men can do the male jobs better). We need more of the intuition, of the generality, of
the user's view, of the female user's view (as specialists, men are good enough) that women are excellent at. That is not achieved by electing 50% women to our committees. And this leads to the wish I expressed in *36 Years of **IFIP*** (ed. Zemanek, **IFIP** Secretariat, Laxenburg, Austria, 1996): **IFIP** should work to regain the universal nature of the **IFIP** Congress, which they had in the first years – not an agglomeration of specialist conferences. Information technology is all embracing. Our specialists cannot have too much of an exposure to general concepts.

Let me come back to the spirit of our founder: in a time of American predominance in computer technology and in an era of "cold war," **I.L. Auerbach** conceived and created an instrument of cooperation and mutual understanding (including the "enemy"), which was also a tool of peace. People who understand information technology know the importance of global cooperation and are workers for peace. This idea of **Auerbach** is as valid today as it was in his time. **Auerbach** had to convince his contemporaries to join his tool for peace. **IFIP** has to detect the present nature of this Auerbach principle and to implement the tool necessary for our days. The cooperation with the successor nations of the U.S.S.R. and with China is as urgent as it was 40 years ago. I think it is not powerful enough. And there are further gaps to be bridged. Here is only one idea (South America would be another): The Islamic world is not yet strong in information technology and has, because of its philosophical base, lots of obstacles to master before getting stronger. A cold war of a different nature may develop. People who understand information technology in those countries will be workers for peace for the same reason: they will recognize the need for global cooperation and mutual understanding. But without promotion by **IFIP**, this process may go much too slowly for all those involved.

Question 4 (personal activities):
I retired from IBM in 1985, but I not only continue to lecture at my Vienna University of Technology. I have taught there since 1947 – more than 50 years – and during all that time I have also had an office in the Electro-technical building. I publish, and I am an invited speaker (all too often). The subjects on which I lecture now are the same ones I would name as my present main fields of interest and as my hobbies: history of information technology and automata, with computers, of course, as the center of gravity; human aspects of our field (relationships between brain and computer); and the theory of design, which I call abstract architecture (what makes a design good?).

Over the last years, I suffered a sad defeat in my attempt to start an archive for the History of Information Technology in Austria (including its relationships to the world development, the U.S. in particular). In spite of the support by the Ministry of Research (an area of 2600 sq. ft. had been rented), the effort did not succeed, and I withdrew from it, saving my material – the main body of the archive content when I left – at my university, where I got (in two steps) the necessary space and furniture. But this is a mausoleum rather than an archive: a storage of dead material without custodians. There is too little interest for history in our time and, there are no people willing to contribute to the enterprise (even if paid).

I was appointed **IFIP** Historian. That is not a voluminous job. In my opinion, history is an elementary subject. Whatever topic one studies, understanding its nature is only possible by knowing its history. Our time ignores this fundamental truth, and my experiences (like the ones described above) inhibited the inclusion of the subject of history under your question 3 on important issues for **IFIP**. It would have been a useless repetition.

I trust in the life of **IFIP**, simply because it is important for all mankind to be aware of information technology, to foster it beyond the immediate technological nature, and to do this in international, global cooperation. (If there is any global village, **IFIP** is the global village.) The **IFIP** headquarters (I witnessed its growth from London and Geneva to Laxenburg) has been made an excellent tool and offers still much more than is actually used. Information Technology has a big future, and **IFIP** has a big future. Find the right people, and it will prosper.

Richard Tanaka (US) 1974–1977

*Plamen Nedkov & **Richard Tanaka** - IFIP GA 1995 in Calgary (CA)*

Dr. Richard Tanaka *is another brightly shining star in the **IFIP** presidential galaxy. He continues to this day to "turn around" companies, which IT giants like Microsoft are eager to acquire. In this exclusive interview, among many interesting episodes, **Dick** recalls TC6 meetings in South Africa and Brazil where first-time-ever demonstrations were made of possibilities to establish an open, global network based on the ARPANET (then primarily used by universities and the U.S. defense establishment). These demonstrations*

incorporated technological concepts that were the precursor of the Internet.

*Question 1 (significant **IFIP** developments):*
The time span of my comments might overlap the boundaries of my term as President, since I worked closely with both my predecessor and successor, **Heinz Zemanek** and **Pierre Bobillier**, respectively. We inherit, enhance, and then hand onward, so that achievements often become stepping-stones. We had a memorable Toronto Congress, in spite of an airline strike and a potentially disruptive political demonstration aimed at one of our Members. MEDINFO, an international conference on medical informatics, then under the **IFIP** umbrella and held contiguously with the Congress, was successful, even though we had to replace the conference's management late in the planning cycle. We had increases in the level and span of TC and WG (Working Group) events, re-staffed the Geneva Secretariat, and measurably improved financial and administrative processes. These all moved **IFIP** to a better level, but, as with the technology itself, results, however noteworthy and useful, are briefly noted and then overtaken by later developments. But, there is a more enduring record, shared by all – **IFIP's** success in dealing with the tensions of the Cold War. **IFIP** was uniquely positioned to provide a common meeting ground for East and West. Every event in which both sides could participate carried underlying importance. A GA or Council meeting — in Tashkent or Dresden, in London or Tokyo — attended freely by a high percentage of delegates, was special. Every TC or WG event in one of the Socialist countries, held with relatively unrestricted access, was special. Every Congress, wherever held, for reasons of diversified attendance, was special. Personally, I felt some additional obligations, since I was also the U.S. delegate. While there were moments of pressure from various sources, plus the perennially unpredictable and capricious visa problems, **IFIP** continued to maintain a balanced posture respected by all.

Also, without slighting any of the considerable achievements of the other TCs, there was at least one event that I believe has had a unique and lasting significance. The TC6 charter encompassed various aspects of global communications, with digital technology as a foundation. However, for national and political reasons, defining a universal system would not have been practical. So, at the time, I understood that TC6 might work to define interface requirements so that systems in one country could communicate with those of another. However, the TC6 experts pointed the way to a better solution. A TC6 meeting in South Africa featured a first-timeever demonstration, based on the Arpanet, of the possibilities of an open, global network. (Recall that the ARPANET was then being used primarily by universities and the U.S. defense establishment.) At a subsequent TC6 meeting in Brazil, a similar but improved linkage was demonstrated. Using a combination of land lines and satellite transmission, with linkages to two or three universities in the U.S. that acted as hubs, the demonstration incorporated technological concepts that were the precursor of the Internet. It's likely that not everyone understood at the time the significance of what was being demonstrated. (Many have claimed to be the inventors of the Internet. The participants

in the demonstration, some as TC6 members and some as invited guests, are unquestionably associated with the development of the Internet; therefore, in my opinion, this event can appropriately be included in the chronicles of the invention of the Internet.)

*Question 2 (current interest in **IFIP**):*
Working with **IFIP** was truly a worthwhile experience, not only because of the idealistic principles underlying **IFIP**, but for the joy and privilege of working with outstanding individuals. Naturally, my interest survives. However, many past members of WGs and TCs and, indeed, even past GA members have probably drifted away. Even though the excellent work of the Secretariat keeps me effectively updated, perhaps not everyone has the resources available to past presidents and Honorary Members. Maybe there are ways of maintaining linkages with the experience and talent embodied in the entity of past participants without compromising the ability of current participants to control and be responsible for the contemporary work of **IFIP**. Even something as simple as providing, at each Congress, a meeting place for past **IFIP** participants might re-establish some contacts.

*Question 3 (important issues for **IFIP**):*
An important area of focus at the time was on the developing countries. I'm assuming that it is still true today. We operated, with a certain level of naiveté, on the assumption that information technology would help solve some of the economic problems of these countries. The task was large, the progress slow. We traveled frequently to Unesco in Paris to try to get funding for conferences and seminars, and to distant and sometimes uncomfortable locations to help stage them. Results, yes, but nowhere near the level of resources needed.

Helping the developing countries is no less challenging than it was in the past, but with inexpensive PCs and Internet access, the tools today are much better. Unchanged is the fact that **IFIP** has access to the right kinds of technical experts. The sheer size of the task still defies a full solution, but I believe that **IFIP** must continue to keep this issue high on its agenda.

Question 4 (personal activities):
After my active years with **IFIP**, I was Chief Executive Officer and Board Chairman of four computer-related corporations – one at a time, of course – sometimes in the context of a "turn around," a euphemism for getting a company back onto a profitable growth path. After the last of these positions, I planned to retire, but that plan gradually evolved into one where I've become active as a member of Boards of Directors. Currently, I am on four boards of companies pursuing markets as diverse as broadband telecommunications, high-resolution optical lithography, software services, and Internet driven company management. Two other Board positions happily disappeared when the companies were acquired by other companies. These directorships allow me to work with experts who easily know much more about today's technology than I do and whose knowledge and expertise help keep me abreast of current developments.

As for hobbies, along with some minimal outdoor activities and keeping a couple of PCs updated, my latest project is to scan and transfer my large assortment of 35 mm slides onto CDs. Eventually, I'll find some of the pictures that **Heinz Zemanek** needed for **IFIP's** historical records. Many of my photographs are the result of trips engendered by **IFIP** meetings, to places where business interests would never have taken me. For that, I am grateful.

Pierre Bobillier (CH) 1977–1983

Fm. left: Asbjørn Rolstadås, Peter Bollerslev, **Pierre Bobillier**, *Q. Wang (CN), Kurt Bauknecht, Heinz Zemanek – 40th IFIP Anniv. - C2000, Washington D.C. (USA)*

Prof. Bobillier *was the sixth* **IFIP** *President, with the longest period of service. Before his presidential term,* **Pierre** *served as* **IFIP** *secretary. Today, he is the keeper of the* **IFIP** *"Bible," as Chairman of the* **IFIP** *Statutes and By-laws Committee.* **Pierre** *was one of the first to support our project by sharing with us his short account of a truly remarkable* **IFIP** *experience.*

Question 1 (significant **IFIP** *developments):*
I was in charge as president from late 1977 (the end of the Toronto Congress) until the end of my second term in 1983. The main events or activities during this period are listed here by year.

1978: Launching the first issue of **IFIP** *News*; first joint meeting of TC/WG Chairmen with FPC, APC and Executive Board (afterwards repeated yearly); my attendance at the Unesco–IBI (Intergovernmental Bureau for Informatics) Conference on Strategies and Policies in Informatics, as **IFIP** representative (I convinced several official delegations to present a paper proposing Unesco-**IFIP** cooperation. Following these conference recommendations, **IFIP** established ICID [**IFIP** Committee on Informatics for Development]).
1979: Euro **IFIP** '79 (organized in London as a large European event between Congresses '77 and '80); establishment of IMIA (International Medical Informatics Association), which replaced TC4.
1980: First "two-continents Congress," as **IFIP** Congress '80 was held in two consecutive weeks in Tokyo and Melbourne, a significant, nontrivial organization! An **IFIP** commemorative stamp was issued by the Japanese PTT.
1981: Closing the IAG (**IFIP** Administrative Data Processing Group) Foundation in Amsterdam after many difficulties and in a very difficult climate; Third World Conference on Computer Education in Lausanne, a great success; publication of the **IFIP** *Information Bulletin* No 15, first special issue replacing the earlier "**IFIP** Summary."
1982: the South East Asia Regional Computer Confederation (SEARCC) was accepted as the first **IFIP** Regional Member; a new idea realized with the objective to better inform our Member societies and the public at large: publication by the journalist Ken Owen of papers on TCs 3, 6 and 10, reproduced in many Member societies' local journals.
1983 was a very important year for **IFIP**. Congress '83, the first in Paris (the first World Computer Congress actually took place in Paris in 1959, before the creation of **IFIP**); the first **IFIP** International Conference on Governmental and Municipal Data Processing; CAPE'83 (the first International Conference on Applications in Production and Engineering; **IFIP**/SEC'83 (the first **IFIP** Security Conference); TC11 (Security) was established; two new Affiliate Members were admitted: International Federation of Associations of Computer Users in Engineering (FACE) and International Joint Conference on AI, Inc. (IJCAII), bringing the number of Affiliate Members to six; publication of new articles by **K. Owen** on TCs 2 and 8 and on IMIA; and the creation of the **IFIP** *Newsletter* with **Dr. Jack Rosenfeld** as Editor, a very significant event.

Question 2 (current interest in **IFIP***):*
I am interested in **IFIP** developments, especially in education, communications and human aspects, including ethics, which is going to play an ever-increasing role in our society. This relates especially to the use and practices of the Internet. I am, however, less directly involved since my "retirement" as the Swiss GA member and consider that new, younger people must grow in **IFIP** and contribute to its development with new ideas through its many committees.

Question 3 (important issues for **IFIP***):*
These include:
- Education at all levels, acceptance of ICT (Information and Communication Technology) in all areas, including developing countries.
- **IFIP** has to do everything possible to ensure the correct utilization of all the means available today to establish, support and make new international laws and rules accepted in all countries.
- As the only truly international ICT organization, **IFIP** must continue to play its role among other international bodies.

GA and TC representatives in their countries and local communities should be reminded of their roles on a continual basis. This is the main communication channel between **IFIP** and the field. These representatives, among other duties, are in charge of communicating information from their countries to **IFIP** and from **IFIP** to their countries. Member societies should be reminded of the important duties of GA representatives and officers before every election.

Question 4 (personal activities):
Being retired in 1994 brought me the long-awaited time and freedom to select those activities most appealing to me, such as participation in professional associations, organizing and attending conferences, and writing articles.

I worked for several years in the Committee for Future Research Policy of the Swiss Science Council, where I contributed, among others, to two projects which I hope will be pursued: status and possible improvements of education and research in legal aspects of ICT in Swiss universities, and an interactive system for Swiss research projects where mall and medium businesses could quickly find information on relevant research projects and activities. My many years of **IFIP** involvement have no doubt helped me in these activities, where international views are obviously essential.

I have been engaged for many years in several Swiss committees such as SARIT (Swiss Association for Researchers in Information Technologies), the SVI/FSI (Swiss Federation of Information Processing Societies), the Swiss Committee for **IFIP** (whose members are our TC delegates), the Swiss Informaticians Society and its Suisse romande section, where I chair the Activity Planning Committee. Some recent events were on digital signatures, e-voting, knowledge management, and e-learning.

My colleague **Raymond Morel** (Swiss GA member and vice-chairman) and I have pushed energetically during the last few years for a better government initiative, planning and support at the national level for the improvement of education and use of ICT in primary and secondary schools. Things have fortunately been moving recently and could, hopefully, improve our position among the other nations.

On the personal side, I stay in e-mail contact with many people around the world. I like reading (for example, T. Clancy, J. Grisham, F. Forsyth, E. Topol, P. Ouelette, etc.), and I have resumed playing tennis after 12 years interruption, and I now enjoy playing as much as possible, both outdoors and indoors. Some skiing, when snow allows, and sailing on my dingy in good weather fill the time left when I am not with my family – 3 grown-up children and 6 grandchildren – or maintaining and repairing the house, which keeps me somewhat busy. It is always stimulating to understand how things work and how to disassemble (and hopefully reassemble!) them.

Ashley Goldsworthy (AU) 1986-89

Ashley Goldsworthy *(middle) in his Element*

*Prof. Ashley Goldsworthy is the 8th **IFIP** president. He is a Scorpio, and this fact speaks a million words. His interview presents an insider's reflections on **IFIP**. Most of the other presidents appear to have continued the path of very successful academic, business and political careers. **Ashley's** interview strikes us with how successful he is now on the business front.*

*Mr. Goldsworthy's responses address some intimate matters related to **IFIP's** operations, including the **IFIP** engine room, does **IFIP** need more Talking Committees as opposed to Technical Committees, what is **IFIP's** vexing problem, would further **IFIP** specialization create technical isolation, and what can be done to overcome this?*

*Question 1 (significant **IFIP** developments):*
Being elected in Tokyo as President-Elect, in 1985, was one of the high points of my professional career. **Kauro Ando**, the outgoing president, and I had been closely associated since 1975 in the organization of the joint 1980 Congress in Tokyo and Melbourne (the first joint Congress in **IFIP** history), and it was an honor to succeed him. He was a true gentleman. Kind, polite, and considerate, **Mrs. Ando** was a truly lovely lady with whom my wife Shirley had several delightful shopping trips in various cities around the world at **IFIP** events.

I was really looking forward to the three years as president, largely because it would give me the opportunity to work even more closely with some wonderful people. I had been fascinated by many of the "characters" when I attended my first GA in Stockholm in 1974, as President of the Australian Computer Society, to present our bid for the 1980 Congress. I well remember **N.J. Lehman**, a large bear of a man, thundering a protest at his country being referred to by another delegate as "East Germany" (remember, this was 1974). He reminded everyone in no uncertain terms it was the "German Democratic Republic," and everyone had better remember that. For someone far removed from the subtleties of European politics, it was a whole new world.

It takes years to really understand the workings of **IFIP**, and being president is a challenge, but a rewarding one. We came together only once a year at the GA, and I felt we could make better use of our time. We needed a lot more parallel processing. We spent too much time (three days) at the GA itself, with everybody in attendance in nonproductive reporting. The GA was seen to be the supreme forum, and everybody wanted to discuss everything at the GA. We were not optimizing the opportunity to use the tremendous amount of experience and wisdom that sat around the table. We did not have a suitable forum to focus on the long-term strategic growth and develop-

ment of **IFIP**. The subsidiary meetings were treated as routine.

I decided we needed to create a forum that was seen as important as the GA, in which technical and strategic issues could be discussed in depth, and we would focus on organizational, administrative and governance issues at the GA. So, after much discussion at the GA in Delhi in 1988, the Technical Assembly (TA) was created. This led to consequential changes in several of the other committees and was undoubtedly one of the most significant organizational changes to **IFIP** since its inception. I appointed **Blagovest Sendov**, who was to be my successor as president, as the first Chairman of the TA. Other significant developments during my term were the creation of two new TCs: TC12 on Artificial Intelligence and TC13 on Human-Computer Interaction. These were the first new TCs created for six years. SG14 on Foundations of Computer Science (which would become TC1 in 1996) was also established in 1989.

*Question 2 (current interest in **IFIP**):*
After spending so long involved in **IFIP**, I find it hard not to remain interested. After all, I have attended every GA (except one) since Stockholm in 1974, and I hope to attend the one in Montreal. I also attended most Council meetings during those years, served as a vice-president for nine years, and had the unique honor of chairing the Organizing Committees for two Congresses (1980 and 1996). Over a period of 28 years, it is the people who keep you interested, not just the organization. **IFIP** does not hold as much interest for me now as it did when I was actively involved, and that is to be expected. But the increasing specialization in the informatics field has also diminished the broader interests that **IFIP** used to have, and people now tend to have narrower interests than years ago. This leads to technical isolation, but this is a natural progression in any developing field. For this reason also, Congresses are no longer as stimulating for me as they were in years gone by.

*Question 3 (important issues for **IFIP**):*
The TCs and WGs remain the engine room of **IFIP**, and it is important that they be very proactive in identifying new and emerging areas. In the past **IFIP**, has tended to be a little slow and conservative in taking the lead. We have yet to solve the vexing problem of how to get industry involved in **IFIP** activities. We need to broaden the interests of our TC's, which have been very technically focused over the years. I well remember when TC9 was established in 1976, **Dorodnicyn** referring to it as Talking Committee 9, because he felt it was outside the scope of what **IFIP** should be about and could achieve little. But it is these application related areas, such as the Internet, e-commerce, "infotainment," telemedicine, and so on that warrant **IFIP** attention.

Question 4 (personal activities):
I left Bond University, Australia's first private university, in 1997, after seven years as Dean of the School of Business, and reentered business. I still live in Brisbane, but have an office in Melbourne (a two hour flight) and go there a couple of days each week. I am currently chairman of several companies: Australia's largest provider of on-line property

data, the subsidiary of an Indian software company, a human resources company, a foundation to nurture inventors, the Centre for International Research on Communication and Information Technologies (CIRCIT) at RMIT University, and the Digital Media Institute at Melbourne University.

I am a member of the Government's Industry Research and Development Board and the Australian Fulbright Commission. Also, I am Executive Director of the Business/ Higher Education Round Table, an organization of which I was a founder in 1990, which comprises the vice-chancellors (presidents) of Australia's universities, business leaders, and the CEOs of the major research organizations. Its purpose is to build stronger linkages between business, research and higher education. I also teach leadership at Griffith University.

Whenever we can my wife and I spend time in the bay on our cabin cruiser, generally with some of our eight wonderful grandchildren.

IFIP will always remain in my memory as a series of very pleasant and enjoyable activities with a kaleidoscope of wonderful people.

Blagovest Sendov (BG) 1989–1992

Anna & **Blagovest Sendov**, *Plamen Nedkov – during Council 1990 in Israel*

Academician Blagovest Sendov *was the ninth* **IFIP** *president and the only living one from Eastern Europe. He is now serving as Vice-Speaker of the Bulgarian Parliament. In his interview, he tells us about the following:*

- *What* **Isaac Auerbach** *advised him in 1989*
- *Whether he was a student or a rector in* **IFIP**
- *Whether he is a politician or a mathematician*
- *What he dreams of.*

*Question 1 (significant **IFIP** developments):*
During my tenure as **IFIP** president, the equilibrium of responsibilities between the national and the technical-expert representation in the Federation was maintained. For a long time, there were repeated discussions on the need for a TA in addition to the GA, and the form of participation of TC chairmen in the GA.

I remember a lunch in San Francisco during the **IFIP** Congress 1989, when my tenure had just started. The late **I.L. Auerbach** told me, "You will be a good president, if you now have an idea who will be your successor." My answer was "**Prof. Rolstadås**."

During my tenure, **Mr. Plamen Nedkov** was involved in the **IFIP** affairs, a fact that speaks for itself.

*Question 2 (current interest in **IFIP**):*
Now I follow the activity of **IFIP** from a distance, as my occupation does not permit me to stay closer. As the only living former president from the former Eastern Bloc, let me note the fundamental role of **IFIP**, and some other scientific and technical NGOs, for the peaceful end of the Cold War. **IFIP** was for me not only a professional society, but also a unique opportunity to make friends in the other world, with which we are now integrated. I see the role of **IFIP** in the future as a powerful instrument for closing the so-called "digital gap" between the rich and the poor.

IFIP was my University, in which I was a student, teacher, and rector.

*Question 3 (important issues for **IFIP**):*
The ultimate tendency toward globalization of the world is mainly assisted by information and communication technol-ogies. I believe that in the long term, the world is going to adopt universal values but will keep the diversity. From its early days **IFIP** has paid attention to social aspects of infor-mation processing. My feeling is that the two categories of information, knowledge and wisdom, are becoming increas-ingly unbalanced in the world. This could be dangerous.

What should be **IFIP's** role in this direction?

Question 4 (personal activities):
I just turned 70, and in my interviews on this occasion I was asked, "Why did you desert mathematics and become a politician?" My answer was, " It is not true. I am still ac-tive in mathematics, and I have been a politician for more than 40 years, without ever being a member of any political party." You have to be a politician, if you are the president of such a prestigious international structure as **IFIP**. A rec-tor also has to be a politician.

As a Vice-Speaker of the Bulgarian Parliament, I now have interesting times with a close friend, **Georgi Parvanov** (the President of Bulgaria), and the former **King Simeon II** (the Prime Minister of Bulgaria).

My dream is to find time to participate in an **IFIP** GA, in order to measure the progress of the Federation.

Asbjørn Rolstadås (NO) 1992–1995

Asbjørn Rolstadås - *Opening of the IFIP Secretariat in Laxenburg (AT) 1995*

*One sunny day in early March 1994, two men in Brussels entered the NATO Headquarters to meet with the top NATO brass for science and research. One man was from a NATO member country, while the other one was from a country that had been considered by NATO as a potential adver-sary only five years earlier. Both men were there to inves-tigate whether the "peace dividend" could be extended to support participants in **IFIP** events. The previous day, the same two men met representatives of the European Com-mission. That meeting resulted in a contract that made it possible for 34 participants from central and eastern Eu-rope to be financially supported to attend the 14th **IFIP** World Computer Congress in Germany that year. (Another significant contract followed in 1995 for the INTERACT Conference on Human-Computer Interaction.) One of*

*the two men was **Prof. Asbjørn Rolstadås**, the tenth **IFIP** president, from 1992 to 1995. Following is our interview of **Prof. Rolstadås**.*

*Question 1 (significant **IFIP** developments):*
My predecessors, **Acad. Sendov** and **Prof. Goldsworthy**, had started a process of change in **IFIP** by installing the TA and giving more power to the TCs. It was my privilege to follow in their footsteps and implement all this.

During my tenure, the **IFIP** Secretariat was moved from Geneva to Laxenburg, Austria. **Mr. Nedkov** was hired as head of the Secretariat (the position is now called Executive Director), and he started to build a new **IFIP** administration based on e-work and the use of the Internet.

I opened a dialogue with the Member societies by visiting a number of them and by inviting them to come forward with their requirements from and views of **IFIP**. That exercise revealed insufficient contact between the GA and the Mem-ber societies, and a process to improve this was initiated.

More power was given to the TCs. The TC chairmen be-came ex officio members of the GA, and they were given greater control over their own finances. With the help of **Mr. Aage Melbye** (DK), then the **IFIP** treasurer, the pro-cedures for approving and organizing events were revised and improved.

With the kind help of **Prof. Zemanek**, the **IFIP** silver-anni-

versary summary was updated, in order to document **IFIP** history for future generations.

*Question 2 (current interest in **IFIP**):*
My heart is still with **IFIP**, and I would like to contribute to **IFIP** work to the extent time allows. Topics that I have an interest in relate to bridging the gap between industry and academia.

*Question 3 (important issues for **IFIP**):*
As I now can see things from a greater distance, it is easier to point to areas where **IFIP** must improve. I think there are three major challenges for the future **IFIP**:

- Obtain stronger collaboration with and commitment from the international ICT industry.
- Revitalize the Congress to become the major international ICT event.
- Prove useful to the Member societies and increase number of Members.

Question 4 (personal activities):
I am still a professor at the Norwegian University of Science and Technology. My main interest is in project management. Together with other universities, we have developed an international program for project management education, and we have started to offer a continuing-education curriculum in management of software projects in cooperation with the Norwegian Computer Society. I am also managing a large international project to develop a curriculum in manufacturing strategy using e-learning. The European part is funded by the European Union. We established a Norwegian Center for Project Management, of which I am currently the chairperson.

My hobbies, which I find too little time for, are collecting Norwegian stamps and shooting and editing video films.

Kurt Bauknecht (CH) 1995–1998

Kurt Bauknecht, *Plamen Nedkov, Mengqi Zhou (CN) – Site Inspection, Beijing, 1997*

*Paris. Autumn 1997. The embassy car picked up the **IFIP** president and executive director from their hotel and drove them close to Pont Alexandre III. The two men entered the Bulgarian Embassy, and the ambassador (at the time also Permanent Representative to Unesco and a member of Unesco's Governing Board) welcomed his visitors. The **IFIP** president introduced himself: "**Bauknecht**" "Ah" responded the ambassador, "Bauknecht weiß, was Frauen wünschen." ("Bauknecht knows what women wish for" — the well-known advertising slogan of a manufacturer [Bauknecht] of household appliances) We smiled. It was a good start. We then discussed the forthcoming reclassification of **IFIP** with Unesco and requested the Ambassador's assistance for **IFIP** to get a favorable hearing. In the following days and weeks, we contacted Unesco officials, and the Ambassador did all he could to help. **IFIP's** reclassification was decided favorably.*

Kurt remembers that visit to Paris. He recalls other important events during his term and has interesting things to tell in this interview.

*Question 1 (significant **IFIP** developments):*
During my presidency, **IFIP** established itself comfortably in Laxenburg and made a major transition from the classical "paper-based" organization to one that makes full use of ICT. The **IFIP** Telecom project was designed and implemented, and the **IFIP** Secretariat provided leadership in demonstrating the advantages of the Internet in the process of management. We had a successful 1998 Congress in Budapest and Vienna. Following our 1997 GA meeting in Natal, the Executive Director and I visited Paris to meet with Unesco officials in order to activate the relations between the two organizations. That visit helped set a course of proactive **IFIP** involvement in Unesco activities, and I am very happy to observe the many positive developments.

*Question 2 (current interest in **IFIP**):*
I continue to follow **IFIP** activities closely. I am a member of TC8, and recently I was the General Chair of the First **IFIP** Conference E-commerce, E-business, and E-government, organized jointly by TC6, TC8, and TC11 in October 2001 in Zurich. I will be in Montreal for the 17th **IFIP** Congress, and I look forward to meeting many good friends there.

As the last one to submit my responses to **Plamen's** questions, I had the advantage of reading beforehand the interviews of my colleagues [I enjoy this project very much], and it is easy to agree with what was said. I am happy that **IFIP** continues to grow as an open, dynamic international federation of national computer societies. In my mind, IFIP is a great model for other international associations, especially now, when issues related to the Information Society and the Digital Divide are on the forefront.

*Question 3 (important issues for **IFIP**):*
No doubt, it is important for **IFIP** to continue to lead in the specialized areas covered by its TCs and WGs. However, there has to be a mechanism allowing **IFIP** to focus on long-term developments, which transcend the subject areas of one TC or a group of them. Forecasting IT developments would certainly position **IFIP** as an organization to which industry, government and the public sector could look to for guidance.

Question 4 (personal activities):
In the spring of 2003, I will retire and will have more time for my responsibilities as president of Infosurance Foundation, which is supported by the Swiss government and industry with the objective of improving information security. I intend to devote more time to the study of new developments in IT, such as ubiquitous and pervasive computing and the development of better and more adequate security measures in computing.

Mountaineering, skiing and golfing are my hobbies, and I have 3 grandchildren with unbelievable energy!

Peter Bollerslev (DK) 1998–2001

Fm left: Judy Hammond (AU), **Peter Bollerslev**, *Dorothy Hayden (IFIPSec), Brian Samways (UK), Plamen Nedkov – IFIP Secretariat, 1998*

The former Inspector within the Education Ministry of Her Majesty, **Queen Margrethe** *of Denmark, speaks in the following interview:*

Question 1 (significant **IFIP** *developments):*
I was designated **IFIP** president-elect at the 1997 GA. My **IFIP** background was made up of six years as TC3 (on Education) chair and some years as Danish GA representative. But I had no experience as "Administrative Officer." However, the support I received from Executive Board colleagues, TC chairs, GA representatives, and, not least, the **IFIP** Secretariat made it easy for me to meet this interesting and challenging task.

Looking back, I consider the following activities from my three years as the most important: enhanced information to Member societies, the increased cooperation with Unesco, the successful **IFIP** publication activity, the start of a closer cooperation with industry, and the establishment of the IT-STAR (a regional association of national computer societies from middle Europe). Insofar as events are concerned, the **IFIP** World Computer Congress in Beijing in August 2000 once again proved that the WCC is the IFIP Flagship event. Of course, personally I especially remember meeting the President of the PRC, **Jiang Zemin**, who addressed the Congress in the opening session. Another meeting at the highest level to be remembered is the one with the Director

General of Unesco in Paris in January 2001.

It was my fate in the year 2000 to commemorate **IFIP's** 40th Anniversary, the Ruby Jubilee. This was done in a federation that is supported by a well-functioning secretariat, one that has developed a perfect home page providing on-line timely updated information and documents and a useful Power Point presentation for the benefit of GA representatives and TC chairs. The attractive pamphlet *This is* **IFIP** was also evolved from the pamphlet *What is* **IFIP**? in this period. In relation to the GA/Council meetings, we succeeded in changing the structure of the meetings in order to avoid too much repetition (redundancy) and focusing on strategic issues rather than just reporting. Finally, with my own professional background, I take great satisfaction in noting that over the years education has come more and more into focus in **IFIP**.

Question 2 (current interest in **IFIP**):
Yes, I am still active in **IFIP**, both in the GA and as a member of TC3 (and two WGs), and thus also involved in some of the developments that should be encouraged. This includes two new events: the **W**orld **IT FOR**um (WITFOR) is planned as a biennial international conference addressing IT issues in developing countries. The first WITFOR will take place in Vilnius, Lithuania, in August 2003. A conference on Meeting **Gl**obal **IT S**kills Needs (GLITS) will take place in the autumn of 2002, the first in a planned series of conferences on The Role of IT Professionalism. Several international organizations like ACM, BSC, CEPIS, CIPS, IEEE-CS OECD, SEARCC, and WITSA are supporting this event.

Endeavors to establish a closer cooperation with industry, which started in my presidential period, thanks mainly to Vice-President **T. Miura's** (JP) initiative, should also be pursued. Finally, **IFIP** should very soon come to a conclusion on the discussions concerning the **IFIP** Digital Library Project.

Question 3 (important issues for **IFIP**):
The present very successful cooperation with Unesco should also be further encouraged. **IFIP** participates in the activities of the Unesco-NGO Liaison Committee and in the Advisory Group, which advises Unesco and the UN on issues related to ICT. Furthermore **IFIP**/Unesco have developed a number of curricula and collaborate on regular updating. I see **IFIP** as an important part in the global efforts to close the digital divide.

We should aim at getting a society from each of the nearly 200 nations in the world as a Member of **IFIP**. We are a truly international federation, but we would like to have a greater coverage. Some argue that **IFIP** is too much Europe-based. However, the newcomers to **IFIP** in my presidential period show that if there is a bit of truth in the previous statement that we are on our way to change. The new full Members came from Latin America, Africa and the Arab world. We should aim at getting more young people involved in the work of **IFIP** (GA, TCs, WGs), and we should also address the gender issue.

Question 4 (personal activities):

I left the Danish Ministry of Education in the autumn of 2000, after having served there for 30 years as Her Majesty's Inspector. I am at present a chief consultant in the leading publishing house in Denmark. I am heavily involved in many activities in the Danish Data Association, and I am still their representative to the **IFIP** GA.

In my spare time I like to attend theaters, cinemas, and art exhibitions, read, cook, and play golf and bridge. And every opportunity to travel with Hanne to experience foreign territory will be used. ∎

European ICT Poles of Excellence
Dublin, Ireland

Dudley Dolan

Dudley is Retired Associate Professor from Trinity College, Dublin, and Chairman of CEN's Workshop on ICT Skills.

Introduction

Dublin ranks 16th out of 34 regions according to the European ICT Poles of Excellence report published in April 2014. In all, the European Commission assessed some 1,303 regions. According to the Report, most of Europe's ICT activity happens in 34 regions across 12 countries. And while Munich, London and Paris are revealed as the top ICT hubs in this particular indicator, Dublin ranks in 16th place. Dublin comes 1st in Top Performing Regions according to Inward ICT Business Internationalisation (the years considered here were 2005-2011).

In Top Performing Regions Sub-Indicators, Dublin ranked:

- 21st out of 30 regions according to ICT R&D
- 12th out of 30 regions in relation to ICT Business
- 5th out of 30 regions in relation to venture capital (VC) financing of ICT firms* *Based on Dow Jones classification of industry segments
- 3rd out of 30 regions according to location of ICT Scoreboard Affiliates Indicator
- 11th out of 30 regions according to number of new investments in the ICT sector.

Speaking on 22 April 2014, European Commission vice-president Neelie Kroes, who is responsible for the Digital Agenda for Europe, said the report is "proof that digital success comes through a willingness to invest", along with an open mind set for innovation and planning.
So how did Dublin, the capital city of the Republic of Ireland, a small state on the periphery of Europe move in to the

In Memoriam

Veith Risak

We sadly announce the passing of Dr. Veith Risak in July 2014 at the age of 78, and extend our condolences to his family, friends and colleagues.

Veith was a founding member of IT STAR and as representative of the Austrian Computer Society (OCG) helped set up the pillars of our Association. He was a strong proponent of international cooperation in the ICT field and as President of OCG was instrumental in bringing IFIP World Computer Congress'98 to Vienna and Budapest.

V. Risak – *1st fm right: IT STAR Business meeting'04 in Chioggia, IT*

technological age so successfully?

History of Dublin

The City of Dublin can trace its origin back more than 1,000 years, and for much of this time it has been Ireland's principal city and the cultural, educational and industrial centre. The Vikings settled in Dyflin in about 841 AD. The name came from the Gaelic "Dubh Linn" meaning a Black Pool. This would have been at a deep part of the River Liffey, which currently flows through the centre of the City.

In 1592, Dublin University, Trinity College was created by Royal Charter from Queen Elizabeth I of England. The University was modelled on Oxford and Cambridge, in England, and it was foreseen that there would be a number of Colleges. As it happened there is only one college, Trinity College. During the halcyon days of the British Empire Dublin developed to such an extent that it competed with Glasgow and Birmingham to be known as the second city of the Empire.

Dublin in the Irish context

Between 1919 and 1921 Ireland experienced the Irish War of Independence - a guerrilla conflict between British forces and the Irish Volunteers. Following a truce, a negotiated peace known as the Anglo-Irish Treaty between Britain and Ireland was signed. It created a self-governing twenty-six county, Irish state, known as the Irish Free State. The Republic of Ireland Act 1948 declared Ireland to be a republic.

The Act came into force in April 1949.

During the years from gaining Independence and for some years after the declaration of the Irish Republic the country pursued protectionist and isolationist economic policies, which led to a period of considerable poverty. Many Irish emigrated as there were few jobs at home.

In the late 1950s a new Government developed a more outward looking policy and decided to follow an aggressive approach to Industrial Development. The introduction of the first programme for economic expansion, in 1958, removed protectionism, encouraged Foreign Direct Investment (FDI) and promoted exports. In 1965 the Anglo-Irish free trade area was agreed. Much of this was driven by the Industrial Development Authority (IDA). The culmination of this more open approach was the joining of the European Union in 1973.

Industrial Development Policy

The brief of the IDA was the furtherance of industrial development in Ireland. This was very new for Ireland as it had always depended on agriculture and industry was very limited. The IDA carried out extensive promotional programmes worldwide and provided grants and other financial incentives to attract new and existing manufacturing and technical service industries. It provided training grants towards the costs of training workers and in general provided an environment conducive to Industrial Development and in fact attracted many industries to Ireland.

The IDA promoted the electronics industry in particular and by the late 1970s this was seen as an area of great potential growth. Initially the IDA attracted computer component manufacturers; this was followed by the mainstream computer manufacturers. Eventually these assembly type operations moved to lower cost areas of the globe and the IDA set about attracting the newly developing software industry to set up in Ireland.

Education to meet the new requirements

Trinity College (located in Dublin city centre)

It was against this background of Government Policy that the initial consideration of education in computing began in

Ireland in the early 1970s. Trinity College Dublin installed its first computer in 1962, an IBM 1620, and began offering computer courses in 1965. The first undergraduate degree programme in Computer Science began in Trinity College in the late 1960s.At that time there were mainframe computers and mini computers in business, but access to computing was rather expensive for schools. In most cases, it was beyond the resources and finance available in schools. However, some enthusiastic teachers became interested in computer programming and borrowed time on computers belonging to local businesses, local authorities or universities. This gave much valuable experience to the small group of enthusiasts and indeed the beginnings of a group named the Computer Education Society of Ireland (CESI) started in 1971. This was a group of teachers and academics who set the group up with an affiliation to the Irish Computer Society; the latter having been founded in 1967.

ICT Companies in Ireland

Today Ireland is recognised as a major hub for ICT companies with nine of the top ten US companies having a presence in the country. Some of the largest ICT Companies such as Intel, Microsoft and Google have major centres located in Dublin.

Global Leaders	Internet	Software	Telecoms	Semi-conductors	Young, High Growth
HP	Google	Symantec	Ericsson	Analog Devices	Riot Games
IBM	eBay/PayPal	VMware	Cisco Systems	Texas Instruments	Engine Yard
Micro-soft	Yahoo!	Adobe Systems	Alcatel Lucent	Infineon Technologies	Marketo
Intel	Facebook	Citrix Systems	Avaya	Cypress Semiconductor	FireEye
SAP	AOL	Red Hat	Huawei	Xilinx	HubSpot
Dell	LinkedIn	Novell	Telefónica	Synopsys	Zendesk
Apple	Amazon.com	Sage	Schneider Electric	Cadence	Qualtrics
Oracle	Dropbox	Sales-force. com	Intec	Maxim Integrated	Gilt Groupe
EMC	Twitter	McAfee	QLogic	Qualcomm	Squarespace

Table of ICT Companies located in Ireland (mainly in Dublin)

Policy for Foreign Direct Investment

The Irish Government, through the IDA, focussed on ICT and Pharmaceuticals as business areas to target for Foreign Direct Investment.

The various incentives provided succeeded in attracting the many ICT companies currently based in Ireland. One of the financial attractions is a corporate tax rate of 12.5%.

Another important instrument used to attract FDI was and is the enormous Irish Diaspora. As mentioned earlier emigration has been a fact of life in Ireland over many years. When I graduated as an Engineer in 1962 only five of my year of thirty stayed in Ireland. The others went to UK, Canada and Australia. The advantage of this is that there are many people of Irish extraction in influential and senior positions in companies throughout the World.

One of the slogans to attract FDI was "The young Europeans" as fifty percent of the population was under the age of

Date and place of establishment

18 April **2001**, Portoroz, Slovenia

Membership

Countries represented (*see next page for societies*), year of accession, representatives

- Austria (2001) G. Kotsis, E. Mühlvenzl
- Bulgaria (2003) K. Boyanov
- Croatia (2002) M. Frkovic
- Cyprus (2009) P. Masouras
- Czech Republic (2001) O. Stepankova, J. Stuller
- Greece (2003) S. Katsikas
- Hungary (2001) B. Domolki
- Italy (2001) G. Occhini
- Lithuania (2003) E. Telesius
- Macedonia (2003) P. Indovski
- Poland (2007) M. Holynski
- Romania (2003) V. Baltac
- Serbia (2003) G. Dukic
- Slovakia (2001) I. Privara, B. Rovan
- Slovenia (2001) N. Schlamberger

Mission

"To be the leading regional information and communication technology organization in Central, Eastern and Southern Europe which promotes, assists and increases the activities of its members and encourages and promotes regional and international cooperation for the benefit of its constituency, the region and the international ICT community."*
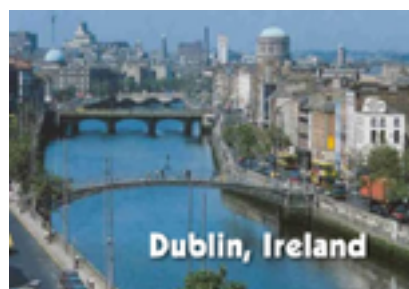
Major Activities

- 7th IT STAR WS on eBusiness - http://www.starbus.org/ws7
- 6th IT STAR WS on Digital Security - http://www.starbus.org/ws6
- IPTS - IT STAR Conference on R&D in EEMS - http://eems.starbus.org
- 5th IT STAR WS and publication on Electronic Business - http://starbus.org/ws5/ws5.htm
- 4th IT STAR WS and publication on Skills Education and Certification - http://starbus.org/ws4/ws4.htm
- 3rd IT STAR WS and publication on National Information society Experiences – NISE 08 http://www.starbus.org/ws3/ws3.htm
- 2nd IT STAR WS and publication on Universities and the ICT Industry http://www.starbus.org/ws2/ws2.htm
- 1st IT STAR WS and publication on R&D in ICT http://www.starbus.org/ws1/ws1.htm
- Workshop and publication on National Experiences related to the EU's 5th and 6th FP http://www.starbus.org/download/supplement.pdf
- Joint IT STAR – FISTERA Workshop on ICT and the Eastern European Dimension ∎

27 at that time. Now, the availability of a highly skilled workforce is a strong incentive for organisations to invest in Ireland. In the 1970s nine Regional Technical Colleges were created to support the work of the five Universities and to produce graduates in the technology areas. Ireland, like the rest of Europe, is still short of skilled graduates for the ICT industry but many initiatives are being undertaken to increase the numbers and to meet the needs of the ever-increasing number of jobs in the area.

Schools are increasing the emphasis on the STEM (Science, Technology, Engineering and Mathematics) subjects.
There is a strong emphasis on research and Ireland has been very successful in participating in the various research programmes funded by the European Union.

A further attraction for organisations looking to locate in Ireland is that it is the only English-speaking member of the Euro zone and has had stable government policies towards membership of the European Union since it joined in 1973.

Conclusion

Dublin, Ireland

Perhaps it is the historic British influence in Dublin that rubs off as it mimics many of the characteristics of London as far as this report goes. Inner London-East ranks second to Munich in EIPE. The future for Dublin looks very bright and as uncertainty regarding the future role of the UK in the European Union continues with a referendum in 2018 as a possibility, Dublin will continue to be more attractive for Companies wishing to be in an English speaking, Euro-zone country. As the report concludes "Dublin serves as a bridge between the continent and other ICT-intensive locations, in particular the US". ∎

IT STAR Member Societies

Austrian Computer Society – OCG Dampfschiffstrasse 4, 8. – 9. floor, A-1030 VIENNA, Austria Tel. +43 1 512 0235 Fax +43 1 512 02359 e-mail: ocg@ocg.at www.ocg.at	**Bulgarian Academy of Sciences – BAS** Institute for Parallel Processing Acad.G.Bonchev str.Bl.25A SOFIA 1113, Bulgaria Tel +359 2 8708494 Fax +359 2 8707273 e-mail: boyanov@acad.bg www.bas.bg
Croatian IT Association– CITA Ilica 191 E/II, 10000 ZAGREB, Croatia Tel. +385 1 2222 722 Fax +385 1 2222 723 e-mail: hiz@hiz.hr www.hiz.hr	**The Cyprus Computer Society – CCS** P.O.Box 27038 1641 NICOSIA, Cyprus Tel. +357 22460680 Fax +357 22767349 e-mail: info@ccs.org.cy www.ccs.org.cy
Czech Society for Cybernetics and Informatics – CSKI Pod vodarenskou vezi 2, CZ-182 07 PRAGUE 8 – Liben Czech Republic Tel. +420 266 053 901 Fax +420 286 585 789 e-mail: cski@utia.cas.cz www.cski.cz	**Greek Computer Society – GCS** Thessaloniki & Chandri 1, Moshato GR-18346 ATHENS, Greece Tel. +30 210 480 2886 Fax +30 210 480 2889 e-mail: epy@epy.gr www.epy.gr
John v. Neumann Computer Society – NJSZT P.O. Box 210, Bathori u. 16 H-1364 BUDAPEST, Hungary Tel.+36 1 472 2730 Fax +36 1 472 2739 e-mail: titkarsag@njszt.hu www.njszt.hu	**Associazione Italiana per l' Informatica ed il Calcolo Automatico – AICA** Piazzale R. Morandi, 2 I-20121 MILAN, Italy Tel. +39 02 760 14082 Fax +39 02 760 15717 e-mail: g.occhini@aicanet.it www.aicanet.it
Lithuanian Computer Society – LIKS Geležinio Vilko g. 12-113 LT-01112 VILNIUS, Lithuania Tel. +370 2 62 05 36 e-mail: liks@liks.lt www.liks.lt	**Macedonian Association for Information Technology – MASIT** Dimitrie Cupovski 13 1000 SKOPJE, Macedonia e-mail: indovski.p@gord.com.mk www.masit.org.mk
Polish Information Processing Society ul. Puławska 39/4 02-508 WARSZAWA, Poland Tel./Fax +48 22 838 47 05 e-mail: marek.holynski@gmail.com www.pti.org.pl	**Asociatia pentru Tehnologia Informatiei si Comunicatii – ATIC** Calea Floreasca Nr. 167, Sectorul 1 014459 BUCAREST, Romania Tel +402 1 233 1846 Fax +402 1 233 1877 e-mail: info@atic.org.ro www.atic.org.ro
JISA Union of ICT Societies Zmaj Jovina 4 11000 BELGRADE, Serbia Tel.+ 381 11 2620374, 2632996Fax + 381 11 2626576 e- mail: dukic@jisa.rs www.jisa.rs	**Slovak Society for Computer Science – SSCS** KI FMFI UK, Mlynská dolina SK-842 48 BRATISLAVA, Slovak Rep. Tel. +421 2 6542 6635 Fax +421 2 6542 7041 e-mail: SSCS@dcs.fmph.uniba.sk www.informatika.sk
Slovenian Society INFORMATIKA – SSI Litostrojska cesta 54 SLO-1000 LJUBLJANA, Slovenia Tel. +386 123 40836 Fax +386 123 40860 e-mail: info@drustvo-informatika.si www.drustvo-informatika.si	