Recollections of the Founding President

In 1985, the late Isaac Auerbach (US), founding president of IFIP, wrote an article about the first World Computer Congress and the founding of IFIP for the book A Quarter Century of IFIP: the IFIP Silver Summary, edited by Prof. Heinz Zemanek (AT). Part of this article, "Personal Recollections on the Origin of IFIP," was published in the IFIP Newsletter [Vol. 17, nos.1&2; March & June 2000]. That part, as published in the NL, is included here. We have also added the list of attendees of the IFIPs Organizing Committee as it appeared in Mr. Auerbach's original article.*

The Concept

During the very first meeting of the Committee of Experts [for the First International Conference on Information Processing (ICIP)] in December of 1957, **Prof. Auger** [of Unesco] posed the question as to the existence of an international organization in the field of information processing that could convene international conferences in future years. He advised us that Unesco's policy was to initiate such activities, but not to continue them. It was the sense of the Unesco advisors, all of whom were attending in an individual capacity, that an organization to convene international conferences would be highly advantageous. We agreed that we would each confer with our own countries and national professional societies so that we could discuss the organization of a federation when we met again.

At our next meeting, in June of 1958, and at subsequent meetings, after completing Unesco business, a group of us would meet regularly in late afternoons and evenings to explore the creation of an organization for convening future information processing conferences. The members of the Organizing Committee were:

I.L. Auerbach, Chairman	USA
J. Carteron	France
S. Comet	Sweden
A. Ghizzetti	Italy
C. Manneback	Belgium
D. Panov	USSR
C.S. Scholten (for A. van Wijngaarden)	Netherlands
M.V. Wilkes	UK
H. Yamashita	Japan

One of the first issues to be discussed was whether the organization should consist of governmental or non-governmental bodies. By this time I had become well aware of the ponderous procedures of governmental bureaucracy and also of the negative sentiments in the U.S. towards the organization of another multi-national United Nations type of organization. Without much debate, we agreed to form a non-governmental federation of national professional technical societies, acknowledging that financing such an activity would pose severe hardship as compared to getting grants from governments. In spite of this difficulty, the decision turned out to be superbly correct.

During these sessions, some of the academics on the Organizing Committee questioned the value of an international federation, stating that its sole purpose should be to convene a few international conferences, there being no other activity worthy of international effort. They felt that we should agree in advance that if we were to organize a federation, it should have a maximum life of ten years. They doubted the need for a federation in the field of information processing, since the subject matter was not on-going, like astronomy or geology or a similar science where international cooperation is essential. They were involved in academic pursuits in their own fields and wanted a computer to enable them to solve their particular problems. They perceived the computer as a means to an end, not a field of study unto itself.

My perception of the computer was quite different. For me, it was a universal tool enabling the solution of thousands of problems and could be a way of extending the capacity and ability of our brains just as the Industrial Revolution extended our brawn. I was convinced that the computer would be the most important technical development of the twentieth century, whose impact on society would be boundless. I expressed these sentiments to the Organizing Committee rather strongly; however, the issue continued to be discussed for about a year. Fortunately, the majority of the members of the Organizing Committee supported my position that the federation should be permanent, and we were able to continue with our plans.

Dr. Harold Chestnut of the United States, the first President of the International Federation of Automatic Control (IFAC), was an excellent source of information and guidance in our proceedings.…He made me aware of the feeling in a number of countries that there were too many international federations being formulated, and that the British were particularly reluctant to participate in new international federations.…He encouraged me to explore with the Organizing Committee the option of becoming a part of IFAC and subsuming our computer activities within IFAC.

During the meetings of the Organizing Committee in October 1958, I reported on the very positive response I had received by letter from individuals and national societies not represented on the Organizing Committee to the formation of a federation dealing with information processing. The members of the committee also reported a definite interest in their countries for us to proceed with the formation of our own federation. We then discussed the IFAC proposal, and, recognizing that our field of interest was much broader than IFAC’s, we were unwilling to have information processing subsumed under control systems. Thus, we decided to thank them for their generous offer and to proceed independently to form our own federation.

The Structure

We agreed that the Federation would be a society of societies, and would not have individual members, so as not to compete with national professional societies. Furthermore, the Federation would have only one national technical society per country as a member, and certain Eastern European countries could register their National Academies of Science as the representatives. The rationale for this decision was that one society for each country would keep the voting balanced and controlled.

It should be noted that in the Scandinavian countries, Netherlands, Japan and Italy, no professional technical society dealing specifically with information processing had yet been formed. Even though these countries had National Academies, each country was triggered by the formation of **IFIP** to organize its own professional computing society to be its representative in the new Federation.

At first, the Federation was incorporated in Belgium, which supposedly had the most liberal regulations for a not-for-profit professional society. Later we learned that the laws in Switzerland, and in particular the Canton of Geneva, were more advantageous, and the Federation is currently registered there. The name that we had decided upon for the Federation was *the International Federation of Information Processing Societies* (***IFIPS***). We proceeded with this name, even though my hand-written notes as of December 1958 say that the name of the Federation should *be the International Federation for Information Processing (**IFIP**)*. Hereafter, to avoid confusion I will refer to the Federation as IFIP, even though the Council did not change the name until October of 1961.

Mr. Jean Mussard of Unesco and his assistant, **Mme. C. Philippot**, were very supportive and encouraging throughout our deliberations, and without their help and secretarial support, we would have had much greater difficulty in bringing an international federation into existence. **Mr. Mussard** furnished me with constitutions of other international federations, summarized our discussions, and was responsible for the first draft of the statutes for the Federation. He was truly a tower of strength, and I would like to thank him here for his assistance and support.
It was our goal to create a set of statutes that would provide the Federation with a solid foundation for operation and, at the same time, provide the officers with maximum flexibility for adjusting to the needs and unknown contingencies which might arise during the early years. We must have been successful, because the statutes stood for twelve years without major refinement. The statutes contained the aims of the Federation to be as follows:

- To organize other international conferences on the subject of information processing.
- To establish international committees to undertake special tasks.
- To advance the interests generally of member societies through international cooperation in the field of information processing.

These basic aims enunciated twenty-seven years ago continue to be the main objectives of **IFIP**.

During this period, we submitted two successive drafts of our statutes to each national technical society or academy represented in the Organizing Committee for their reactions. Finally, we invited all of the national technical societies or academies worldwide to attend the Organizing Committee meetings during the Unesco-sponsored ICIP in June.

On June 18, 1959, the fourth day of the ICIP, the final meeting of the **IFIP** Organizing Committee was held, and twenty-eight people from eighteen countries attended. …Many of these people were meeting each other for the

first time, which caused the meeting to be somewhat more fractious than any heretofore. ...

[Following is the list of attendees taken from Mr. Auerbach's original article.}

Attendees of the Organizing Committee for IFIPS,
Unesco House, Paris,
June 18, 1959

Name	Representative (R) Observer (O)	Organization	Country
Isaac L. Auerbach	R	National Joint Computer Committee	U.S.A.
Jouri J. Basilevski	0	Academy of Sciences of the U.S.S.R.	U.S.S.R.
Niels lvar Bech	R	Danish Academy of Sciences	Denmark
Sergio F. Beltran	R	Mexican Society for Information Processing	Mexico
Stig Comet	R	Swedish Society for Information Processing	Sweden
A.A. Dorodnicyn	0	Academy of Sciences of the U.S.S.R.	U.S.S.R.
H.W. Gearing	0	British Conference on Automation and Computation	United Kingdom
Aldo Ghizetti	R	Instituto Nacionale per le Applicazioni del Calcolo	Italy
Harry H. Goode	0	National Joint Computer Committee	U.S.A.
C.C. Gotlieb	R	Computing and Data Processing Society of Canada	Canada
Korgenoff (M. Carteron)	R	l’Association Francaise de Calcul	France
J. Kryze	0	Czechoslovakia Academy of Sciences	Czechoslovakia
Pentti Lasonen	R	Finnish Committee for Information Processing	Finland
Fernando de las Penas	0	Polytechnic Institute of Mexico	Mexico
Leon Lukaszewicz	0	Polish Academy of Sciences	Poland
W.L. van der Poel	0	Dutch Society of Mathematics	Netherlands
Zvi Riesel	0	Weizmann Institute	Israel
M. Sedosky	R	National Commission of Atomic Energy	Argentina
José Garciá Santesmases	R	National Spanish Council of Research	Spain
Paul Szulkin	0	Polish Academy of Sciences	Poland
A. Walther	R	German Computer Society	Germany

A. van Wijngaarden Netherlands	R	Dutch Society of Mathematics
Maurice V. Wilkes United Kingdom	R	British Computer Society
Hideo Yamashita Japan	R	Japanese Council of Sciences
Zdzislaw Pawlak Poland	R	Polish Academy of Sciences

Attendees representing international organizations

Georges R. Boulanger	International Association of Cybernetics
Jean A. Mussard	Unesco
E.H.E. Pietsch	International Federation of Documentation and the European Organization of Economic Cooperation

East vs. West

I chaired the meeting and, after an introduction and discussion of our purpose, circulated for discussion a copy of the proposed statutes for the formation of IFIP. Two issues of substance were raised for the very first time. The first was a request from the observer from the Polish Academy of Sciences that the voting rights in the Federation's Council be modified to permit a veto right for the representatives from the nations which had similar veto rights in the [Security] Council of the United Nations. The second issue was that all national societies of recognized scientific or technical merit should be automatically admitted as members of the Federation, independent of a decision by the Council members.

It was during this meeting that I learned the tremendous value of a coffee break to enable people with differing viewpoints to discuss them informally rather than debate them in an open forum. During the coffee break, I met **Acad. A.A. Dorodnicyn** of the Soviet Union for the first time and was able to explain to his satisfaction that we were not proposing a United Nations type body, but a professional society of societies that would conduct its affairs in a more democratic way. Once he fully understood that the proposed Federation was to be a non-governmental organization, we were able to resolve both issues. It was finally agreed that the statutes be presented for ratification to each national professional technical society or Academy of Science.

From then on, **Acad. Dorodnicyn** and I established a mutually cordial and effective working relationship, each respecting the political polarization of our countries, but working together for a common goal. In later years, when I chaired the Nominations Committee for the President of **IFIP** and discussed with him his willingness to be a candidate for President, he agreed on one proviso. Namely that since his knowledge of finances was so meager, based on his experiences in the Soviet Union, that I must agree to be his advisor on all financial matters during his term of office. I so agreed, and we worked effectively together during his three years in office.

By the conclusion of the meeting of the Organizing Committee, the following decisions had been taken: 1) to create an International Federation of Information Processing Societies (**IFIPS**) if seven or more national technical societies agreed to ratify the statutes before January 1, 1960; 2) to establish a provisional committee consisting of President **I. L. Auerbach**,

Vice Presidents **A.A. Dorodnicyn** and **Dr. A. van Wijngaarden**, and Secretary **J.A. Mussard**; 3) to authorize the Council to examine the possibility of holding a Second International Conference and Exhibition on Information Processing in 1963; 4) to study the financial arrangements for the Second International Conference and report on it to the Council at its first meeting; 5) to have member societies bear the expenses of their representatives' participation at the first meeting of the Council; 6) to select the place and date of the first meeting of the Council; 7) to publicize the decision to create **IFIP** and the names of the members of the Provisional Committee.

This was a most auspicious occasion, and all of us who had spent so many hours planning for this meeting were delighted with its results. I was ecstatic.... In three and a half years from the moment of the original concept, I had convinced Unesco to sponsor a most successful international conference, had helped program it, and had simultaneously organized an international federation. I had made many new and worthy acquaintances in countries around the globe, some of whom became close friends. This was indeed a thrilling period in my life.

By January 1, 1960, thirteen national professional technical societies had formally agreed to adhere to the statutes proposed by the Organizing Committee, and **IFIP** legally came into existence....

The First Council Meeting

The **IFIP** Council met for the first time in Rome June 16–17, 1960. ... Ten representatives from the then fifteen societies which had approved the statutes plus many observers assembled:

M.	Linsman	Belgium
N.I.	Bech	Denmark
R.	de Possel (for J. Carteron)	France
A.	Walther	Germany
H.	Yamashita	Japan
J.G.	Santesmases	Spain
S.	Comet	Sweden
A.P.	Speiser	Switzerland
M.V.	Wilkes	United Kingdom
I.L.	Auerbach	United States

The following representatives were unable to attend:

C.C.	Gotlieb	Canada
J.	Kryze	Czechoslovakia
A.	van Wijngaarden	Netherlands
A.A.	Dorodnicyn	U.S.S.R.
P.	Laasonen	Finland

One of the first actions of the Council was to modify the statutes, changing the titles of Chairman and Vice Chairman to President and Vice President, and electing the first President for a three-year rather than two-year term so he would serve through the next **IFIP** Congress. Later the statutes were modified so that all of the officers were elected for staggered three-year terms. I was elected President, **Dr. A. Walther** Vice President, **Dr. A.**

Speiser Secretary-Treasurer, and I appointed **Mr. J. Mussard** as Technical Advisor.

In the early years, the Council was the only official body of **IFIP**. However, as the Federation grew in size and the Council meetings became unwieldy, we created a General Assembly for all of the representatives to meet once a year and a new, smaller Council consisting of only the officers and six members elected from the General Assembly to meet twice a year. Annually thereafter, two representatives and appropriate officers were elected for a three-year term.

The Next Congress

To avoid conflicting dates of international conferences, particularly with IFAC, we agreed to schedule **IFIP** Congresses every three years, the next to be held in 1962.

Most of the time during the Council meeting was spent discussing the next international Congress, our first Congress as **IFIP**. We solicited invitations from all of the member societies and Academies of Sciences, but received only one written invitation. It was from **Prof. A. Walther**, Chairman of the Deutsche Arbeitsgemeinschaft für Rechgenanlagen (DARA) of the Federal Republic of Germany, to convene our Congress in September of 1962 in Germany. Apparently, the information processing societies either did not take us seriously or did not feel confident enough to extend invitations. We accepted **Prof. Walther's** invitation and agreed that the city would be decided upon at the next Council meeting. After **IFIP**'s First Congress, we rarely received fewer than two invitations, and there has been active international competition to host the next Congress.

To continue the international flavor of the Congress, we established a policy that the Chairman of the Program Committee and the Chairman of the Arrangements Committee from the host country would each report directly to the President of **IFIP**. The Program Committee was appointed by the President to insure its international constituency and its independence from the host country. For our first Congress, we agreed that the Council members would constitute the Program Committee. Thereafter, the Program Committee was selected from international experts with care taken to assure national representation. The Chairman of the Arrangements Committee generally selected the chairmen of the subcommittees, which included Finance, Exhibition, Proceedings, Printing, and Spouse Activities. This structure for organizing **IFIP** Congresses continues to this day.

For our first Congress, called **IFIP** Congress 62, I appointed **Prof. A. Walther** as General Chairman of Arrangements and **Niels I. Bech** Chairman of the Program Committee. In discussing the technical content of the Congress, the Council members pressed for papers of both higher quality and greater currentness than those presented at the ICIP, with less attention paid to the national distribution of the authors. The Council strongly recommended more symposia and panel discussions to further increase participation and currentness of the program. The Council agreed that its operating language would be English and that Congresses would be conducted in English. Permission was granted to the local Arrangements Committee to provide competent technical interpretation at no cost to **IFIP**.

Financing the New Federation

To finance the federation, each national technical society was asked to make an annual contribution of $1000, $500, or $250 per year. The NJCC [National Joint Computer Committee – the initial U.S. Member society] from the U.S. and the Academy of Sciences from the U.S.S.R. both agreed to contribute $1000. All of the other professional societies except DARA from the Federal Republic of Germany, which gave $500, selected the $250 option. In later years, the Finance Committee insured more equitable distribution of contributions. [At present, dues range from 1 600 to 12 800 eur.] At the time of our first Council meeting, our treasury held a mere $2,758.13 (the odd amount was due to the conversion of foreign currencies into U.S. dollars). It was clear from the beginning that we would have to take heroic measures to insure our financial viability. The officers agreed that their companies would underwrite the expenses of their activities and all of the representatives would pay their own expenses to attend the Council meetings. Our first annual budget totalled $2200. [The budget for 2000 is nearly 400 000 eur.] The Director General of Unesco generously contributed $5000 to **IFIP** to assist us in organizing and defraying the costs of the next Congress. Indeed, it took tremendous chutzpah [audacity] to plan an international conference with such a meager treasury. We addressed the problem by arranging to have either the host city or country or local industries agree to underwrite any losses that the **IFIP** Congress suffered. Based on the successes with our 1962 Congress, I was charged with the responsibility for these negotiations for the next three Congresses. Thereafter, the responsibility fell to other members of the General Assembly.

In retrospect, one of the most amusing items in the minutes of the first Council meeting was a discussion of the fees to be charged for the first Congress. For attendance at the technical sessions, the fee was to be between fifteen and twenty dollars, with students paying only five dollars. The proviso was that “this fee will entitle participants to receive all pre-printed Congress papers, but not the Proceedings.” The registration fee for IFIP Congresses continued to be an issue for the first three Congresses. Those familiar with the current registration fees will be aware that the fees are significantly higher and include a copy of the Proceedings. [The regular registration fee for Congress 2000 in Beijing is $650.]

One of the major legacies I left **IFIP** was the establishment of sound fiscal policies, creating a positive net worth, that in twenty-five years have never put the Federation in financial jeopardy. I attribute this to three factors. First, my working experience was in industry and not academia or government. Second, I was intimately familiar with the finances of the professional societies in the U.S. and in particular with the financing of computer conferences. Each conference had to generate a surplus to provide adequate funds for the other activities of the societies during the intervening years. Third, I showed patience and perserverance during the conduct of these discussions and was willing to devote endless hours enlightening my peers about fiscal management.

Over the next three years, I was able to put into place a set of financial policies that made **IFIP** one of the few international federations that, after

the first contribution from Unesco, never had a major financial problem or had to borrow money to conduct its affairs. The axioms are relatively simple: 1) each Congress has to be financially self-sufficient with registration fees adequate to cover all normal expenses and produce a surplus derived principally from fees charged exhibitors and casual attendee to the exhibition; 2) **IFIP** must derive a royalty from all of its publications; 3) we conduct the affairs of **IFIP** in a prudent manner throughout a three-year fiscal cycle.

Of these policies, the only one that caused dissension was that of establishing a royalty on publications. This particular idea was my own. Some representatives from the academic community objected strongly, for they felt the royalty would increase the price of the proceedings and other **IFIP** publications and make them prohibitively high. This has not been borne out by our historic results. In reviewing the financial statements of **IFIP** over a quarter of a century, I am happy to report that, even though the royalty percentage has been quite modest, it has generated income which on occasions was equal to or greater than the annual contribution from the member professional societies. In later years, many other professional societies adopted this same practice.

Other Actions of First Council

Another noteworthy action of the first Council meeting was the recognition of the need for greater standardization of terminology throughout the industry. Since I was responsible for this activity within the NJCC, it was my intent that **IFIP** should have a similar technical activity, and I drafted the goals accordingly. The Council authorized the establishment of our first Technical Committee — Terminology (TC-1), whose objectives were to establish a terminology of digital computers and data processing devices, and to compile a multilingual glossary for information processing systems and related subjects. We were indeed fortunate to find **Geoffrey C. Tootill** (U.K.) to serve as its first Chairman and **A. R. Wilde** (U.K.) to be committee secretary.

To increase the awareness of **IFIP** within the member societies and in professional circles, the Council authorized the publication of a bulletin. The original circulation of approximately two hundred was through members of the Council… [The current Bulletin has a circulation of 2 600.]

Our host for the first Council meeting… initiated a practice that we continue, providing for an excursion or outing for the entire Council and its guests. The excursions proved to be invaluable, enabling the representatives to mingle informally, to get to know each other better, and to conduct Federation business that was formalized during subsequent meetings.

Looking to the Future

All of the lofty goals that were set forth in the original proposal to Unesco, which began with that first flash of an idea during our conversation in the winter of 1955, were brought to successful fruition. The visionaries among us recognized the significance and importance of the computer and information processing, and how significant an impact it would have on our

lives. Eventually, others joined in our vision, and today the computer industry has become the most exciting, dynamic, and rapidly expanding field of the century. Today, as the computer becomes ever more essential to the smooth running of every aspect of our lives, it is difficult to believe how reluctant people were to understand, appreciate and involve themselves in one of the greatest technological developments of all times.

IFIP has had a great impact on bringing together scientists, engineers, mathematicians, academicians, and computer professionals worldwide, providing an opportunity to exchange ideas and enhance the advancement of information processing. Its success has been largely due to the devotion of its national representatives and the members of the Technical Committees and Working Groups, all volunteers who have given freely of their knowledge and time to insure the progress of the Federation.

The future of **IFIP** should be devoted to reaching out to developing nations, holding regional Congresses and conferences in countries in Africa, South America and Southeast Asia, which have been slow to integrate data processing into their societies. We have worked in the past to educate and disseminate knowledge, and we have shown that a meeting of the minds is essential in dealing with the complexities of a technical revolution. With information processing such an integral aspect of everyday life around the world, **IFIP** can continue to be an important force in shaping the future.