

Italy in IFAC

From dawn to our days

A report on Italy's activity for IFAC: 1956 - 2003

R E S O L U T I O N

The following undersigned are in favor of an international union of Automatic Control and are prepared to work toward this end in our own country. This union will have the following aims:

1. To facilitate the interchange of information in Automatic Control and to advance this field.
2. To organize international congresses in Automatic Control.

Heidelberg, 27. Sept. 1956

Signed:

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Report on 50 years of IFAC activity in Italy

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Foreword

In 1956, in Heidelberg , a small group of enthusiastic scientists and engineers from different countries signed the famous resolution "in favor of an international union of automatic control". This group included professor Giuseppe Evangelisti of the University of Bologna. One year later, Professor Evangelisti signed the documents with which Italy entered the group among the first eight countries to join IFAC. Since then, the participation and service of Italy to IFAC's ideals has been steadily growing.

This publication is a homage to a few distinguished scholars whose vision made it possible for many other Italian scientists and engineers to become respected members of the international community of automatic control. It is also a homage to the many Italian volunteers who, from 1957 to 2002, promoted the cause of IFAC and, in various capacities, contributed to the realization of all IFAC events that took place in Italy

The booklet is in three parts. The first one is a brief history describing how Italy joined IFAC from its early days, and actually hosted the first IFAC event that took place after the 1960 congress in Moscow. The second part is devoted to three personalities who were instrumental in the development of automatic control in Italy: Giuseppe Evangelisti, Giorgio Quazza and Antonio Ruberti. The biographies of these Italian scholars point out their life-long dedication to IFAC. In the third part, a concise documentation of the IFAC events organized in Italy can be found .

This publication has been written in the firm belief that, in a foreseeable future, Italy will be given the privilege of hosting an IFAC Congress. It is the result of a collective enthusiastic effort of the Italian automatic control community.

The contribution of
the Italian Automatic Control community
to the early days of IFAC
and the rise of IFAC activity in Italy

The early days of IFAC - the Italian contribution

Memories of activity in Italy before and immediately after the formation of IFAC

On the 27th of September of the year 1956, a meeting with the name of Automatic Control Congress was held in Heidelberg (Germany). During this meeting a small group of scientists and engineers from different countries took the first steps towards setting up an international institution for automatic control and its applications, the *International Federation of Automatic Control*. One member of this group was the eminent Italian scholar, Giuseppe Evangelisti (see his biography in this volume) who was a professor of Hydraulics at the University of Bologna.

The Heidelberg meeting was followed one year later by the Constitutive Assembly of IFAC, held in Paris, where a preliminary version of the constitution of the new Federation was prepared.

In the negotiations and discussions following these two events, Evangelisti proposed the organization of a formal meeting to be held in Italy, for the finalization of the constitution. His proposal was accepted immediately by the provisional committee of the new federation. .

To prepare for this formal meeting, Evangelisti contacted Algeri Marino, a professor of Electrical Communication at the University of Rome and President of the Fondazione Bordoni. In 1955 this foundation had set up a research laboratory on Automatic Control where Antonio Lepschy and Antonio Ruberti were working (for information on Antonio Ruberti see his biography in this volume).

Among other things, Professor Marino had, on behalf of the Consiglio Nazionale delle Ricerche (CNR), already organized an international Congress on Automation (“Problemi dell’Automatismo”) that was held in Milan in April 1956, at the Museo della Scienza e della Tecnica. It was well attended and had a worldwide audience. This was one of the first international congresses on control.

Following Evangelisti’s request, Marino obtained permission to set up the *CNR Commission for IFAC*. Its presidency was entrusted to Evangelisti, Marino took part, and Lepschy and Ruberti were nominated as secretaries. Through this Commission CNR was to become the Italian authority supporting IFAC, thus assuming the relative financial commitments.

Starting from the 20th of January 1958 the *CNR Commission for IFAC* met on various occasions, with the main purpose of collecting and coordinating the proposals that, for the statute of IFAC, were formulated by the various members of the provisional com-

mittee. In accordance with the proposal formulated by Evangelisti, a meeting in Rome had to be organized in order to prepare formal actions for the setting of the new organization. To this purpose, the *CNR Commission for IFAC* worked out a preparatory document to submit for approval to the Rome meeting.

In fact, the Rome meeting was held at the CNR headquarters from the 2nd to the 6th of March, 1959. It was at this meeting that the final version of the Constitution was worked out, and then submitted to all National Member Organizations in preparation of the General Assembly of IFAC. In Rome, it was decided that the Assembly would meet in Chicago in September.

All this sequence of facts is appropriately summarized in the 4th Information Bulletin of IFAC, dated May 1959, where one can read:

Meeting of the Executive Council and the Advisory Committee

On invitation of the Italian National Research Council, the Executive Council and the Advisory Committee of IFAC had a meeting in Rome from March 2 to 6, 1959. All the members of the Executive Council were present with the exception of H. S. Tsien (China) for whom S. M. Chung was present. The other members of the Executive Council are:

H. Chesnut (USA), (President of IFAC), M. Ajnbinder (Belgium), V. Broida (France), J. F. Coales (United Kingdom), G. Evangelisti (Italy), E. Gerecke (Switzerland), A. Letov (USSR), P. Nowacki (Poland), G. Ruppel (Germany).

Moreover, the following members of the Advisory Committee and guests were present at least during part of the meeting:

J. Balchen (Norway), O. Benedikt (Hungary), D. P. Eckman (USA), F. Foddis (Italy), W. Findeisen (Poland), K. Izawa (Japan), R. Oldenburg (USA), W. Oppelt (Germany), Z. Trnka (Czechoslovakia).

All items of the very large agenda were discussed in a very friendly spirit and with whole-hearted co-operation of each member. The Italian National Committee of IFAC had prepared all facilities and had extended a very friendly hospitality.

The following report is to inform our readers about several resolutions which might be of special interest."

Then a set of points are touched, in particular point 4 reads:

4. Constitution of IFAC:

The Constitution which has been adopted at the Constitutive Assembly of IFAC September 1957 in Paris had found some criticisms among several National

Member Organizations. A special committee under the chairmanship of Prof. G. Evangelisti (Italy) had collected and coordinated all proposals for amendments of the Constitution and has taken these comments as a basis for a new draft which thoroughly was discussed by the Executive Council. The new draft including some more modifications will be submitted to all National Member Organizations before long in order to vote on it on the General Assembly to be held in Chicago in September 1959.

The Chicago meeting took place at the Chicago Hotel Sheraton, the 14th to the 18th of September 1959. The consulting Committee met on September the 14th and 15th, while the true and proper meeting took place, in a very friendly and enthusiastic atmosphere, the 16th, 17th and 18th. Informal meetings also took place among the representatives of national associations, and with the official bodies of the main western countries, Japan, and the East European countries. These meetings and exchanges were also facilitated by social occasions like the cocktail party offered by Professor Jones on the 16th, a barbecue at Doctor D. Boyd's home in Evanston the 17th and the official banquet at the Hotel Sheraton on the 18th. Professor Gerecke of the Zurich Polytechnic gave a talk, illustrating the things that had struck him the most during his visit to the United States (things that, at that time, were not very widespread in Europe, but, were, however, soon to be). Notice in passing that the Chicago meeting also offered the occasion for many of the participants to visit an important exhibition on instrumentation organized by ISA in the Coliseum of that town.

The Italian delegation to the Chicago Meeting consisted of Giuseppe Evangelisti, member of the consulting Committee of IFAC, Antonio Lepschy and Antonio Ruberti. These last two were responsible for presenting Professor Marino's lecture on the problems of university education in the field of automatic control and automation. This lecture was presented by Lepschy and discussed in the consulting Committee afternoon session of September the 14th. The Chicago meeting anticipated, by a little less than a year, the first world IFAC congress, held in Moscow June the 27th to July the 1st 1960.

In the period from the Moscow congress to the subsequent IFAC World Congress (held in Basle, Switzerland, in 1963), Italy had the privilege to host the first symposium organized under the aegis of IFAC. The symposium, held from the 26th to the 28th of April 1962, was devoted to optimisation and adaptive control and, upon the initiative of CNR, was held in Rome at the Istituto Superiore delle Poste e delle Telecomunicazioni, headquarters Higher Institute of Post and Telecommunications), headquarters of the Fondazione Bordini. The welcome address was given by Giovanni Polvani, president of CNR in those days. This event, held more than 40 years ago, was the first official IFAC event in Italy. It had to be followed by a long series, as witnessed in this volume.



*Visit to IBM World Trade Corporation - Poughkeepsie, September 24, 1959
Seated left to right: Mr. A. Lepschy, Istituto Superiore delle Telecomunicazioni, Italy
Prof. G. Evangelisti, professor of Hidraulics, Bologna University, Italy
Standing left to right: Mr. G. Simons, Manager of United Records System, IBM, New York
Mr. A. Ruberti, Istituto Superiore delle Telecomunicazioni, Italy*

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OF AUTOMATIC CONTROL

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TO ALL NATIONAL MEMBER ORGANIZATIONS OF IFAC

All the information contained in the present Bulletin has been submitted either by the national member organizations of IFAC or by the Executive Council of the Federation.

Therefore, if you wish that any information on Automatic Control in your country, such as past and coming events, books, published or to be published, specialized reviews, addresses of specialized engineering institutions etc., to be mentioned in the Bulletin, please send it to the Editor:

Prof. Ing. Dr. Victor Broida
2nd Vice-President of IFAC
13, rue de la France-Mutualiste
Boulogne - sur - Seine (Seine)
F r a n c e

In this way you can contribute to the international exchange of information in the field of Automatic Control, which is one of the main aims of IFAC.

If you are not familiar with the English language, you may use one of the other three official languages of IFAC, namely: French, German or Russian.

We thank you most sincerely in advance for your co-operation.

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I - IFAC NEWS

A short history

On September 11th, 1957, the International Federation of Automatic Control (IFAC) was created in Paris. The idea of creating such a Federation which arose at the Automatic Control Congress held in Heidelberg on September 27th, 1956, was thus carried into effect less than a year later by a Provisional Committee consisting of V. Broida (France) Chairman, G. Ruppel (Germany) Secretary, J.P. Coales (United Kingdom), O. Grebe (Germany), A.M. Letov (USSR), P. Nowacki (Poland) and H. Oldenburger (USA).

The Automatic Control Societies of Austria, Belgium, China, France, Germany, Hungary, Italy, Japan, Netherlands, Norway, Poland, Roumania, Sweden, Switzerland, Turkey, United Kingdom, USA, USSR and Yugoslavia were represented at the Constitutive Assembly. Automatic Control Societies of several other countries showed their interest in the creation of IFAC and approved its aims.

The swift progress in creating IFAC is especially significant since for several countries it was first necessary to organize their own automatic control engineers on a national basis.

At the Constitutive Assembly, the Constitution was submitted to the meeting and was adopted with some alterations.

According to this Constitution, the field of activity of the Federation covers the theory and the applications of Automatic Control including automatic control of physical systems and servomechanisms as well as instrumentation, automatic data processing and computers so long as the latter form a part of automatic control systems.

Exchange of news and experience between member organizations will promote the development of the science of automatic control amongst nations. For this purpose, international congresses will be organized and special committees will handle given tasks in the field of automatic control. Any country can participate in IFAC through a single scientific organization or through a national committee working in the field of automatic control.

The official languages of IFAC are English, French, German and Russian, the legal language being English.

The Constitution provides for a General Assembly of the member organizations which elects the Executive Council. Presently, the Executive Council consists of the following members:

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President: H. Chestnut (USA)
 1st Vice-President: A.M. Letov (USSR)
 2nd Vice-President: V. Broida (France)
 Secretary: G. Euppel (Germany)
 Treasurer: E. Gerecke (Switzerland)
 Ordinary Members: M. Ajubinder (Belgium)
 J.F. Coales (United Kingdom)
 G. Evangelisti (Italy)
 P. Nowacki (Poland)
 H.S. Tsien (China)

The Secretary has installed his office at the V D I (Association of German Engineers) in Düsseldorf, Prinz-Georg-Str. 79.

An Advisory Group of experts will act as an advisor to the President on matters in which the specialized committees are concerned.

Membership

Up to April 15th, 1958, the following 14 national organizations have ratified the Constitution of IFAC, adopted on September 11th, 1957, by the General Assembly held in Paris, and have determined their annual subscription to cover the expenses of the Federation:

1 ^o) AUSTRIA	Österreichischer Arbeitsausschuss für Automatisierung, Österreichisches Produktivitäts-Zentrum, Hohenstaufengasse 3, <u>Wien I</u>	£ 125
2 ^o) CHINA	Chinese Association of Automation c/o Institute of Automation, Academia Sinica, <u>Peking</u>	\$ 500
3 ^o) CZECHOSLOVAKIA	Laborator pro Automatismaci a Telemechaniku, Ceskoslovenska Akademie Ved, Zidna 28, <u>Praha</u>	£ 250
4 ^o) DENMARK	Dansk Ingeniørforening, 29, Vester Farinagsgade, <u>Copenhagen</u>	£ 125
5 ^o) HUNGARY	Hungarian National Committee of IFAC, c/o Budapesti Műszaki Egyetem, Villamosgepek Üzemtana Intezetek, Stoczek-u. 2 T.-EP. III.36, <u>Budapest</u>	\$ 125
6 ^o) ITALY	Consiglio Nazionale delle Ricerche, Ufficio relazioni internazionali, Piazzale delle Scienze 7, <u>Roma</u>	\$ 500

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7 ^o) JAPAN	National Committee of Automatic Control, Science Council of Japan, Ueno Park, <u>Tokio</u>	\$ 250
8 ^o) NORWAY	Den Norske Ingeniorforening, Kronprinsensgate 17, <u>Oslo</u>	\$ 250
9 ^o) POLAND	Polski Komitet Automatyki, Naczelna Organizacja Techniczna, ul. Czackiego 3/5, <u>Warszawa</u>	\$ 125
10 ^o) ROMANIA	Comisia de Automatizare, Academia Republicii Populare Romine, Calea Victoriei 125, <u>Bucarest</u>	\$ 250
11 ^o) SWEDEN	Svenska Centralkommitten för internationella ingenjörskon-gresser, c/o Svenska Teknolog-föreningen, Brunkebergstorg 20, <u>Stockholm</u>	\$ 250
12 ^o) SWITZERLAND	Association Suisse pour l'Auto-matique, Sternwartstr. 7, <u>Zürich</u>	\$ 250
13 ^o) UNITED STATES OF AMERICA	American Automatic Control Coun-cil, c/o Mc Graw-Hill Book Co., 330 west 42nd street, <u>New York 36</u>	\$ 1,000
14 ^o) UNION OF SOCIALIST SOVIET REPUBLICS	Natsionalny Komitet SSSR po Avto-maticheskomu Upravleniu, Kalan-tchevskaja ulitza 15a, <u>Moskva</u>	\$ 1,000

The 1960 Congress

The first international congress of IFAC will be held in Moscow in 1960. It will start on June 25th and last 10 days.

The papers read will be divided into the following 3 main groups, each of which will comprise several sections:

- 1^o) Theory of Automatic Control
- 2^o) Automatic Control components
- 3^o) Automatic Control applications

It is expected that visits to industrial installations and educational and scientific institutions of USSE will be arranged.