SPECIAL CONTRIBUTION

Copyright © IFAC Systems Analysis Applied to Water and Related Land Resources, Lisbon, Portugal, 1985

## THE INTERGOVERNMENTAL BUREAU FOR INFORMATICS (IBI)

INFORMATICS, THE DAWN OF A NEW ERA

Contemporary man is faced with an important challenge - to search for a new world balance to achieve harmonious development. The upcoming decades are heralding economic and social instability, crises in energy resources and international conflicts.

Traditional management methods cannot cope with the growing complexity of phenomena. Other methods therefore must be found.

Informatics is undoubtedly an effective instrument which opens up abundant prospects. Its integration with other disciplines, such as telecommunications and audiovisuals, provides man with new and complete tools for rationally processing the fundamental raw material: information - thus giving him appropriate solutions to the problems he must face.

It is in this context that the Intergovernmental Bureau for Informatics (IBI) fulfills its mission to "permanently assist mankind in the field of informatics, to help them live in the context created by this discipline, to understand better its impact on society and to derive the maximum benefit from its possibilities...".

Aware of the political importance of informatics, IBI has, right from its very beginning, urged countries to take note of this phenomenon, its cultural, social, political and economic dimensions, so that they may not one day run the risk of losing their decision-making power and their countries.

Thanks to an intense worldwide campaign to promote awareness in top officials, not only is suchawareness almost totally widespread today, but it is reflected in the functional structures of a good number of countries.

In fact far from being limited to merely raising the awareness of top officials - this would have been futile if it had not been followed by concrete action - IBI has encouraged the creation of national informatics structures, helping to launch and develop them. This task is and will continue to be carried out and a great many of the Organization's actions are geared towards this aim.

Opportunities are therefore in view for the emerging countries and the Organization intends to use every possible means to help them seize such opportunities.

This work however would remain incomplete if, at international level, a balanced distribution of resources and the development of informatics means is not achieved. In this respect, conscious of its own role, IBI serves as a platform of exchange and harmonization. Thanks to the promotion of numerous meetings of international experts and of various world conferences, it enables single countries at whatever level of informatics development to compare their own problems with those of the others and to voice their aspirations and concerns.

Informatics no longer remains the problem of a few, but involves in fact everyone.

The importance of its current task does not stop IBI from looking to the future. The problems the informatics world will be concerned with tomorrow are among the main topics of the Organization's attention and activity.

FOR A BALANCED INTERNATIONAL DISTRIBUTION OF RESOURCES AND THE DEVELOPMENT OF INFORMATICS MEANS

A computerized society has a pressing need for new international legislation and regulation enabling countries balanced international exchange and a rational use of their own informatics resources.

For this reason IBI is increasing the number of meetings of international experts as well as the regional and world conferences so as to build up the best favourable conditions.

IBI has promoted analyses which have shown that there are global needs which can be met by Informatics Stra-tegies and Policies.

A first government-level Conference, held jointly with UNESCO in Spain in 1978 on the above topic, was attended by over 70 countries, numerous international organizations and a wide range of recommendations were issued.

Since 1979, the Organization has attempted to put these recommendations into practice through its programme of activities.

In 1981, in what is now known as the Declaration of Mexico, a group of leading figures, under the presidency of Mr. Lopez Portillo, the President in office of the United Mexican States, called the attention of governments to the risk that informatics development may contribute, if not suitably balanced, towards exacerbating international imbalance and tensions and called on them to undertake action in this direction.

IBI in this regard has been carrying out sectoral and regional research on specific topics of development, such agriculture, education, health, etc. At the same time the prospects opened up by technological breakthroughs in microinformatics, satellite transmission etc. have been and continue to be assessed. In addition, an important international programme has been proposed, namely the Special Programme of Informatics for Development (SPINDE) which was launched by IBI in 1983 to enable the informatics industry to make a significant contribution to international cooperation with balanced negotiations between the parties involved: namely the developed and supplier countries on the one hand and the developing and receiving countries on the other.

With this aim of exchange, harmonization and balance constantly in mind, IBI organized the World Conference on Transborder Data Flow (TDF) Policies in Rome in June 1980.

The political and technical operations regarding transborder data flow, defined as the movement across national borders of machine readable data for processing, storage and use, are the practical manifestations of this procedure for transferring information and applying informatics.

In 1981, the international working groups, organized by IBI after the June 1980 Conference, analysed the TDF problems in greater depth.

A world survey on TDF was conducted in 1982–1983, laying particular emphasis on the policies and practical applications adopted by the governments, the posts and telecommunications administrations and the multinational companies.

As a culmination of these initiatives, the Second World Conference on Transborder Data Flow Policies was held in Rome on 26-29 June, with the following objectives:

- to offer a better knowledge of the TDF phenomenon;
- to develop the debate on the universal principles of TDF in order to define the line of future negotiations;
- to define a cooperation programme.

The following suggestions emerged from the debate:

A Committee of Reflection should be set up by IBI to study informatics and TDF policies.

All regions of the world should be invited to join an IBI-sponsored Committee which would issue ideas and recommendations on TDF policies.

A programme should be launched to sensitize appropriate personnel in the developing countries to TDFrelated issues.

Consideration should be given to initiatives to support the development of telematics and informatics infrastructures in the developing countries.

A third Conference on TDF policies should be convened by IBI having regard to the rapid advances made in this field.

## PRESENTATION OF IBI

The Intergovernmental Bureau for Informatics (IBI) formally assumed its name, structure and current functions under the resolution of the General Assembly held in Paris from 11 to 13 December 1974. It took the place of the ICC (International Computation Centre) created under Resolutions 22 (III) of 3 October 1946, 160 (VII) of 10 August 1948, 318 (XI) of 14 August of 1950 and 349 (XIII) of 24 August 1951 of the United Nations Economic and Social Council and under Resolution 2,24 of the UNESCO General Conference. The ICC had started to work as an autonomous body in 1961. The member countries of the United Nations Organization or of any of its specialized institutions can become members of IBI by signing and accepting its Convention.

IBI has the following structure:

- the General Assembly of Member States, which is the supreme organ and which establishes the Organization's policy and determines its programme and budget;
- the Executive Council, composed of representatives from 30% of its Member States, which, under the authority of the General Assembly, approves the programme and the budget of the Organization and controls the financial management;
- the Secretariat, whose work is directed by the Director General in line with the programmes and directives established by the General Assembly.

IBI, whose headquarters are in Rome, is the only international intergovernmental Organization, specialized in informatics, with an activity programme approved and financed by the governments of the member countries.

IBI's sphere of activity covers, in addition to the promotion of information processing methods and models, the study of the political, economic and socio-cultural problems linked to the advent of the information society.

Moreover, IBI, due to its privileged position in the field of informatics development, offers its member countries the services of its own automated data base (IBIS - IBI Bibliographic Information System), specialized in international informatics developments.

IBI in agreement with its member countries has worked out a doctrine which could be outlined as follows:

- Informatics is made up of a set of essential techniques for the economic and social development of countries and consequently for the reduction of the technological abyss dividing the industrialized and developing countries.
- The informatization of a country is a process that must be controlled by the government, since it has fundamental consequences on the establishment of an essential infrastructure for the efficient management of a Nation-State.

The governments of countries, in particular those of the developing countries, must have a supranational institution such as IBI, within which they can work on drawing up strategies and policies for an informatics which is harmonized at world level, in order to contribute to the establishment of international balance in this respect.

This doctrine has led IBI to gear all its efforts towards the promotion of national informatics capacities; promotion which takes the form of various technical missions, training seminars, expert working sessions on informatics applied to the major sectors of activity of a nation.

IBI has drawn up a particular type of joint action programme with its member countries as regards the com-

## 280

puterization of the national administrative structures. Such programmes ensure the "vertical" transfer to the developing countries of the technology and at the same time, the experience and knowhow of the industrialized countries.

IBI, moreover, finances pilot projects whose implementation must be repeated in the member countries of the same geographical area, ensuring in this way the "horizontal" transfer of technology.

## IBI

INTERGOVERNMENTAL BUREAU FOR INFORMATICS Vicolo Antoniniano 13 00153 Rome / Italy Phone: 770181 Telex: 612065 IB INF I Cable: IB INF ICS ROME/ITALY Postal Address: IBI P. O. Box 10253 Rome/ITALY

281