

Global Information Society

A highly significant and rapidly on-going process confronts us all: it is the **building of a global information society**.

Global information society acts at three levels. **Geographically speaking**, this process is not confined to one single country or region. However, if different rates of carrying it out are come across, they are to be explained not by specific demands but by a quicker capacity of understanding the process inevitably and by existing capabilities of implementing it. Globality also defines **the scope** as informatization goes from the classical economic, military and administrative applications to culture, recreation and health care. A third level testifying globality is that of **the awareness and involvement of ever more people**: men of science, businessmen, political and educational people. For Romania, such a process is a matter of situation as well. Provided correct understanding and coherent and efficient approach, the longed for economic, cultural and political integration into the civilized world, in general, and into the Euroatlantic community, in particular, would become a reality. Ignoring such a process, slowly reacting to it or questioning it would bring about isolation, underdevelopment, and would even jeopardise the future of the Romanian society.

Many years ago, **Academician Mihai Drăgănescu**, who was to be elected the first president of the revived Romanian Academy, and at the same time, who was the founder and the first chairman of the "Information Science and Technology" Section, foresaw this process. Unfavourable circumstances prevented this process from being carried out at a large scale in Romania, and eventually prevented Romania from benefiting such practical priorities. Such ideas survived, and the people maintaining them lived on and did their best under those given circumstances.

Nowadays, the necessity for action is largely comprehended. The setting out of the most suitable strategies and ways of action for Romania asks for a clear theoretical approach and for alternatives evaluation. It was on the 14th of March, 1995 that the "Information Science and Technology" Section of the Romanian Academy dedicated a scientific session to the **Global Information Society** subject. Invited speakers at the scientific session there were most outstanding representatives from research, higher education, GO, industry, and even private sectors. Most of them have for the last thirty years been concerned with the development of the IT field in Romania.

Academician Virgiliu N. Constantinescu, president of the Romanian Academy honoured the scientific session by delivering an opening speech where the importance and high-time for discussing such a subject were revealed.

The scientific session was double-motivated: a) to let participants discuss and define concepts and actions; b) to let the Romanian public and potentially actors in the process have an interesting material at their disposal for future decision-making and activities.

A special issue of the **Romanian Journal of Information Technology and Automatic Control** would try to meet in due time the latter objective of the scientific session. All the papers included, although sharing common ideas and agreeing on them, were to be classified in three groups according to the importance they assigned to the problem concerned.

A first part dealt with **global problems**, i.e. **strategies and policies**, and included five papers.

Professor dr. Marius Guran, one of the main promoters of IT and computer networks in Romania, made a detailed and informative presentation of the concepts devised and the practical activities taken during the last twenty five years by the USA, Japan, and European countries for creating an information society. Considering various strategies and industrial policies, he reached the conclusion that Romania would fail in successfully implementing information infrastructures "unless there will be definite and urgent measures... with strategical partnership". He also said that for the basic and applied software and for services "capital should be invested for exploiting the existence of high-qualified personnel and for motivating them and preparing others in these fields".

Professor dr. Mircea Petrescu, an active participant in the IT implementation in Romania, and acting president of the National Commission of Informatics, brought forth a nice and encouraging view of the information society as being a consequence of the interaction between development and technology (viewed in its largest acceptance), which if meant to be productive, should lie on and be fed with information.

Dr. Vasile Baltac, one of the main co-ordinators of the domestic computing equipments' production, suggested, in an elaborate and well-documented paper, an apparently surprising but optimistic perspective, which he largely accounted for "Romania is presented a historical chance of soon becoming a country of the North, prosperous and industrialized, but showing today, in many respects, an economy characteristic of the South, if only opting for an IT-based development".

Andrei Chirică, a well-known manager of the telecommunication sector in Romania, reviewed the developments of the last years and expressed the conviction of a modern communication infrastructure as a prerequisite for building an information society in Romania. Open issues such as education and new mentalities were dwelt upon.

Academician Dan Dascălu, director of the Institute for Microtechnology, insisted on the high-time and feasibility of an industrial sector of microsystems, based on the European models and experience and sustained by the domestic human potential. The Institute for Microtechnology made its valuable contribution to staff training for this sector.

The second part of the scientific session which included three presentations, drew attention to some **application areas** (manufacturing and business processes, medical science, health care and military systems). All these significantly bear on the would-be information society.

Dr. Florin Filip, the now director of the Research Institute for Informatics, which stands for a research centre of excellence in IT, dealt with those manufacturing and business processes characterized by diversity, globality, demassification and dematerialization. The evolution and convergences occurred at four levels (IT, manufacturing processes, human factors and geopolitical and social changes) were analysed. An attempt was made at identifying interactions and at proposing elements of practical and reactive strategy for Romania.

Medical Informatics and its technological, methodological and deontological problems were considered by a famous group of academic people in Jassy. **Professor dr. H.N. Teodorescu, Professor dr. D. Galea, Professor dr. F. Topliceanu, dr. I. Bogdan and A. Brezulianu** saw informatics as a "motor of change", but also as a "regulating factor".

General dr. N. Irimic approached problems specific to "supervisory, control and communication" systems in military activities in the view of the 21st century.

The third part is reserved to papers dealing with **technological aspects** related to the building of information society.

Professor dr. Nicolae Țăpuș, head of Computer Chair at the "Politehnica" University of Bucharest, made a highly technological presentation of the interconnectability of systems, emphasizing the necessity for developing academic networks and referring to developments in other Central European countries.

The role of "client-server" technology and trends in standardization were shown in **dr. Florin Păunescu's** presentation. Dr. Păunescu is a reputed specialist in Distributed Processing.

Dr. Dan Tufiș spoke about "language technologies" which, in his opinion, laid the background for advancements in communications, education and human potential exploitation. Dr. Dan Tufiș is a well-known specialist in this marching-on and modern domain.

The special issue concluded with a quite special contribution, which was actually a beautiful *essay* written by **Dr. Gheorghe Ștefan**, on informatics and civilisation-culture alternative.

Editors of this special issue intended to make available to the reader information in due time, while sticking to the spirit of the papers. So, the articles included are the very presentations made at the March scientific session of the "Information Science and Technology" Section of the Romanian Academy. New versions will be considered for publication in the "ACADEMICA" Journal and for the Proceedings to be edited by the Publishing House of the Romanian Academy.

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