

requiring a high reduction in plant electricity production, somewhat lower with modification of radiators at the consumer end, or quite low with a heat pump at the receiving end. Heat transmission, storage and distribution, the appropriate selection of materials for a heat transmission network, prevention of heat losses and assurance of a reliable supply of heat, are additional problems to be solved.

Although a number of technical, administrative and legal problems remain, it is certain that district heating can bring considerable economical benefits, and a great reduction in total fuel requirements.



REPORT OF AN IAEA/UNESCO/FAO SYMPOSIUM, BULGARIA, OCT. 1974

The symposium brought together 138 policy makers, managers and systems designers concerned with major information systems.

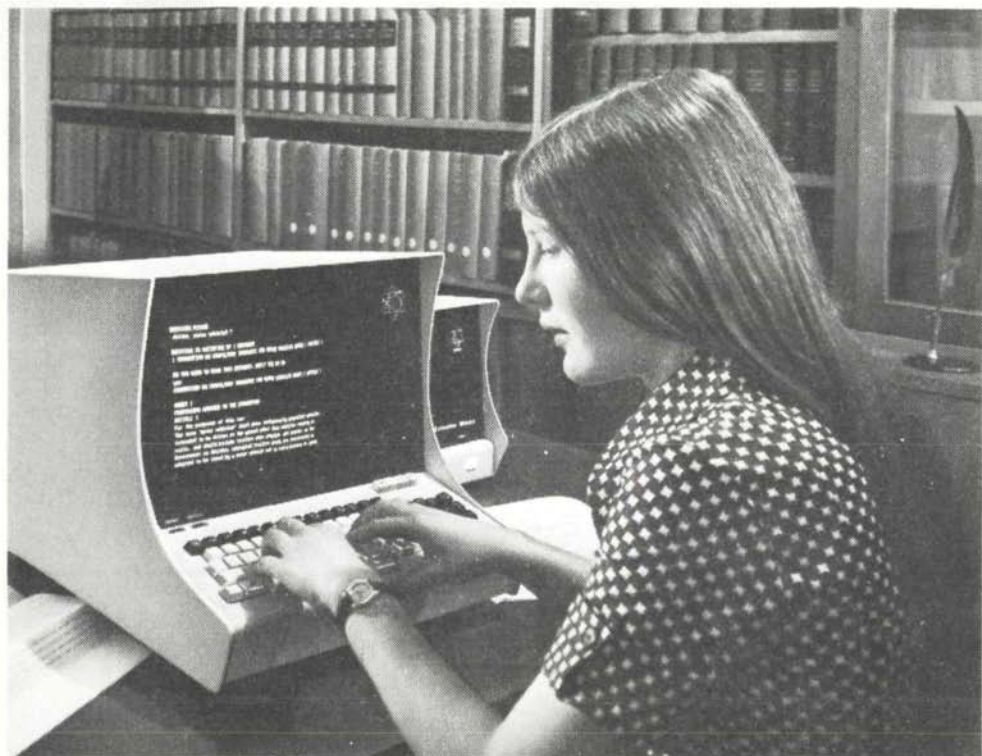
In all, 36 countries and 13 organizations were represented.

World-wide Information Systems

“The world information transfer community needs the benefits that ideal systems interconnection and systems compatibility would bring. A prolonged period in which major information systems and services continue to develop independently, without consideration of the needs of interconnection and compatibility, will not only lead to grave economic waste, but perhaps also to eventual chaos when we reach the point that no single system in any nation can continue to do the job it was created to do. The future will be difficult if we work together; it will be bleak if we do not.”

These words by Dale Baker, Director of the Chemical Abstracts Service, and one of the Panel Chairmen, sum up the basic reasons for the organization of the “International Symposium on Information Systems: Connection and Compatibility,” which was held in Varna, Bulgaria from 30 September to 3 October 1974.

The three international organizations, IAEA, FAO, and UNESCO, which jointly sponsored the Symposium, share an active interest and involvement in information systems development. The extent of their interest was explained by the Director General of the IAEA, Dr. Sigvard Eklund, when he opened the meeting on behalf of the three co-sponsors: UNESCO in conjunction with the International Council of Scientific Unions (ICSU), took initiatives in 1966 which led to the establishment of its UNISIST programme. Its aims are to co-ordinate existing trends towards international co-operation in the collection, storage and dissemination of information and to act as a catalyst. Its ultimate goal is to establish “a flexible and loosely connected network of information services based on voluntary co-operation”. A particular concern of UNISIST is to ensure co-ordination of the information activities of the United Nations organizations.



Jointly with 45 Member States and 13 international organizations, the IAEA operates the International Nuclear Information System (INIS). FAO's planning of a similar system for agriculture, known as AGRIS, is well advanced. The first "level" of AGRIS, aimed at providing a co-operative, comprehensive and rapid current awareness service, covering all the subject fields of FAO's interest, has been developed in close co-operation with INIS and makes full use of its methods and procedures.

The Symposium provided an opportunity for the science information community to assess the progress already made in creating links between diverse national, international, intergovernmental and non-governmental information systems and services. Papers were presented describing current developments in the national information systems of a number of countries, with special emphasis on how these developments were furthering harmonization of national information policies and facilitating interconnection with international systems.

INIS and AGRIS figured prominently amongst the international systems discussed. In addition, proposals for two new international systems, to be known as DEVSIS and SPINIS, were outlined. The former will deal with development science information; the latter will cover the information on the administrative, scientific and legal aspects of science policy. There was also discussion of international co-operation in information handling within such international organizations as the CMEA, the Commission of the European Communities and OECD.

In exploring and enumerating the immediate and long-term actions needed to ensure further programmes in increasing compatibility amongst systems, particular emphasis was placed on the need to develop and accept international standards. A number of speakers discussed the work of the International Organization for Standardization (ISO) in the development of international standards for information handling. The need to find a solution to the problems arising from the legal and moral requirement to protect the rights of authors and publishers, without at the same time erecting barriers to the free flow of information, was the subject of a very interesting paper.

In the long term, achievement of real progress in the interconnection and compatibility between information systems will depend on a willingness to co-operate on the part of those responsible for the systems. Their willingness to do so must result from their recognition of the need to do so, as explained in the quotation which began this report.

▲ Searching for information by computer, using a visual display terminal to ask the questions and recover the answers. A high degree of interconnection and compatibility between inspection systems is essential to take full advantage of the computer's ability to scan through a large file rapidly and display on the screen the items that satisfy the search requirements. This shows the STATUS Logo Computer system at Harwell, England. Photo: U.K.A.E.A.

◀ This shows part of the processing of information received from Member States as input to the International Nuclear Information System. Photo: IAEA