Meeting on the
FEASIBILITY OF AN INTERNATIONAL INFORMATION SYSTEM
FOR THE DEVELOPMENT SCIENCES (DEVESIS)

Co-sponsored by the
International Development Research Centre
the Organization for Economic Co-operation and Development
and Unesco (within the framework of its UNISIST program)
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SUMMARY RECORD OF THE MEETING
based on the version presented to the final session
OPENING SESSION

Dr. Hopper, Dr. Wysocki and Mr. Fossi, on behalf of the co-sponsoring organizations, emphasized the important role of information in development and the need to keep the objectives of sharing information in mind. Dr. Sylvestre indicated how Canada's experience in optimising information resources in a bilingual, federal state covering a large geographical area might be an example to those involved in international co-operation.

GENERAL SESSION

PREVIOUS INITIATIVES TOWARDS A DEVELOPMENT INFORMATION SYSTEM

Mr. Fossi described the early pragmatic attempt of the OECD Development Centre to provide developing countries with appropriate and timely information. The Development Enquiry Service, begun in 1965, relied on a voluntary network of correspondent institutions in developed and developing countries, but there had been no common language for communication in the social sciences and economics.

The first attempt to fill this gap, described by Mr. Viet, had been the Aligned Descriptor List of economic and social terms, produced in 1969. This had brought together the interests of ILO, OECD, FAO, DSE and ICSSD. It had serious subject gaps, however, and did not involve other organizations, such as UNIDO and UNDP, with their own vocabulary problems. A broader list of descriptors was therefore prepared, which had become the Macrothesaurus, published already in English, French, German and Spanish, and soon in Arabic and Portuguese.

Mr. Thompson described attempts at networking to share the resources of development organizations and achieve better cost/benefit ratios. The Jackson report(1) had stressed the need for an information

system and an infrastructure to facilitate the definition of effective
development projects and their management. Most UN agencies were now
indexing their own documents, but standards and other tools were
needed. Several agencies were also using computers and the indexing
techniques of ILO's ISIS system. Any agreement to adopt ISIS in
an ILO member country always provided for development work to meet
needs expressed by the country, and in this way the whole system was
being improved.

Dr. Wysocki described three Unesco initiatives: the Science
and Technology Policies Information Exchange System (SPINES), the
Unesco Computerized Data Retrieval System in Social and Human Sciences
(DARE) and the Unesco Computerized Documentation Service.

STATUS OF UNISIST AND EXISTING SYSTEMS

UNISIST

Dr. Wysocki presented working paper no 4(1) describing UNISIST,
which was a program not a system, and did not conflict with proposals
for international systems. It was already trying to remedy many of
the problems discussed later by the meeting, for example, by assistance
to member states in strengthening their information infrastructures.
National focal points were identified by the national governments
and preferably should be in an agency connected with policy. Although
UNISIST had begun with science and technology, an extension into the
social sciences was being actively considered. A preliminary meeting
had shown this to be feasible, though social sciences information had
different problems from the natural sciences.

INIS

Dr. Gadjokov, in working paper no. 6(2), outlined the
accomplishments of INIS after five years of preparation and five
years of operation. Like UNISIST, INIS was already tackling some

(1). A. Wysocki, UNISIST Programme, Its Role in International Co-
operation in Scientific and Technical Information, DEVSIS (1974) W.P.4
(2). V. Gadjokov, Zh. Turkov, INIS, A Feasibility Example of a Modern
International Information System with Decentralized Input Preparation,
of the problems posed by the DEVSIS proposal. The incorporation of a subject index in the printed INIS-Atomindex had made it much more useful to developing countries. The paper's conclusions, summarizing the factors that contributed to INIS's successful inception, showed what might be expected of other co-operative systems.

AGRIS

Mr. East spoke to working paper no. 7 (1), which pinpointed aspects of AGRIS experience that were relevant to the DEVSIS proposal. Service to users should be emphasized and objectives clearly spelled out. AGRIS experience, following that of INIS, suggested that the time scale of the DEVSIS proposal was rather optimistic.

INTRODUCTION OF DEVSIS PROPOSAL (2)

Mr. Woolston had already circulated his proposal and had received many comments from participants and other interested people. In introducing it, he compared information services in various fields of knowledge. In the natural sciences, information was concentrated in a few well-established services, in which the user could have complete confidence. In the applied sciences, most literature was under bibliographic control but the user lacked one comprehensive service. In economic and social development, however, much literature was neither properly published, nor under bibliographic control. Consequently, the user could not know with confidence what had been done before and there was much waste in what was perhaps man's most important activity. Mr. Woolston asked whether we had our priorities right? The considerable duplication in the handling of social and economic literature could be eliminated by pooling existing resources. But a world system could not be expected to grow naturally from a


small beginning and would need an international stimulus to reach developing countries at reasonable cost to them. Any initial system would be judged on the usefulness of the information it provided and on how rapidly it approached comprehensiveness. Mr. Woolston asked the meeting to consider whether such a system was needed, and if so to plan what had to be done in the next year or two to define it with sufficient precision so that commitments could then be forthcoming.

DISCUSSION OF A POSSIBLE SYSTEM

Mr. Woolston presented working paper no. 3(1), which had been written in an attempt to identify questions for the meeting to consider.

Points of major importance arose during all parts of the meeting. The discussions have been grouped under the headings below, together with an indication of differences of opinion and matters for further consideration.

The Need for a Development Sciences Information System

The meeting considered lack of critical information to be a major constraint upon development planning. Poor access to existing knowledge had led to many examples of duplication and waste in development efforts. The various information activities that had tried to remedy this situation had also tended to duplicate each other, thus revealing a need for co-ordination. The participants generally agreed that better mobilization of information would greatly assist development activities. In addition to the co-sponsors of the meeting in their initial statements, the representatives of the UN, the Asian Institute, CLADES, UNDP, IBRD, CNRS, UNIDO, ICSSD and DSE made positive statements of support for this aspect of the DEVSIS proposal; but when the details of DEVSIS were examined, it became evident that a range of related fundamental questions needed further examination: e.g. to what extent will the consumer be satisfied with improved access to basic documentation, and will he require

(1). Working Paper Offered for Discussion under Item (4) of the Agenda, DEVSIS (1974) W.P. 3
condensation and evaluation of available material before he will accept it? How can the national infrastructures be developed to permit real exploitation of any new international service? Can a new service be demonstrated on a small scale, or are the inter-relationships so important that only a comprehensive service will respond to needs?

Relevance of the Proposal to the Development Process

How relevant the proposal was to users' needs was considered the most important factor in gaining acceptance. Though users in developed countries had development information problems of their own, relevance to developing-country needs was given paramount importance. A system could be set up that would well serve developed-country interests but would be unacceptable if it went no further. Poor access to suitable systems and services, whether national or international, could be considered a characteristic of under-development.

The developing-country representatives felt strongly, however, that a system designed by developed-country organizations on the grounds that access to information was good in itself would have little chance of success. Even though developing countries might express interest, they would not actively participate in an international effort unless convinced of its immediate usefulness to their needs. The DEVSIS proposal might have been made in response to needs expressed formally and informally on many occasions, but by itself this was insufficient motivation for active participation.

Other speakers pointed out that developing countries could benefit from an international system in another way, as it would help them to define what needed to be done at the national level with national literature collected primarily for national use. A system would involve strong national units assisted but not controlled by an international body, and developing countries would be involved in its design and possibly in any central processing. DEVSIS was an attempt to mobilize resources to meet national needs first, but nations would then be able to tap a much larger body of potentially useful information.

Nevertheless, it became evident that the disparate needs of developing countries, and also of developed countries, had to be identified much more clearly before an international effort could be launched.
Evaluation of Present Activities

Little was known about the actual uses made of existing information systems, of the references they provided, and of the documents they flagged; much less about their contribution, if any, to development decisions. The use of INIS outputs had not been systematically studied within each individual country participating in the system. AGRIS was not yet in regular operation, although the user response to the experimental issue of Agrindex had been overwhelmingly positive. Comparisons with these two systems might not be valid for DEVSIS, however. There were dangers in relying too heavily on previous successes under different conditions, and no comparable world systems existed in the field of economic and social development.

Nevertheless many lessons could be learned from previous activities, particularly those that had failed for reasons other than technical. It was suggested that any new system must be based upon existing activities and must first help remedy their problems. Perhaps better co-ordination and integration would meet many requirements without starting a completely new system. A comprehensive survey of all relevant activities and resources, including those in national institutions, and investigations into their effectiveness in solving users' problems were suggested as prerequisites to any new international initiative.

In this regard, there was some difference of opinion as to whether cost-effectiveness could be measured, particularly of a system that might take several years to mature. A cost/benefit calculation, in the accounting sense, might be demanded by the present tightness of budgets, but quantification of some aspects would be impossible. Some inputting costs could be estimated fairly easily (INIS and AGRIS central processing costs are of the order of $500,000 per annum), but decentralized operating costs would be much more difficult to establish. Against these, an appreciation of effectiveness would be necessary to attract funding. This could only be achieved by much better feedback from users.
Target Groups and the Involvement of Governments

Though any international effort should probably involve inter-governmental organizations, non-governmental organizations, the academic community, and private corporations, the co-operation of national governments was considered essential. They voted the budgets of international organizations and controlled the national bodies participating in them. They would also want to decide whether to participate directly or through regional arrangements. The problems of international co-operation in information activities were not technical but organizational, political and financial, and it was national governments that had to be convinced of the need. Most governments had yet to give a high enough priority to this type of work, and their staff tended to be discipline or sector-oriented.

The individuals who would have to do the convincing would generally be members of the staff of national planning bodies, who would act as gatekeepers to the information store. In the development of an international service, these individuals should therefore be part of the target audience, which should be clearly defined.

Strengthening of National Information Infrastructures

There was complete agreement that assistance to nations taking part in any international program should receive great emphasis. Though information infrastructures in some developing countries were quite sophisticated, others needed considerable strengthening. Without this, the best intentions would fail. The capacity of developing countries to participate in international systems and to use them was a major limitation upon co-operative efforts. Training activities and the establishment of multipurpose national documentation centres should begin now. They would not conflict with plans for international co-operation but rather would be complementary, as any international system would be at least five years in the preparation.

An International Host

It was generally accepted that any international system or service for development information should eventually be adopted by a
member of the UN family. INIS particularly had demonstrated the stimulus of such an endorsement. It was impossible at this stage, however, to be more specific, and, though the methodology of the host institution might be important in defining technical details, it was unrealistic to expect any institution to consider adopting DEVSIS without much more detailed information on such matters as costs and necessary development work.

There was no question, however, that an international operation would have to be placed within the framework of UNISIST to provide the necessary links with other activities.

**Project Demonstration**

No commitments to a DEVSIS type of proposal could be expected until it was more clearly defined. Several participants therefore favoured a stepwise approach starting on a pilot scale to demonstrate the feasibility and utility of the proposal. Sufficient checkpoints and evaluations must be built in to enable priority-setters to appreciate its effectiveness. Interested organizations would be more likely to support a phased development, which would acquire in a rational manner the necessary experience for future extension. This idea was generally accepted, several suggestions being made for limiting the scale of the pilot operation, by subject, by type of material, or by region.

**Subject Scope**

To produce a manageable exercise, it was suggested that the subject scope of the pilot project be limited to a few or only one subject in a high priority area, such as public financing or project evaluation. Some participants felt that choice of a suitably self-contained subject could give a reasonable appreciation of inputting difficulties, users' needs, and the potential of the resulting service. Others believed, on the other hand, that, as economic problems were generally interrelated, this appreciation could only be obtained from a broad scope that would not prejudice developing countries' needs at any one time. INIS experience with a limited subject scope might not be very relevant to DEVSIS, but had been that proportionately more selection work was needed at input, and that
the system's usefulness was not indicated until full scope had been achieved.

As for the full subject scope of the eventual system, a complete and precise definition was too large a task for the meeting, but principles were discussed. Six broad topics had been suggested in working paper no. 3, to which could be added planning studies, planning methodology, and sectoral development policy. The Macrothesaurus had been developed pragmatically and the suggestion that it should be used as the basis for a subject scope definition which would take into account the actual demand for information was received favourably. Some participants wanted to broaden the subject scope beyond economic and social matters to include political, technological and administrative questions. Others were worried about the exclusion of certain sectoral information. Some broad documents would inevitably fall within the scope of more than one system, and some overlap would be necessary. This problem would be alleviated, however, by ensuring that all these systems were in the framework of UNISIST, one of whose main aims was to establish links between systems in different subject areas and with different missions. It was recommended, therefore, that systems interconnection should receive first priority in considerations of subject scope.

Coverage

Though material needed for development included rosters, project information, data and documents, the DEVSIS proposal had been limited to documents in order to give a manageable system. Data, particularly raw data, were much more difficult to process, especially for comparative purposes. Several participants felt, however, that information on institutions and people was as important as documents. Others suggested that if the limitation on the pilot project was to be coverage, emphasis could be given to mimeographed reports and documents not published in the conventional sense. These might be more important than published material, and were particularly difficult to locate at present. This type of material could remain extremely difficult to collect, however, even with a co-operative system, and it could be
difficult to assess the service value of a pilot operation emphasizing it.

Technical Problems

The technical problems of a development sciences information system would probably be like those of INIS and AGRIS and the meeting did not doubt that they could be solved. Agenda items 4b and c (input sharing, mechanisms for assembling input, processing) were not therefore discussed. Computer systems would probably be needed and if located at a central unit would be useful for training purposes. Individual inputting centres would not necessarily need them, however, and there were pleas not to introduce capital-intensive high technology too early.

RECOMMENDATIONS

It was assumed during the meeting that some sort of task force would be needed to carry the proposal further. Many participants emphasized that such a group would need very explicit guidelines. As a result of the discussion, however, its immediate function changed from systems design to definition of alternative proposals backed by adequate information. It would therefore involve a variety of people, in addition to technicians. A steering committee as well as, or possibly incorporating, a technical task force was then suggested. Developing countries should be deeply involved, but it would be difficult to convene their participants for the several months needed. The idea was therefore adopted of a steering committee supported by a secretariat from some suitable body and with resources to use consultants, convene groups, travel, and interact with eventual operators and users of the system.

These considerations, together with some of the major topics discussed at the meeting, were incorporated in a document prepared by a drafting committee and agreed, after amendment, by the meeting as a whole: "Recommendations of the Meeting on the Feasibility of an International Information System for the Development Sciences (DEVSIS), Ottawa, 11 to 13 June 1974." These "Recommendations", which have already been distributed to participants and other interested parties, welcome the
initiative of the DEVSIS proposal and cover the objectives of DEVSIS, general recommendations, establishment of a steering committee and study team, terms of reference of the steering committee, and additional issues for the consideration of the steering committee. The steering committee is asked to take into account the various observations made during the meeting and outlined in this summary record.